THE IMPACT OF PROFESSIONAL DEVELOPMENT ON TRAUMA INFORMED PRACTICES (TIPs) IN A TEACHER’S FEELING OF SELF-EFFICACY

by

Christina Kay Cumbest

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2022
THE IMPACT OF PROFESSIONAL DEVELOPMENT ON TRAUMA INFORMED PRACTICES (TIPs) IN A TEACHER’S FEELING OF SELF-EFFICACY

by Christina Kay Cumbest

A Dissertation Presented in Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

Liberty University, Lynchburg, VA

2022

APPROVED BY:

Vivian O. Jones, Ph.D., Committee Chair
Angela Ford, Ed.D., Committee Member
The purpose of this quantitative, quasi-experimental, static-group comparison design study was to determine the increase or decrease of self-efficacy for elementary and secondary teachers regarding instructional strategies, student engagement, and classroom management after professional development in TIPs. TIPs in the school setting provide comprehensive interventions to address childhood trauma that could promote positive academic progress. There has been little research provided on the impact of TIPs regarding instructional strategies, student engagement, and classroom management as it relates to teacher-efficacy. The results of this study found significant differences in survey responses from teachers in two school districts. The Teachers’ Sense of Efficacy Scale (TSES) was utilized to collect data on teacher’s sense of self-efficacy from 100 teachers in two urban school districts in Mississippi. According to the results of three independent t tests, there is an indication that TIPs may impact teacher self-efficacy. Teachers do not receive appropriate training at the university level to overcome the effects of trauma in the classroom setting; therefore, professional development in TIPs should be implemented at the school level. The researcher recommends further research into the role of TIPs at improving social-emotional learning of students and increasing teacher self-efficacy.

*Keywords: trauma-informed practices, self-efficacy, professional development, resilience*
Dedication

To my husband, Robbie: Without your unfailing support, I could not have completed this enormous task. We did it! Can’t wait to see what our next season will bring.

To my children, Wesley and Travis: I love you more than you will ever know. Thank you for always pushing me to finish.

To all the educators in my life: I hope that I always set goals high enough for you to achieve, but made you stretch just outside of your comfort zone. Thank you for pushing me to be a better administrator.

Isaiah 51:1- 2 (New International Version) “Listen to me, you who pursue righteousness and who seek the Lord. Look to the rock from which you were cut and the quarry from which you were hewn; look to Abraham, your father, and to Sarah, who gave you birth. When I called him, he was but one, but I blessed him and made him many.”

Thank you, Lord, for the MANY students and teachers that you placed in my life. I pray that they saw You in me.
# Table of Contents

ABSTRACT ......................................................................................................................................................... 3  
Dedication ......................................................................................................................................................... 4  
List of Tables .................................................................................................................................................... 7  
List of Figures ................................................................................................................................................... 8  
CHAPTER ONE: INTRODUCTION ......................................................................................................................... 10  
  Overview ....................................................................................................................................................... 10  
  Background .................................................................................................................................................... 10  
  Historical Context .......................................................................................................................................... 11  
  Theoretical Context ....................................................................................................................................... 13  
  Problem Statement ......................................................................................................................................... 15  
  Purpose Statement .......................................................................................................................................... 16  
  Significance of the Study ............................................................................................................................... 17  
  Research Questions ....................................................................................................................................... 18  
  Definitions ..................................................................................................................................................... 18  
CHAPTER TWO: LITERATURE REVIEW ................................................................................................................. 21  
  Overview ....................................................................................................................................................... 21  
  Theoretical Framework .................................................................................................................................... 21  
  Related Literature .......................................................................................................................................... 23  
  Summary ....................................................................................................................................................... 51  
CHAPTER THREE: METHODS .................................................................................................................................. 52  
  Overview ....................................................................................................................................................... 52  
  Design ............................................................................................................................................................ 52  
  Research Questions ....................................................................................................................................... 53  
  Hypotheses .................................................................................................................................................... 54  
  Participants and Setting ................................................................................................................................. 54  
  Instrumentation .............................................................................................................................................. 56  
  Procedures .................................................................................................................................................... 59  
  Data Analysis ............................................................................................................................................... 60  
CHAPTER FOUR: FINDINGS .................................................................................................................................... 64  
  Overview ....................................................................................................................................................... 64  
  Research Questions ....................................................................................................................................... 64
Hypotheses ........................................................................................................ 64
Descriptive Statistics .......................................................................................... 65
Results ................................................................................................................ 67
Data Screening .................................................................................................... 68
Results for Hypothesis One .............................................................................. 76
Results for Hypothesis Two ............................................................................. 78
Results for Hypothesis Three ......................................................................... 80

CHAPTER FIVE: CONCLUSIONS ..................................................................... 83
Overview ............................................................................................................ 83
Discussion .......................................................................................................... 83
Implications ........................................................................................................ 87
Limitations .......................................................................................................... 90

Recommendations for Future Research .......................................................... 91
References .......................................................................................................... 94

APPENDICES .................................................................................................. 108
List of Tables

Table 1 TSES Question Correspondence ................................................................. 58
Table 2 Teacher Sense of Efficacy Scale (TSES) Reliability ......................................... 59
Table 3 Frequency Counts for Selected Demographics .................................................. 66
Table 4 Descriptive Statistics for Each Factor Group for Both School Districts ................. 67
Table 5 Total Self-Efficacy Score for Both Districts ................................................. 67
Table 6 Kolmogorov-Smirnov Teacher Self-Efficacy in Instructional Strategies ............... 77
Table 7 Levene’s Test for Equality of Variances ....................................................... 77
Table 8 t tests for Equality of Means of Instructional Strategies .................................. 78
Table 9 Kolmogorov-Smirnov Teacher Self-Efficacy for Student Engagement ................. 79
Table 10 Levene’s Test for Equality of Variances ...................................................... 79
Table 11 t tests for Equality of Means of Student Engagement ..................................... 80
Table 12 Kolmogorov-Smirnov Teacher Self-Efficacy for Classroom Management .......... 81
Table 13 Levene’s Test for Equality of Variances ...................................................... 81
Table 14 t tests for Equality of Means of Classroom Management ............................... 82
List of Figures

Figure 1 Scatter Plot of Overall Self-Efficacy of Instructional Strategies ........................................ 68
Figure 2 Histogram of Overall Self-Efficacy of Instructional Strategies ........................................... 69
Figure 3 Boxplot of Self-Efficacy of Instructional Strategies .......................................................... 70
Figure 4 Scatterplot of Overall Self-Efficacy by Student Engagement ............................................. 71
Figure 5 Histogram of Overall Student Engagement .......................................................................... 72
Figure 6 Boxplot of Student Engagement by School District ......................................................... 73
Figure 7 Scatter Plot of Overall Self-Efficacy by Classroom Management ........................................ 74
Figure 8 Histogram of Classroom Management .................................................................................. 75
Figure 9 Boxplot of Classroom Management by School District ..................................................... 76
List of Abbreviations

Adverse Childhood Experiences (ACEs)
Multi-Tiered System of Support (MTSS)
Positive Behavior Interventions and Supports (PBIS)
Post-traumatic Stress Disorder (PTSD)
Secondary Traumatic Stress (STS)
Self-Determination Theory (SDT)
Social-Emotional Learning (SEL)
Teacher Professional Identity (TPI)
Teacher Self-Efficacy (TSE)
Trauma Informed Practices (TIPs)
CHAPTER ONE: INTRODUCTION

Overview

The purpose of this quantitative, quasi-experimental, static-group comparison design study was to determine how a teacher’s sense of self-efficacy was affected when professional development on trauma-informed practices (TIPs) is implemented. This researcher was specifically interested in a teacher’s self-efficacy regarding instructional strategies, student engagement, and classroom management after training in TIPs. Chapter One provides information on the background of the problem on how trauma impacts the school setting, the problem of the study which is to determine whether TIPs improve teacher self-efficacy, and the purpose of the study which is to identify how teacher self-efficacy is affected by the addition of TIPs. The researcher will provide background on adverse childhood experiences (ACEs), the effects of student trauma in the classroom setting, self-efficacy of teachers and students, trauma-informed practices (TIPs), and ending with the importance of professional development training in schools. This researcher will cover the significance of the study and research questions.

Background

Approximately two-thirds of people in the United States have experienced childhood trauma (Plumb et al., 2016; Yohannan & Carlson, 2019). ACEs can include abuse or neglect and even issues in the home of drug abuse and mental illness (Herrenkohl et al., 2019). Chronic exposure to stress without the support of a caring adult can affect a child’s growing brain which could have adverse effects on learning and behavior (Anderson et al., 2015; Berger et al., 2019; Sciaraffa et al., 2018). Trauma can lead to lower cognitive development, memory and concentration issues, and poor relationship building skills with peers (Brunzell et al., 2016b).
Without adequate support, children who have experienced trauma are likely to separate themselves from the academic setting (Rumsey & Milsom, 2019).

Trauma informed practices (TIPs) in the school setting provide comprehensive interventions to address childhood trauma (Fondren et al., 2020; Plumb et al., 2016). These guidelines and strategies ensure that the policies and practices of an organization understand, identify, and respond to the effects of trauma on an individual’s behavior and overall well-being (Christian-Brandt et al., 2019; Fondren et al., 2020; Howard, 2019; Morgan et al., 2015). The classroom environment should be safe, stimulating, and predictable to respond to children who have experienced trauma (Anderson et al., 2015; Sciaraffa et al., 2018). Culturally responsive pedagogy should be responsive to student needs with a solid foundation in building relationships if student trauma needs are to be met (Blitz et al., 2020). Social-emotional learning (SEL) should be implemented as well to address both social and learning issues (Anderson et al., 2015; Plumb et al., 2016).

**Historical Context**

Gibson and Dembo (1984) found that the self-efficacy of a teacher is the most critical characteristic that determines if a teacher will be able to help even the most unmotivated or disruptive student. High self-efficacy of a teacher was even found to be a predictor of high student achievement in reading. Personal responsibility and elevated expectations were identified as hallmarks of a teacher who exhibited high self-efficacy. According to Gibson & Dembo, a teacher with a high sense of self-efficacy sees student difficulties as something to be overcome with appropriate instructional techniques, and not as a sign that the student had learning difficulties.
Ayllón et al. (2019) identified student self-efficacy as the determining factor in the level of engagement, choice of task, perseverance to achieving learning goals, and the amount of effort expended. Students need autonomy in the classroom to enable them to reflect on learning needs, and the learning environment should motivate students to improve learning. This autonomy enables students to have learning choices and gives them a voice in the learning process. Teachers with an autonomy-supporting teaching style support student thinking and welcome student input. Students in classrooms where autonomy is supported exhibit greater resilience and motivation (Reeve et al., 2020). Ayllón et al. (2019) further found that positive teacher-student relationships which are strong and stable provide a safe environment and provide structure for learning. Havik & Westergård (2020) found that student engagement can be static and vary from teacher to teacher which makes it difficult to determine the level of student engagement.

Self-efficacy is formed when one interprets competence from experiences and persuasion by others (Ayllón et al., 2019; Bandura, 1977; Gebauer et al., 2020; Pfitzner-Eden, 2016). A person’s sense of self-efficacy determines behavioral goals, amount of effort expended, and persistence towards a goal; therefore, self-efficacy is important in the classroom setting (Burić & Kim, 2020; Pfitzner-Eden, 2016). A teacher’s sense of self-efficacy directly impacts student achievement and behavior. Instructional decisions, teaching pedagogy, and classroom management are all determined by the strength of the teacher’s belief in their self-efficacy. A teacher’s personal efficacy is the most important predictor of a teacher’s self-perception, motivation, organizational planning, and tolerance towards students (Clark, 2020; Herman et al., 2018; Mahler et al., 2018; Wolmer et al., 2016;). Teachers with high self-efficacy tend to be goal oriented, and efficacy is directly tied to student achievement (Yoo, 2016).
Research on resilience and the importance of protective factors has been plentiful when studying the effects of ACEs. In the school setting, formal and informal support systems are important to aid children in developing coping skills and academic achievement (Herrenkohl et al., 2019). School-based programs should focus on minimizing a child’s exposure to unnecessary adversity and trauma triggers while providing support and coping skills that are individualized or generalized to specific situations (Brooks, 2006; Durlak et al., 2011). There are various school-based programs that can benefit students who have experienced ACEs; however, there is limited evidence to support which programs are the most sustainable and effective (Durlak et al., 2011; Greenberg et al., 2003).

**Theoretical Context**

Bandura’s theory of self-efficacy (Bandura, 1977) will guide this study to explore the importance of outcome and efficacy expectations. Bandura theorized that the belief in one’s ability to produce a desired behavior determines the strength of one’s self-efficacy. It is important to determine what drives behavior for both adults and students. Efficacy expectations are based on factors of personal mastery, performance capabilities, vicarious actions, verbal persuasion, and various physiological states. Bandura also found that firsthand experiences of mastery, extended encounters with positive behavioral outcomes, self-directed experiences, and clear outcomes with modeled expectations all increase self-efficacy.

Bandura (1977) identified teacher efficacy as being causally linked to student outcomes. Teachers with a high sense of self-efficacy report higher levels of positive experiences in the classroom (Bandura, 2002; Gul, 2014; Kuyina & Desai, 2007; Sharp et al., 2017). Adversely, low self-efficacy has been shown to have adverse effects on engagement and is a strong predictor of intentions and actions (Bandura, 2002; Duyini & Desai, 2007; Gul, 2014; Sharp Donahoo et
There is still a need to further understand how teacher self-efficacy affects relationships with students and student outcomes. School leaders should ensure that the school’s policies and culture understand, identify, and respond to the effects of trauma (Christian-Brandt et al., 2019; Fondren et al., 2020; Howard, 2019; Morgan et al., 2015). Schools should offer training in TIPs to increase the self-efficacy of both students and teachers. This type of professional development will provide tools and strategies for recognizing how trauma affects behavior in the classroom setting (Crosby et al., 2018). A teacher’s sense of self-efficacy is important in the classroom to guide instructional decisions, promote positive student behavior, and improve student outcomes.

The theory of resilience (Richardson et al., 1990) will also guide this study. This theory states that individual resilience is the ability of a person to interact with their environment successfully. Resilience is a coping mechanism which allows one to add protective measures which allow them to persevere despite adverse circumstances. Resiliency is seen in self-efficacy by one’s ability to attempt a challenge despite limitations. Resilience can change over time and circumstances as various challenges are encountered. It is crucial to identify predictors that increase resilience to provide early interventions which could promote resilience and decrease negative outcomes (Edwards et al., 2016).

Schools have become known for providing feelings of safety and positive environments and providing a place for children to find mental health resources to help manage stress and trauma (Blitz et al., 2020). Resilience, one’s ability to overcome hardship, is important for both teachers and students (Gardner & Stephens-Pisecco, 2019). Children need at least one caring adult to provide support and make them feel safe and secure, and teachers can provide the ideal environment for children to help them overcome adversity both academically and emotionally.
Resilience is important for teachers dealing with secondary traumatic stress (STS), and the school setting can promote resilience in children by increasing self-efficacy. Schools are a critical component in fostering resilience in children (Gardner & Stephens-Pisecco, 2019; Greene et al., 2003; Herrenkohl et al., 2019).

**Problem Statement**

Maynard et al., (2019) urged school leaders to use trauma informed practices (TIPs) with caution until further evaluation of these practices could be conducted. While there are many questions remaining regarding the effectiveness of TIPs, the writers encouraged the implementation of evidence-based strategies which address issues of childhood trauma and its effects on educational outcomes. TIPs should be implemented within the multi-tiered systems of support (MTSS) which would give both structure and support to the strategies. Within this MTSS structure lies basic guidelines for evidence-based instructional strategies to increase teaching pedagogy, student engagement, and classroom management. The amount of a teacher’s sense of self-efficacy in instructional strategies, student engagement, and classroom management as a result of professional development on TIPs warrants further investigation. Yoo (2016) stated that classrooms have become the ideal place to address ACEs; therefore, schools must be equipped to handle issues that could arise for teachers that could affect their sense of self-efficacy. A teacher’s self-reflection on the changes in their efficacy as a result of professional development in TIPs has not been studied. Yoo (2016) further stressed the importance of determining how a teacher’s self-efficacy evolves, and how their professional practices are improved (Yoo, 2016).

A teacher’s sense of well-being is important to decrease burnout and increase teacher retention (Brunzell et al., 2018). Burnout is often prevalent when teachers deal with disruptive
and disengaged students which can make work more difficult (Yoo, 2016). Compassion satisfaction, the ability to find pleasure in doing a job well, is important for teachers; therefore, professional development in effective pedagogy in instructional practices and classroom management strategies are crucial. Meaningful work is defined as the meaning that work is to an individual. Working with students who have experienced trauma can contribute either to meaningful work or burnout (Brunzell et al., 2018). McCray and Joseph-Richard (2020) identified meaningful work as a protective factor for resilience.

There has been little research regarding the impact of TIPs regarding instructional strategies, student engagement, classroom management, or a teacher’s own personal efficacy. Experience in the teaching field did not influence teacher self-efficacy (TSE) (Pfitzner-Eden, 2016); therefore, the results of this study would be beneficial to determine if the results support this theory when comparing years of teaching experience to TSE. Brunzell et al. (2018) identified the need for further research to identify how trauma-informed practices affect a teachers’ overall well-being, and how teacher well-being effects the overall school environment. The problem is the literature has not fully addressed the impact of professional development on TIPs on a teacher’s self-efficacy regarding instructional strategies, student engagement, and classroom management.

**Purpose Statement**

The purpose of this quasi-experimental, static-group comparison design is to determine how TSE is affected with the addition of professional development in trauma informed practices. The independent variable will be participation in professional development in TIPs and those who did not participate in professional development in TIPs, and the dependent variables will be a teachers’ sense of their self-efficacy in the following: *instructional strategies, teaching*
pedagogy that a teacher utilizes to instruct students to promote positive academic achievement (Tschanne-Moran & Hoy, 2001); student engagement, level of enthusiasm, engagement, motivation, and involvement that student exhibits in the learning process (Tschanne-Moran & Hoy, 2001); and classroom management, tools teachers utilize to engage students in the learning process with minimal disruptive behaviors (Tschanne-Moran & Hoy, 2001).

This study seeks to determine teacher self-efficacy from two separate school districts with similar demographics and student populations. The participants of this study will be drawn from a convenience sample of elementary and secondary teachers from two school districts in south Mississippi during the 2021-2022 school year. Both districts qualify as Title I districts with at least 75% of students eligible for free or reduced lunches. School District A consists of two high schools, two middle schools, and twelve elementary schools. School District B consists of one high school, one middle school, and two elementary schools.

**Significance of the Study**

The primary significance of this study is to determine if a teacher’s sense of self-efficacy is impacted by trauma informed practices (TIPs). A teacher’s personal efficacy is the most important predictor of a teacher’s self-perception, motivation, organizational planning, and tolerance towards students (Clark, 2020; Herman et al., 2018; Mahler et al., 2018; Wolmer et al., 2016). External factors such as student behavior, curriculum demands, and socio-economic status of the students and school can negatively affect a teacher’s sense of efficacy (Yoo, 2016). Professional development in TIPs enables a teacher to enhance strategies in promoting resilience and self-confidence (Wolmer et al., 2016); however, there is no significant research to determine the effects of professional development in TIPs increasing self-efficacy in teachers regarding their instructional strategies, student engagement, and classroom management. The results of this
study will add to theoretical knowledge of both self-efficacy and resilience by determining if teachers’ self-efficacy and resilience are impacted positively and/or negatively by professional development in TIPs. Empirical knowledge will be increased by the results of this study by the examination of efficacy expectations and outcomes of teachers after the implementation of TIPs.

**Research Questions**

**RQ1:** Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *instructional strategies* who do or do not participate in TIPs?

**RQ2:** Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *student engagement* who do or do not participate in TIPs?

**RQ3:** Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *classroom management* who do or do not participate in TIPs?

**Definitions**

1. *Adverse Childhood Experiences (ACEs)* - Experiences that were abusive, neglectful, or otherwise traumatic in nature that have lasting effects on one’s overall health and educational outcomes (Day et al., 2017; Plumb et al., 2016; Sciaraffa et al., 2018; Whitaker et al., 2019; Yohannan & Carlson, 2019).

2. *Classroom Management* - Effective classroom management strategies are tools for teachers to utilize to engage students in the learning process with minimal disruptive behaviors (Tschannen-Moran & Hoy, 2001).

3. *Compassion Satisfaction* – The ability to find pleasure in doing a job well, helping others, and finding work invigorating (Brunzell et al., 2018).
4. **Complex Trauma** – Ongoing and repeated exposure to traumatic experiences that could include abuse such as sexual, emotional, or physical abuse. Significant neglect and even family violence could be classified as complex trauma. (Howard, 2019).

5. **De-escalation** – Important component in increasing a child’s regulatory abilities which encourages calmness and a ready-to-learn state of effectiveness (Brunzell et al., 2016a).

6. **Instructional Strategies** - Instructional strategies are teaching pedagogy that a teacher utilizes to instruct students to promote positive academic achievement (Tschannen-Moran & Hoy, 2001).

7. **Meaningful Work** - The meaning that work is to an individual, the positive and significant aspects of one's work, and work that is purpose oriented (Brunzell et al., 2018).

8. **Multi-Tiered System of Support (MTSS)** - A tiered system of supports which prioritizes resources, decision making that is efficient, and a strong focus on prevention (Fondren et al., 2020).

9. **Positive Behavior Interventions and Supports (PBIS)** - Interventions in schools to specifically address behavioral issues in the classroom and address the social-emotional needs of students (Plumb et al., 2016; Reinbergs & Fefer, 2018).

10. **Protective Factors** - Enable a person to recover or bounce back from adversity (Greene et al., 2003; Liew et al., 2018; Sciaraffa et al.; Yule et al., 2019).

11. **Resilience** - One’s ability to overcome hardship (Gardner & Stephens-Piscecco, 2019).

12. **Secondary Traumatic Stress (STS)** - The response to stress or trauma that can be experienced when one hears the stories of those who have experienced trauma (Christian-Brandt et al., 2019; Reinbergs & Fefer, 2018).
13. **Self-Efficacy** - Formed when one interprets competence from experiences and persuasion by others (Ayllón et al., 2019; Bandura, 1977; Gebauer et al., 2020; Pfitzner-Eden, 2016).

14. **Social-Emotional Learning (SEL)** - Utilizes supportive relationships, emotional literacy, and a child’s ability to solve problems to increase resilience and address both social and learning issues (Anderson et al., 2015; Plumb et al., 2016).

15. **Student Engagement** – Student engagement will be identified by the level of enthusiasm, engagement, motivation, and involvement that a student exhibits in the learning process (Tschannen-Moran & Hoy, 2001).

16. **Student Self-Efficacy** - The determining factor in the level of engagement, choice of task, perseverance to achieve learning goals, and the amount of effort expended (Ayllón et al, 2019).

17. **Teacher Professional Identity (TPI)** - How a teacher perceives learners, and how they perceive themselves as educational leaders (Morgan et., 2015).

18. **Teacher Self-Efficacy (TSE)** - A teacher’s feeling of competence which can positively affect student achievement and behavior (Herman et al., 2018; Mahler et al., 2018; Yoo, 2016).

19. **Trauma-Informed Practices (TIPs)** - Guidelines and strategies which ensure that the policies and culture of an organization understand, identify, and respond to the effects of trauma on an individual’s behavior and overall well-being (Fondren et al., 2020; Plumb et al., 2016).

20. **Trauma-Informed Professional Development** - Professional development which provides tools and strategies for recognizing how trauma affects behavior in the classroom (Crosby et al., 2018).
CHAPTER TWO: LITERATURE REVIEW

Overview

The purpose of this literature review is to explore adverse childhood experiences (ACEs), trauma informed practices (TIPs), resilience, self-efficacy, and professional development in the school setting. The chapter opens with reviews of the theory of self-efficacy (Bandura, 1977) and the theory of resilience (Richardson et al., 1990). When applied in the school setting, a teacher’s feeling of self-efficacy directly impacts instructional choices made for students (Yoo, 2016). These self-reflective and self-reactive capabilities allow one to exercise control over one’s own actions, motivations, and feelings of competence in a situation. A review of the literature was also completed to determine how staff development training in trauma informed practices (TIPs) in the school setting would impact a teacher’s sense of self-efficacy to adequately prepare school professionals to interact positively with students who have experienced trauma. At the conclusion of this literature review, a gap in literature will be identified to focus this research study.

Theoretical Framework

There were two theoretical frameworks that guided this study: Theory of self-efficacy (Bandura, 1977) and theory of resilience (Richardson et al., 1990). Both theories helped lay the foundation for identifying what factors enable a teacher to increase self-efficacy.

Bandura’s theory of self-efficacy (Bandura, 1977) theorized that one’s expectations of performance determines whether effort will be expended, the amount of effort, and the ultimate sustainability of the effort. All behavior is derived from cognitive processes; however, actual performance-based activities have proven to be more effective at creating psychological changes.
Bandura believed that experiences of mastery learning can mediate change; however, cognitive processes play a significant role in creating new behavioral patterns.

Bandura (1977) found that learning from others through modeling is an effective avenue for learning new behaviors. Response consequences also guide behavior due to the effectiveness of observing the effects of one’s behavior. A correlation must be determined between the behavior and the consequences for behavior to change; however, not all consequences are immediate. Future outcome predictions can become motivators for behavior. Self-evaluative feedback and goal setting are additional cognitive processes that can drive behavior.

Bandura (1977) believed that outcome expectancies, the belief that certain behaviors will have certain consequences, and efficacy expectations, belief in one’s ability to produce a behavior, determine the strength of self-efficacy. Pasha-Zaida et al. (2020) stated that the belief in ability to succeed overshadowed the importance of talent and intellect. High expectations alone will not guarantee positive performance outcomes if the person lacks the capability to perform the desired behavior. Efficacy expectations are a high predictor of success if one has the appropriate skill set and adequate incentives to perform a task. Duration of the activity, the amount of effort expended, and choices of activities are all affected positively under these conditions (Bandura, 1977).

Bandura (1977) stated that sources of efficacy expectations are based on personal mastery, performance capabilities, vicarious actions, verbal persuasion, and various physiological states. Extended encounters with positive behavioral outcomes are more effective than short sporadic periods of achievement. Experiences that are self-directed tend to reinforce positive self-efficacy more than vicarious actions and experiences. In addition, clear outcomes from modeled behavior are more effective than outcome behavior that is ambiguous. Verbal
persuasion from others is also weaker when attempting to influence behavior than if the person were to accomplish the behavior alone. Bandura (1977) felt that self-efficacy is a strong predictor of positive task performance regardless of whether it is derived from one’s own accomplishments or through vicarious experiences from others.

Richardson et al. (1990) identified individual resilience as being evidenced from every ethnic group, socioeconomic status, culture, and even various stages of life. Resilience is defined as the ability of a person to interact with circumstances successfully. This coping mechanism allows individuals to obtain additional protective factors and persevere through negative circumstances. The Law of Disruption and Reintegration proposes that one must face negative situations to create new ways to deal with demanding situations, discover additional ways to deal with life situations, and rearrange personal perspectives of events.

Richardson et al. (1990) identified the traits of a resilient person to include creativity, personal insight, high pain tolerance, independence, self-esteem, personal reflection, and a dependence on others within one’s own set limits. Resiliency is seen in self-efficacy by one’s ability to attempt a challenge despite limitations, and this resilience can change over time depending on progress towards a goal. Resilience has also been defined as the ability to solve problems by altering the approach to solving a problem utilizing both internal and external sources. Coping mechanisms are important despite the level of disruption, and one’s resilience increases as they pass through various challenges and learn from experiences (Richardson et al., 1990; Shebuski et al., 2018).

**Related Literature**

Adverse childhood experiences (ACEs) describe experiences that were abusive, neglectful, or otherwise traumatic in nature that have lasting effects on one’s overall health and
educational outcomes (Day et al., 2017; Plumb et al., 2016; Sciaraffa et al., 2018; Whitaker et al., 2019; Yohannan & Carlson, 2019). Childhood trauma is so pervasive that it is estimated that it affects approximately two-thirds of people in the United States alone (Plumb et al., 2016; Rumsey & Milsom, 2019). ACEs can include abuse or neglect and even issues in the home of drug abuse and mental illness (Herrenkohl et al., 2019). A measurement of ACEs can be utilized to identify the link between childhood trauma and issues in adulthood. A higher incidence of trauma results in a rise in maladaptive behaviors which can increase chances of incarceration, substance abuse, memory issues, impaired self-regulatory behavior, and emotional regulation. Just one exposure to ACEs can result in negative outcomes (Pasha-Zaidi et al., 2020).

Research has shown that chronic exposure to stress without the support of a caring adult can affect a child’s growing brain which could have adverse effects on learning and behavior (Anderson et al., 2015; Sciaraffa et al., 2018). Children who have experienced ACEs have higher incidences of attention and language deficits, difficulty with problem solving, and acquiring new skills (Blitz et al., 2020; Sciaraffa et al., 2018). Behavioral issues are represented by decreased self-regulation skills, low impulse control, oppositional, reactive, aggressive, and the practice of self-harm or drug abuse. (Blitz et al., 2020; Morgan et al., 2015; Sciaraffa et al., 2018). Students who have experienced ACEs are 2.5 times more likely to be retained in a grade, have lower academic performance, speech and language delays, suicidal ideations, disruptive behavior, and often are identified as needing special education services (Brunzel et al., 2016b; Pasha-Zaida, 2020; Plumb et al., 2016). Trauma can also lead to lower cognitive development, memory and concentration issues, and poor relationship building skills with peers (Brunzell et al., 2016b; Blitz et al., 2020). Trauma exposure could result in social and behavioral issues in the classroom setting with more externalizing behavior such as aggressiveness, impulsivity, and physical
aggression (Day et al., 2017; Domitrovich et al., 2016; Plumb et al., 2016; Purtle, 2020). The duration, frequency, and setting of trauma influences the overall functioning and resilience of children (Herrenkohl et al., 2019).

ACEs, because of abuse or neglect, can have potentially devastating effects on a student’s academic achievement and even future vocation (Brunzell et al., 2016a). Children who have been exposed to complex trauma often have difficulty connecting and engaging with the curriculum in the classroom (Brunzell et al., 2016a; Howard, 2019; Plumb et al., 2016). Disruptive behavior in the classroom setting can occur because of this disconnect which often results in additional issues arising with teacher well-being (Howard, 2019). Without adequate support, students who exhibit learning disabilities, have low achievement in the classroom, truancy, and experience emotional issues, and are likely to separate themselves from the academic setting (Rumsey & Milsom, 2019). To increase social-emotional learning of students, classrooms must focus on increasing school engagement with a positive climate, relationships, personal responsibility, and self-regulation (Day et al., 2017).

Special care should be given to the emotional health and well-being of students and teachers instead of a single focus on academics (Morgan, et al., 2015). A positive education response should include efforts to repair a child’s regulatory abilities (Brunzell et al., 2016a). This can occur with the use of learning environments that focus on co-regulatory experiences, collaboration with a child’s family, self-regulatory capacity building opportunities, understanding of emotional and stress triggers, and encouraging self-regulation strategies throughout the school day (Brunzell et al., 2016a; Cummings et al., 2017).

Gardner and Stephens-Pisceco (2019) defined resilience as one’s ability to overcome hardship. This resilience becomes a strength or characteristic that can positively impact one’s
performance, health, and overall well-being. Resilience can also be defined as the reduction in susceptibility when faced with challenges which results in positive outcomes (Pasha-Zaida et al., 2020). Some individuals flourish when encountering adversity due to individual fortitude. Schools are a critical component in fostering resilience in children (Gardner & Stephens-Pisecco, 2019; Greene et al., 2003; Herrenkohl et al., 2019). Gardner and Stephens-Pisecco (2019) found that students who are non-resilient exhibit issues with peers due to introversion or aggressive personality traits. They can also exhibit low self-esteem and have lower competencies than peers. Non-resilient children can exhibit higher levels of stress with the addition of hyper-aroused senses which have an impact on learning. Lifelong implications for children who are non-resilient include maladjustment, pessimism, deviant behavior, and issues with achieving goals.

Agentic engagement, which is proactive, purposeful, and educationally important, allows students to catalyze the learning process (Bandura, 2006; Reeve et al., 2020). Learners who are agentically engaged take the initiative, ask questions, and contribute to their own academic success. Progress is made toward mastery, and high academic achievement is attained. When students are disengaged from the learning process, agentic disengagement occurs, and academic progress does not occur (Reeve et al., 2020). Matos et al. (2018) found a unique relationship with teacher-provided autonomy support and student-initiated agentic engagement. Teachers should actively seek student input and offer encouragement which results in students learning to become resilient. Autonomy satisfaction is needed for motivation which creates mobilization and initiative to succeed (Reeve et al., 2020).

Cummings et al. (2017) noted that children can be resilient despite being exposed to traumatic events when paired with strong family relationships. Yule et. al (2019) stated that understanding what increases resilience is important to develop effective strategies for
intervention. Resilience involves internal factors relating to one’s temperament, attitudes, and external factors of community well-being (Greene et al., 2003). Developing resilience involves faith or belief in something that is more substantial than themselves, and the ability to make meaning when traumatic events occur (Greene et al., 2003).

Yule et al., (2019) identified four protective factors as having the most powerful effects to increase resilience: self-regulation, support from families, support from the school community, and peer support. These protective factors improve adjustment to situations regardless of the level of trauma experienced. Effective coping or buffering strategies aid children to overcome adversity. Promotion of protective factors is beneficial regardless of the type of trauma encountered. ACEs that occur in the family environment were found to have a negative relationship with self-regulation as the home is where adolescents first learn self-regulation of emotions and behavior (Pasha-Zaida et al., 2020). Protective factors enable a person to recover or bounce back from adversity (Greene et al., 2003; Liew et al., 2018; Sciaraffa, et al., 2018; Yule et al., 2019). Protective factors from caring relationships could include positive parenting and sibling support; however, when trauma is experienced in the home, protective factors that can be found in the school setting become vital (Greene et al., 2003; Herrenkohl et al., 2019). Trauma that occurs in the home setting can impede the internalization of outside pressure to succeed which makes it difficult for students to learn self-regulation (Pasha-Zaida et al., 2020).

There are three interrelated protective systems that enable a person to adapt: individual capacity, nurturing caregiver, and a protective community surrounding the individual (Sciaraffa et al., 2018). Self-protective factors such as withdrawing from a situation, flight, or anger can be generalized in new situations when one feels threatened or uneasy (Howard, 2019; Yule et al., 2019). Informal emotional and support systems can also play a significant role in reinforcing
protective factors (Herrenkohl et al., 2019). Grit, the ability to persist despite failure, is a meaningful predictor of overcoming adversity. Grit does not work in isolation but can be a contributing factor to increasing motivation and self-regulation when one encounters challenges (Pasha-Zaida et al., 2020). Educators can assist a child in recovering from ACEs (Greene et al., 2003; Sciaraffa et al., 2018).

Mindset, belief in human traits being malleable, is an additional factor which can increase resilience (Dweck, 2006; Pasha-Zaida et al., 2020). When students see their ability to complete a task unreachable or fixed, they interpret this inability as a reflection of their own ability. This view of their ability being unchanging results in lower resilience levels. The ability to view their ability as malleable allows one to attempt strategies to increase resiliency and achieve growth. Growth mindset, grit, self-efficacy, and self-regulation can all be utilized in the academic setting to increase resilience (Pasha-Zaida et al., 2020). Resilience can be both stable and malleable. Dispositional resilience is the quality that one possesses that enables adaptation amid stress or adverse events. This malleable resilience becomes a mediator of the antecedent effects of adverse events (Etherton et al., 2020).

To build a resilient child, it is crucial that there is at least one caring adult who provides support and enables the child to feel safe both emotionally and physically (Plumb et al., 2016; Sciaraffa et al., 2018). Herrenkohl et al. (2019) stated that educators should constantly look for vulnerabilities as conditions are ever changing. In the context of the school setting, resilience refers to any formal or informal systems that offer support to aid students in overcoming adversity both academically and emotionally. Gardner and Stephens-Piscecco (2019) found that resilience can be observed in the playground, classroom, and transitions in the forms of independence, engagement in activities, self-control, and self-esteem. Moral reasoning, acumen,
and reflexive actions to help others are hallmarks of resilience. Other signs of a resilient child include fortitude, coping skills, and moral beliefs.

There are many opportunities for building resilience in the community, home, and school setting (Gardner & Stephens-Pisecco, 2019; Yule et al., 2019). Gardner and Stephens-Pisecco (2019) stated that teachers should be cognizant of student dispositions to manage behavior, promote academic achievement, and improve student social and emotional well-being. Schools should be a place of shelter and security where children feel safe to learn and explore. Classrooms should be operated with clear and consistent rules that are known by students and balanced with expressions of encouragement, support and even empathy. Students should be offered opportunities to be successful in endeavors which motivate and encourage. Plumb et al. (2016) reported that the developing brain of a child can build resilience from the addition of stress if it is predictable, moderate, and occurs in a controlled environment. Unpredictable or severe stress can cause a child to develop an intense vulnerability to stress response which can affect brain development, behavior, and learning.

Self-efficacy is formed when one interprets competence from experiences and persuasion by others (Ayllón et al., 2019; Bandura, 1977; Gebauer et al., 2020; Pfitzner-Eden, 2016). Success will increase one’s self-efficacy, and failures will lower it (Gebauer et al., 2020; Pfitzner-Eden, 2016). Pfitzner-Eden (2016) found that affective states are a powerful indicator of self-efficacy as hyperarousal or dysfunction can lead one to believe that efficacy is low. Behavioral goals are affected by self-efficacy as one determines how much effort or persistence to spend based on self-efficacy. Burić & Kim (2020) found that self-efficacy beliefs can influence the function of cognitive processes, motivation, and decision making which can affect
expectations and perception of causal outcomes. Self-efficacy plays a role in important life decisions.

Gebauer et al. (2020) claimed that a person’s own experiences, whether they be successful or not, becomes a strong source of mastery experience. These experiences are evaluated based on past experiences, skills, depth of understanding, and present knowledge. Vicarious experiences, observing others performing a behavior, can also increase self-efficacy by reinforcing the idea that something could be done if others are performing the act successfully. Verbal persuasion from others can also increase self-efficacy; however, the persuasion must come from someone wherein there is a strong relationship bond. Task-specific efficacy effects goal setting and performance, and dispositional resilience increases confidence in ability to perform specific tasks (Etherton et al., 2020). Gebauer et al. (2020) stated that by simply reinforcing the idea that the person is capable of success in a task, verbal persuasion can be a powerful force to increase self-efficacy. Etherton et al. (2020) posited a clear connection between self-efficacy and the ability to be resilient.

Pasha-Zaida et al. (2020) found that student motivation is linked to intrinsic motivation which improves academic outcomes. Motivation guides the use of learning strategies that students utilize which confirms Bandura’s (1977) theory that a student’s beliefs about ability drives motivation to succeed. Social learning theory states that self-efficacy can be compelling motivational tool, and experiencing success has the highest power in increasing self-efficacy (Zulkosky, 2009). Other factors to increase self-efficacy include reminding of ability, observing others being successful, believing in importance and value of a task, and finding meaning in the activity (Pasha-Zaida et al., 2020).
A teacher’s sense of self-efficacy is a critical component that can positively affect student achievement and behavior (Burić & Kim, 2020; Herman et al., 2018; Mahler et al., 2018; Yoo, 2016). A teacher’s personal efficacy is the most important predictor of a teacher’s self-perception, motivation, organizational planning, and tolerance towards students (Clark, 2020; Herman et al., 2018; Mahler et al., 2018; Wolmer et al., 2016). Teacher self-efficacy (TSE) is associated with positive school culture, recognition for efforts, higher salaries, effective feedback, realistic job demands, positive administrator attitudes, and self-care (Wolmer et al., 2016). Mastery experiences are the strongest driver for improving TSE, and perceived self-efficacy as a result of cognitive processes has a profound effect on a teacher’s performance (Herman et al., 2018; Pfitzner-Eden, 2016). McLennan et al. (2017) stated that TSE is directly associated with teaching effectiveness, job satisfaction and performance, and ultimately, teacher retention. Experience in the teaching field and peer comparison did not influence TSE (Pfitzner-Eden, 2016). Yoo (2016) and Burić & Kim (2020) found that teachers make instructional choices based on self-efficacy, and teachers with a high sense of self-efficacy have high student engagement, especially with students who are struggling. Teachers with high self-efficacy tend to be goal oriented, and efficacy is directly tied to student achievement. Perera et al. (2018) stated that teacher affectivity increases their self-efficacy, engagement, agreeableness, and work-related satisfaction.

Disruptive behaviors of students can impact the well-being of teachers, feeling of self-efficacy, and the overall retention of teachers staying in the classroom (Howard, 2019; Herman et al., 2018; Morgan et al., 2015). Teacher burnout is often the result of teachers feeling inadequate or overwhelmed (Herman et al., 2018). When confronted repeatedly with managing disruptive behavior, a teacher’s well-being can be impacted (Berger et al., 2019; Howard, 2019).
Plumb et al. (2016) found that maximizing a teacher’s capacity to deal with disruptive behaviors and provide adequate self-care and support is important. Vicarious trauma can also be an issue for teachers who interact with students who have experienced trauma. Teacher self-care must be exercised to avoid burnout and compassion fatigue. Proper nutrition, physical activity, friendships, spiritual wellness, and relaxation are all modes of self-care for teachers.

The American Psychiatric Association has advised that either directly or indirectly experiencing trauma can lead to trauma for an individual resulting in post-traumatic stress disorder (PTSD), and adjustment, reactive detachment, or social engagement issues (Brunzell et al., 2016a; Cummings et al., 2017). Even though teachers are not therapists, they are often on the front-line in dealing with trauma-impacted students who may not have access to mental health services (Brunzell et al., 2016a). Secondary traumatic stress (STS) can be defined as the response to stress or trauma that can be experienced when one hears the stories of those who have experienced trauma (Christian-Brandt et al., 2019; Reinbergs & Fefer, 2018). Low self-efficacy, job exhaustion, and cynicism can contribute to burnout due to job related stressors; however, burnout does not require only exposure to second-hand trauma (Christian-Brandt et al., 2019; Domitrovich et al., 2016). Burnout in teachers is often manifested as disruptive student behavior in the classroom and poor academic outcomes. STS has been seen at a higher rate for teachers who work in low-economic areas and high-minority schools (Christian-Brandt et al., 2019).

Yoo (2016) determined that external factors such as student behavior, curriculum demands, and socio-economic status of the students and school can negatively affect a teacher’s sense of efficacy. Teachers can develop learned helplessness because of repeated failures which can contribute to these external factors. Learned helplessness can occur even amid a high sense of self efficacy due to the uncontrollable nature of external factors. Digić et al. (2014) identified
teacher personality as a factor that influenced efficacy. A teacher’s conscientiousness and openness, both personality traits, are indicators of high teacher self-efficacy.

Perera et al. (2017) identified teacher personality profiles which were indicators of high self-efficacy. Conscientious teachers who favored order and exhibited high self-discipline often prepared lessons that were highly engaging for students. Teachers with high curiosity and openness were found to be more effective due to their tendency to seek out new teaching strategies which were more engaging for students. Agreeable teachers who were more relationship minded were found to have positive interpersonal relationships with students which increased engagement. Perera et al. surmised that a teacher’s level of self-efficacy was directly impacted by their personality profile which impacted their instructional strategies, level of student engagement, and classroom management skills.

Teacher professional identity (TPI) involves how a teacher perceives learners and themselves as educational leaders (Morgan et al., 2015). Educator identity influences professional practices in the classroom, and teachers must engage in critical reflection to ensure they are offering innovative and meaningful responses to students (Herman et al., 2018; Morgan et al., 2015). Career adaptability is essential in forming a professional identity which ties back to teacher preparation programs (McLennan et al., 2017). Compassion satisfaction is a teacher’s satisfaction and positive sense of self-efficacy due to the ability to help children, and this compassion satisfaction plays a protective role for teachers (Christian-Brand et al., 2019; Domitrovich et al., 2016). The level of a teacher’s self-efficacy is an indicator of a teacher’s self-identity, job satisfaction, and commitment to students (Burić & Kim, 2020; Wolmer et al., 2016). Teacher self-efficacy can be linked to the level of student achievement (Herman et al., 2018).
Zee and Koomen (2016) identified classroom consequences of high teacher self-efficacy as improved behavior management, inclusive discipline practices, effective instructional management, classroom goal structures, and increased technology use. A teacher’s ability to increase emotional support to students is improved due to the overall emotional climate of the classroom. Teachers with high self-efficacy tend to place emphasis on student interests, points of view, and motivations for learning. Student achievement and motivation for learning are the most common consequences of teacher self-efficacy. Further consequences for increased teacher self-efficacy include lower burnout, better control of stress and coping factors, improved job satisfaction, and commitment to the profession (Herman et al., 2018; Zee & Koomen, 2016).

McLennan et al. (2017) identified outcome expectations, beliefs about certain outcomes based on one’s self-efficacy, as being causally linked with motivation to achieve goals. High outcome expectations result in positive progress, achievement, and optimism. Lazarides et al. (2018) found that enthusiastic teachers with a high sense of self-efficacy have students who are highly motivated. Mastery oriented classrooms increase student motivation as well. Teacher enthusiasm for concepts taught aids in supporting student motivation and differentiation based on student learning needs.

Ayllón et al. (2019) stated that a student’s sense of self-efficacy is the determining factor in the level of engagement, choice of task, perseverance to achieve learning goals, and the amount of effort expended. A child must be able to be a causal agent, feel competent to promote psychological growth, and form and maintain relationships with others. The strength of a child’s self-efficacy is essential to motivation, learning, and achievement. Olivier et al. (2021) stated that autonomy support is needed for students to enable them to reflect on learning needs and values and to express perspectives. The learning environment and classroom activities should
motivate students to improve their learning. This can be accomplished by giving students learning choices, providing relevance for activities, and by showing respect to students utilizing non-controlling language (Ayllón et al., 2019; Matos et al., 2018). This autonomy support provides students with need satisfaction, engagement, and motivation that is autonomous which results in increased academic performance (Matos et al., 2018).

Ayllón et al. (2019) further stated that structure in the classroom allows students to exercise individual capabilities. Consistent guidelines should be set with predictable routines. Providing structure increases clarity using detailed instructions, a solid framework of the classroom curriculum, constant monitoring of progress, and the continual offering of support throughout the learning process (Ayllón et al., 2019; Olivier et al., 2021). Effective feedback that strengthens the student’s autonomy aids in the student setting goals that are manageable and attainable. Olivier et al. (2021) found that autonomy-supporting educators provided students with choice, allowed students to pace their learning, acknowledged student perspectives, and avoided the use of controlling language. Structure increases a student’s perception of their competence to complete a task.

Ayllón et al. (2019) and Olivier et al. (2021) identified involvement as a key component to increase a student’s self-efficacy and increase engagement. Everyone has a powerful desire to form relationships that are strong and stable. Teachers can show empathy to students by showing affection, and a strong commitment to the learning process strengthens pro-social behavior by simply being available to students. Teachers can strengthen involvement with students by showing affection, understanding, providing resources, and simply being dependable and
available. Increasing involvement in a student’s life can increase self-efficacy (Ayllón, et al., 2019).

Self-regulation is the ability to manage one’s own thoughts or feelings to control behavior (Pasha-Zaida et al., 2020; Sciaraffa et al., 2018). When a child has strong regulatory abilities, they can acknowledge, identify, and learn from dysregulated feelings (Brunzell et al., 2016b). Interventions should focus on aiding students to repair the regulatory issues of stress response and create nurturing student-teacher relationships (Brunzell et al., 2016a). Complex trauma exposure can lead to difficulties with self-regulating emotions and detachment from others (Howard, 2019). Teachers should provide opportunities for students to self-regulate which increases the ability to improve emotional and behavioral outcomes, interact positively with peers, and enable them to de-escalate emotions. The ability to self-regulate behavior and emotions is a principal factor in increasing self-efficacy (Brunzell et al., 2016b).

Havik & Westergård (2020, p. 489) defined student engagement as “energy in action” with various subtypes which include academic, cognitive, emotional, and behavioral to name a few. Olivier et al. (2021) further defined student engagement as a student’s involvement in the learning process which includes the behavioral, emotional, cognitive dimensions. Student engagement is grounded in self-determination theory (SDT) which states that teachers should implement need-supporting strategies which are centered on autonomy, structure, and student involvement (Burić & Kim, 2020). SDT is utilized to understand student motivation and behavioral outcomes and identifies students as active or disengaged in the learning process based on the social context (Matos et al., 2018). Reeve et al. (2020) identified autonomy as the need to practice volition and self-affirmation of one’s behavior. Olivier et al. (2021) stated that even the use of one of the need-supporting strategies can bring about positive impacts on engagement;
however, the use of a combination of all three can lead to a substantial increase in student engagement. Higher student engagement is found when classrooms are well-structured, caring, and incorporate high and clear academic and behavioral expectations (Havik & Westergård, 2020). Matos et al. (2018) explained that according to SDT, teachers create a learning environment that either promotes or undermines how a student reacts to the learning environment.

Matos et al. (2018) defined student engagement as an active involvement in the learning process which is multidimensional with four intercorrelated constructs. First, behavioral engagement is the extent of student involvement in learning activities in terms of engagement and effort. The second construct relates to emotional engagement, or the presence of emotions or enjoyment during learning. Thirdly, agentic engagement refers to the contribution of the student, which is intentional, proactive, and effective. Finally, cognitive engagement describes how the student intentionally employs sophisticated learning strategies which could involve explanation of critical thinking. Reeve (2013) found that when students exhibited agentic engagement or initiative, there was an increased student perception of increased autonomy-supporting teaching strategies which increased engagement in the learning process.

Olivier et al. (2021) described behavioral engagement as the conduct and action of a student which could include answering questions, completing assignments, and can even include passive engagement. Daydreaming or not completing assignments would indicate a lack of behavioral engagement. Emotional engagement includes the affective reactions of students to the learning process and even the learning environment. Interest in learning, overall feeling of well-being, and completion of assignments are all indicators of positive emotional engagement. Cognitive engagement is manifested by the subconscious effort expended to learn and master
curriculum content. Self-regulation is paramount in cognitive engagement to remain focused on learning. Etherton et al. (2020) described self-regulation as the response of individuals to perceived discrepancies which effects student engagement. Havik & Westergård (2020) concluded that student engagement results in positive academic achievement and prosocial behavior in the school environment.

Cognitive activation refers to the teacher’s ability to engage students in challenging tasks that require higher-order thinking, focus on deep understanding instead of surface learning, and explore new concepts and ideas (Burić & Kim, 2020). Quality of instructional strategies utilized in the classroom are causally related to teacher self-efficacy (TSE) (Künsting et al., 2016).

Instructional quality includes the climate of the classroom, classroom management, and overall cognitive engagement of students. Teachers who exhibit strong self-efficacy are more willing to experiment with instructional strategies that can be differentiated to accommodate student needs. Cognitive activation is accomplished by creating lessons that are challenging and require background activation, conflict resolution, learning basic concepts, and problem solving. Finding similarities and differences in concepts forces students to engage in self-reflection, and discourse with others reinforces new learning. Cognitive activation promotes student learning of new concepts. A teacher’s use of instructional strategies that incorporate cognitive activation is an indicator of high TSE (Künsting et al., 2016).

Personality traits of a teacher with a high mastery goal orientation include the motivation to learn innovative teaching strategies and establish professional competency (Künsting et al., 2016; Sangkawetai et al., 2018). Having a mastery goal structure in the classroom promotes problem solving, higher level cognitive processes, growth mindset, and differentiated instruction that focuses on individual student learning goals. This structure promotes not only mastery
teaching, but the pursuit to learn additional ways to teach. Learning opportunities are seen as crucial to improving self-efficacy which promotes the implementation of effective instructional strategies (Künsting et al., 2016). Deep learning is a result of mastery goal structure in the classroom (Sangkawetai et al., 2018).

Sangkawetai et al. (2018) classified classroom goal structure as either mastery or performance. While mastery structure emphasizes both progress and effort on tasks, performance structure is based on student competition and low-level adaptive instruction. Instructional strategies that utilize rote memorization activities and surface learning can be found in classrooms with low teacher self-efficacy. Instructional strategies which are focused on task completion and surface learning result in lower educational outcomes. Mastery structured classrooms are characterized by challenging tasks, high student engagement, intrinsic value in learning, student autonomy, and collaboration with peers (Burić & Kim, 2020). Teachers with high self-efficacy utilize instructional strategies that promote mastery learning and increased student motivation to improve learning outcomes (Sangkawetai et al., 2018). Mastery instructional strategies focus on probing of understanding, emphasizing key points, justifying responses, and involving all stakeholders (Lazarides et al., 2018; Sangkawetai et al., 2018).

Teacher-centered classrooms are characterized by instructional strategies that lack conceptual understanding, focus on mere transmittal of knowledge, incorporate assessments which require little cognitive activation, and classroom management of negative reinforcement with little feedback on performance. In contrast, instructional strategies that focus on deep learning engage students in higher cognitive activities and emphasize the interconnectedness of concepts. This can occur utilizing instructional strategies that focus on explaining and justifying thinking and promoting critical analysis (Lazarides et al., 2018; Sangkawetai et al., 2018).
Mastery goal structure is a hallmark of a teacher with high self-efficacy (Sangkawetai et al., 2018).

Slater & Main (2020) identified classroom management skills as essential for effective teaching. Organization, classroom routines, task engagement, and modeling appropriate student interactions are just a few of the components for a well-managed classroom. Classroom management is tied to self-efficacy as the teacher must believe in their ability to create certain outcomes. Bandura (1977) stated that the higher a teacher’s self-efficacy, the more they believe they can influence student outcomes. Slater and Main (2020) state that personality traits, task difficulty, and teaching experience are all involved in a teacher’s sense of self-efficacy. Effective classroom management maximizes instructional time and minimizes behavior that can disrupt the learning environment (Burić & Kim, 2020; Künsting et al., 2016).

A teacher’s self-efficacy regarding classroom management is the belief that they can execute classroom management tasks effectively (Lazarides et al., 2018). Researchers have found a correlation between effective classroom management skills and a mastery learning classroom structure (Lazarides et al., 2018; Wolters & Daugherty, 2007). Lazarides et al. (2018) further found that teachers identified by students as having high self-efficacy regarding classroom management created mastery learning classroom environments. This strengthens the importance of teachers having strong classroom management skills to create classrooms which focus on adaptive academic achievement of students.

Due to the substantial number of children who attend public schools in the United States, the school setting is the ideal place to implement comprehensive interventions to address childhood trauma (Fondren et al., 2020; Plumb et al., 2016). Trauma-informed practices (TIPs) are defined as guidelines and strategies which ensure that the policies and culture of an
organization understand, identify, and respond to the effects of trauma on an individual’s behavior and overall well-being (Christian-Brandt et al., 2019; Fondren et al., 2020; Howard, 2019; Morgan et al., 2015; Purtle, 2020). TIPs present a system-level framework for how schools should recognize and respond to trauma-impacted students in the school setting (McIntyre et al., 2019; Record-Lemon & Buchanan, 2017). Research has shown that adversity can impede a child’s social, emotional, cognitive, and physical development; however, access to appropriate mental health services and safety can impact the magnitude of these impairments (Berger et al., 2019; Herrenkohl et al., 2019; Purtle, 2020).

The classroom environment should be safe, stimulating to the brain, have predictable activities, nurturing, and incorporate age-appropriate activities and expectations (Anderson et al., 2015; Sciaraffa et al., 2018). Classrooms that are harsh or overly regulated can have an adverse effect on children who have experienced trauma. When a student exhibits behavioral or learning difficulties, teachers should recognize that the behavior could be a result of trauma, stress, or adversity. Teachers should be sensitive and respond appropriately to a child’s individual needs as students can have varying levels of adversity (Sciaraffa et al., 2018). It is also important to understand that not all children who exhibit behavioral difficulties have experienced trauma (Morgan et al., 2015).

Herrenkohl et al. (2019) found that acts of defiance in children who have faced adversity are often misunderstood when they are based on emotional pain, relational issues, or lack of emotional regulation. Punitive measures such as suspensions or expulsions can often impact students of color in a disproportionate manner. Alternative strategies should be developed that are not punitive but restorative. Students should be taught self-management skills and additional coping skills to aid in decreasing disruptive behavior in the classroom (Anderson et al., 2015).
Educational impacts of trauma include lower cognitive capacity, sleep issues, memory deficiencies, and language delays (Morgan et al., 2015). Strength-based trauma-informed positive education (TIPE) approach offers support for students who have experienced trauma by providing support in self-regulation, attachment issues, and expanding access to psychological support (Brunzell et al., 2016a; Brunzell et al., 2016b; Gardner & Stephens-Pisecco, 2019). The TIPE model focuses on elevated expectations for learning outcomes, opportunities for access to psychological resources, consistent classroom routines, and the teaching of self-regulation strategies (Brunzell et al., 2016a; Brunzell et al., 2016b).

The teacher’s ability to manage disruptive classroom behaviors in a way that is safe and supportive is the hallmark of trauma-informed classroom management (Brunzell et al., 2016b). Other strategies could include flexible seating arrangements, predictable schedules, teacher coaching, and a teacher’s ability to teach a child how to recognize and respond to feelings. Self-regulation can be strengthened for children by providing space, time, and support to help children learn to manage emotions. Sciaraffa et al. (2018) determined that setting clear behavioral expectations will aid the teacher in redirecting misbehavior and offering opportunities for students to move around the classroom when they are unregulated can help to calm stress and aid in self-regulation.

Brunzell et al. (2016b) identified the classroom setting as the safest environment for a trauma impacted student as it offers a consistent place for interventions. Trauma-informed classrooms which focus on increasing regulatory and relational skills of students to stimulate growth provide a jumpstart in improving outcomes for the trauma-impacted student. These practices should be followed up with classroom interventions and opportunities for learning which strengthen the student’s self-regulation abilities. Herrenkohl et al. (2019) stated that
interventions should be grounded in a multi-tiered framework that utilizes evidence-based programs and varying interventions based on student needs. Brunzell et al. (2016b) found that positive educational interventions increase hope, create optimism, foster a growth mindset, focus on character strengths, and encourage positive emotions. The role of TIPs reinforces the importance of authentic relationships to restore one’s ability to connect with others and increase learning outcomes.

Brunzell (2016a) stated that utilizing rhythm in the classroom in the form of brain breaks, triage intervention for resisting students, and a focus on heart rate aids in increasing self-regulation. Due to the heightened arousal response from trauma exposure and chronic stress, a child’s resting heart rate is often higher; therefore, classrooms should have systems in place to aid students in building stamina for self-regulating responses. Rhythm is an essential component to decreasing arousal response in children, increasing stamina to improve learning acquisition, and supporting capacity for prolonged concentration.

Brunzell et al. (2016a) found that to increase emotional regulation and cognitive functioning, mindfulness can be incorporated into the classroom routine. Mindfulness activities such as breathing and centering can be introduced during either brain breaks or short mini-lessons and can also assist in training students to focus attention on breathing and awareness of the environment. The purposeful introduction of mindfulness by teachers with clear expectations of respect and safety should be implemented to purposefully tie mindfulness to school life.

Brunzell et al. (2016a) identified de-escalation as a critical component in increasing a child’s regulatory abilities. De-escalation in the classroom is seen as teaching about de-escalation strategies, using de-escalation maps, and creating individualized plans for safety for students. The goal of de-escalation is to encourage calmness and a ready-to-learn state of effectiveness.
Teachers should model expectations for behavior and set the tone for the classroom which includes one’s own de-escalated behavior. Teachers should create a calm environment with routine daily activities, and consistently monitor arousal states of students to address issues as they arise. Brunzell et al. (2016a) also found that student created escalation maps allows a visual representation of the path of emotional response, and individual safety-plans should detail a plan for de-escalation when behavior is triggered.

Personal relationships between students and teachers are extremely important, and even more so for children who have experienced trauma (Brunzell et al., 2016a; Gardner & Stephens-Pisecco, 2019; Iancu et al., 2018; Morgan et al., 2015; Sciaraffa et al., 2018; Whitaker et al., 2019). Supportive relationships in the classroom setting can improve neurological function, behavioral outcomes, and the well-being of students who have been exposed to trauma (Domitrovich et al., 2016; Howard, 2019; Purtle, 2020). A mutual relationship that is both caring and respectful enables re-engagement, and this robust relationship is causally linked to a teachers’ feeling of efficacy in aiding students to develop academic, emotional, and social skills (Morgan et al., 2015).

Havik & Westergård (2020) found that student engagement is increased when teachers encourage and care about students. This student-teacher relationship often becomes a protective factor for the child and can in some instances be the only positive relationship in a child’s life (Gardner & Stephens-Pisecco, 2019; Sciaraffa et al., 2018). Positive teacher-student relationships which are centered on warmth, encouragement of critical thinking, and overall genuineness result in positive student outcomes (Brunzell et al., 2016b). Relationship-based classrooms which are centered on mutual affection and respect enable struggling students to respond more effectively (Brunzell et al., 2016b; Liew et al., 2018; Yule et al., 2019). These positive emotions increase the
reciprocal causation of reinforcing the ability for one to form psychological responses (Brunzell et al., 2016b).

Social-emotional learning (SEL) can be utilized in the school environment to address both social and learning issues (Anderson et al., 2015; Plumb et al., 2016). By utilizing supportive relationships, emotional literacy, and a child’s ability to solve problems, resiliency can be increased (Plumb et al., 2016). A teacher with competent social-emotional abilities is vital for a healthy classroom environment for classroom management to be effective (Domitrovich et al., 2016). Classroom-based interventions should include programs that create supportive learning environments, peer relationship building, stress management, and self-regulation (Anderson et al., 2015; Burić & Kim, 2020; Crosby et al., 2018; Herrenkohl et al., 2019). Positive relationships between peers and teachers should fortify feelings of safety in the classroom setting. Experiencing the feeling of belonging aids in coping with healthy stressors as well (Brunzell et al., 2016a). Behavioral interventions that focus on social-emotional skills enable students to internalize skills needed to regulate behavior and develop positive peer relationships. Improvements in communication, positive relationships, and conflict resolution skills are all outcomes for SEL in the classroom (Domitrovich et al., 2016).

SEL programs should be based on student needs, be implemented throughout the school, and most importantly, be evidenced based (Plumb et al., 2016). Through the trauma-informed lens, disruptive behavior and/or withdrawal should not be seen as acts of defiance but as responses to overwhelming stress or anxiety and lack of social-emotional skills (Anderson et al., 2015). Plumb et al. (2016) stated that the SEL program should shape the school’s culture, focus on increasing emotional competencies of students, increase coping skills, teach empathy, and provide guidance on other prosocial behavior. The SEL curriculum should be developmentally
appropriate for the age of the student population. A school crisis plan should be developed to ensure proper training has been given to all stakeholders. Plumb also stated that de-escalation strategies of children in crisis should be addressed, and a crisis team formed with clear identification of contact information. Every member of the school community should be knowledgeable of the crisis plan to assist in de-escalation if needed.

Professional development for educators in TIPs is important to provide tools and strategies for recognizing how trauma affects behavior in the classroom (Crosby et al., 2018). Professional development enables a teacher to enhance strategies in teaching coping strategies in promoting resilience and self-confidence (Wolmer et al., 2016). Record-Lemon & Buchanan (2017) stressed that trauma-informed practices should focus on a strong understanding of the importance of classroom environment, safety, and autonomy for students; therefore, training should focus on these areas. Sciarafa et al. (2018) found that community, a protective factor to foster adaptability, can be created in the school setting. Enhanced teacher training, trauma-informed care, a community of support between families and school personnel, and an effective collaboration across all systems all support the child to provide opportunities for proper brain development. Whitaker (2019) stated that professional development in TIPs creates additional knowledge, improved attitudes, and supportive teacher behaviors which can increase the awareness of trauma in the classroom environment and improve teacher-student relationships. Programs should incorporate education for staff members on the specific programs being implemented, provide targeted teaching objectives and strategies, and allow for periodic evaluation to determine effectiveness (Gardner & Stephens-Pisecco, 2019). Ongoing training should be provided in best practices for working with students who have experienced trauma and the individual needs of the school population (Plumb et al., 2016).
Federal regulations require that teachers be highly qualified and utilize evidence-based teaching practices in the classroom to promote academic achievement (Herman et al., 2018; Plumb et al., 2016). Positive Behavior Interventions and Supports (PBIS) have been implemented in schools to specifically address behavioral issues in the classroom, and it also addresses the social-emotional needs of students (Plumb et al., 2016; Reinbergs & Fefer, 2018). PBIS focuses on addressing behavioral issues before academics to effectively address any hyperarousal issues (Plumb et al., 2016). Although PBIS does not address any underlying issues regarding behavior, it does give the classroom teachers external benefits such as improved behavior (Plumb et al., 2016). von der Embse et al. (2019) details a multi-tiered system of support (MTSS) approach to PBIS which provides a framework for implementing effective interventions for students. MTSS prioritizes resources, decision making that is efficient, and a strong focus on prevention. Professional development in this tiered process, appropriate identification of students, and effective intervention practices should be implemented in the school setting (Fondren et al., 2020).

The use of evidence-based professional development has been found to improve the outcomes for teachers, improvements in the school environment, increase the efficacy for teachers and students, and reduce the number of teachers who experience burnout (Domitrovich et al., 2016). Yoo (2016) found that a teacher’s sense of self-efficacy increased because of professional development and the addition of pedagogical skills. This higher self-efficacy does not change based on the number years teaching which confirms Bandura’s (1977) view that additional training in skills can increase self-efficacy.

Yoo (2016) identified several themes that arose after implementation of evidence-based professional development. The first theme related to increased professional enhancement due to
the additional skills gained or positive outcomes which in turn increased self-efficacy. The development of a theoretical foundation, addition of pedagogical skills, goal setting, and strategies to increase student engagement all increased self-efficacy because of professional development. A frame of reference change was another theme identified by Yoo (2016) which is characterized by an adjustment of value systems or beliefs. This reference change also increased and decreased self-efficacy due to an increased awareness of learning, and the self-analysis of this change was increased. This awareness at the completion of the training of their reference change allowed participants to determine their estimation of their self-efficacy can sometimes be inaccurate.

Yoo (2016) identified a third theme of learned helplessness that emerged after implementation of professional development. This resulted from repeated negative experiences which had an inverse effect on self-efficacy. Yoo also found that external factors, which were often uncontrollable, decreased self-efficacy despite increased pedagogical knowledge. External factors could include curriculum expectations, student abilities, and social-economic status of the school setting.

Brunzell et al. (2018) found that meaningful work is defined as the meaning that work is to an individual, the positive and significant aspects of one's work, and work that is purpose oriented. Meaning is defined as the positive-oriented beliefs and significance that one makes about work. When work is seen as contributing to the greater good of others and is socially relevant, an individual’s sense of well-being is increased. Four sources of meaningful work include one’s values or motivations, individuals surrounding them, context of the work completed, and spiritual life. Brunzell et al. further found that factors which determine if work is meaningful are as follows: authenticity, self-efficacy, self-esteem, purpose, belongingness,
transcendence, cultural and interpersonal connections. These pathways can be activated either alone or simultaneously with others.

Brunzell et al. (2018) found that teachers who work with trauma-impacted students are known to do so because of the positive social changes they feel that they can make, and they believe they are truly called to work with students. Burnout is often prevalent when teachers must deal with disruptive and disengaged students. Teachers can feel secondary trauma when dealing with students with trauma exposure which can make work more difficult. Teachers should be trauma-informed to ensure that they are knowledgeable about effective pedagogical practices and positive self-care practices (Brunzell et al., 2018).

Brunzell et al. (2018) defined compassion satisfaction as the ability to find pleasure in doing a job well, helping others, and finding work invigorating. When teachers are presented with effective strategies to teach in trauma-impacted environments, supported when dealing with adversity, feel satisfaction with accomplishments, and believe they are making a difference with students, compassion satisfaction occurs. Working with students who have experienced trauma can either contribute to meaningful work or to burnout.

Brunzell et al. (2018) stated that a teacher’s perception of effectiveness in pedagogy practice can be a source of meaningful work. Teachers are continually focusing on effective pedagogy to increase individuation to affect change and increase self-esteem. Adequate resources and autonomy are also important components of meaningful work. A teacher’s self-perceptions of value are improved when students are successful and reduced when students are not engaged or disruptive. Self-connection is a key component of meaningful work when work aligns with personal values. Pedagogy is important in self-connection due to the feeling of accomplishment in completing job duties. Connection to one’s authentic self is most prevalent
when work is meaningful and not reactive in nature. Brunzell et al. determined that contributions to something greater and work that improves student outcomes support making work meaningful.

Brunzell et al. (2018) also found that meaningful work is hindered when a teachers’ pedagogical skills do not meet the needs of those who are affected by trauma. Vicarious exposure to trauma, secondary trauma, and the inability to teach effectively due to inadequate training are also threats to meaningful work. Teachers are often unprepared to deal with the social-emotional and self-regulation needs of students, which adds an additional level of frustration and stress. Repeated exposure to dysregulation and lack of empathy in students often leads to the teacher becoming dysregulated as well. Lack of strong relationships with students due to disruptive behavior can also impede meaningful work.

Perera et al. (2017) explained that work satisfaction is found when one makes progress towards meaningful goals, has positive work conditions, displays high self-efficacy, encounters environmental support, and has positive personality traits. Brunzell et al. (2018) found that teacher well-being, which includes coping skills, self-regulation, professional identity, and relationships, are further components of meaningful work. Positive meaning from work enables one to identify self-efficacy and self-regulation when faced with adversity. Increasing a student’s self-regulation abilities also increases teacher well-being, and self-connection was increased when positive emotions supported coping mechanisms. Well-being is centered around genuine feelings of happiness, affection for work and community, passion for work being completed, and the feeling of satisfaction.
Summary

As schools are becoming more responsible for emotional needs of students who have experienced trauma, professional development for teachers in effective trauma informed practices (TIPs) has become a priority in schools. As teachers often experience secondary trauma when dealing with disruptive behaviors in the classroom, effective practices to increase confidence or self-efficacy of teachers is critical for student success. With teachers leaving the teaching profession in such large numbers, it is essential that teachers find work meaningful for school districts to retain experienced and effective teachers. Utilizing a strong focus on cognitive behavioral therapy and social-emotional skill building, TIPs are focused on building resilience and self-efficacy in both students and teachers.

Special focus should be given to increasing the self-efficacy of both teachers and students. By identifying work motivators for teachers, professional development can be tailored to specific needs to increase self-efficacy and confidence in dealing with disruptive students who have experienced trauma. TIPs focus on relationship building between students and teachers which will increase job satisfaction. A teacher’s self-efficacy is directly tied to student achievement; therefore, it is worthy to be investigated further. A gap has been identified in literature regarding the effectiveness of professional development in TIPs in increasing the self-efficacy of teachers regarding instructional strategies, student engagement in the learning process, and classroom management.
CHAPTER THREE: METHODS

Overview

Using a quasi-experimental, static-group comparison design, the collected data was analyzed to determine the effect of TIPs on a teacher’s self-efficacy for student engagement, instructional strategies, and classroom management. Data was collected from two separate school districts in South Mississippi. Chapter Three includes a discussion of the overall design of the study, the research questions which guided the study, the hypothesis, the recruitment of participants, the testing instrument, and the process of data collection and analysis.

Design

The current study is a quantitative, quasi-experimental, static-group comparison design to identify teacher self-efficacy regarding student engagement, instructional strategies, and classroom management after receiving professional development in trauma informed practices (TIPs). Creswell et al., (2019) describes a quasi-experimental design as beneficial when an intact group is preferred and not a random assignment of participants to groups. In a static-group comparison design, as defined by Gall et al. (2007), participants are not randomly assigned, and a post-test is administered without a pretest. Researchers should be aware of threats to internal validity of a static-group comparison design which could include any differences between participants based on personal characteristics which are outside the conditions set forth in the study.

The purpose of this quasi-experimental design is to determine if there are any interactions between the independent variable of participation in professional development in TIPs and those who did not participate in professional development in TIPs, and the three dependent variables of self-efficacy in instructional strategies, student engagement, and classroom management (Gall et
TIPs are guidelines and strategies which ensure that the policies and culture of an organization understand, identify, and respond to the effects of trauma on an individual’s behavior and overall well-being (Fondren et al., 2020; Plumb et al., 2016). The independent variable, those who do or do not participate in professional development in TIPs, is defined as professional development which provides tools and strategies for recognizing how trauma affects behavior in the classroom (Crosby et al., 2018). The first dependent variable, *instructional strategies*, is the teaching pedagogy that a teacher utilizes to instruct students to promote positive academic achievement (Tschannen-Moran & Hoy, 2001). *Student engagement*, the second dependent variable, is defined as the level of enthusiasm, engagement, motivation, and involvement that a student exhibits in the learning process (Tschannen-Moran & Hoy, 2001). The final dependent variable, *classroom management*, is defined as the effective classroom management strategies that teachers utilize to engage students in the learning process with minimal disruptive behaviors (Tschannen-Moran & Hoy, 2001).

The quasi-experimental, static-group design is appropriate for this researcher’s study due to the similarities of the participants chosen and common elements among the school districts. School district A participated in professional development in trauma informed practices for instructional strategies, student engagement and classroom management to increase their self-efficacy; however, school district B did not participate in this type of professional development. Since the school districts are in the same county and state, the researcher can assume that the school districts have similar characteristics.

**Research Questions**

The problem in this study related to the need for teachers to have a high sense of self-efficacy to have positive impacts on students who have experienced trauma. The purpose of this
study was to determine the self-efficacy for elementary and secondary teachers regarding instructional strategies, student engagement, and classroom management who did or did not participate in professional development in TIPs.

**RQ1**: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *instructional strategies* who do or do not participate in TIPs?

**RQ2**: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *student engagement* who do or do not participate in TIPs?

**RQ3**: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *classroom management* who do or do not participate in TIPs?

**Hypotheses**

The null hypotheses for this study are:

**H₀₁**: There is no significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *instructional strategies* who do or do not participate in TIPs.

**H₀₂**: There is no significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *student engagement* who do or do not participate in TIPs.

**H₀₃**: There is no significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *classroom management* who do or do not participate in TIPs.

**Participants and Setting**

The participants of this study are drawn from a convenience sample of elementary and secondary school teachers from two school districts in southern Mississippi during the 2021-2022 school year. Both districts qualify as Title I districts with at least 75% of students eligible for free or reduced lunches. School District A consisted of two high schools, two middle schools, and twelve elementary schools. School District B consisted of one high school, one middle
school, and two elementary schools. The target population are teachers from pre-kindergarten to twelfth grade in a convenience sample of at least 50 teachers from each school district in the southern United States.

Superintendents of both districts were contacted by the researcher via email to determine if the results of this study would be beneficial to each district’s school leaders for planning and implementing effective professional development training in TIPs (see Appendix C). After permission was obtained from the superintendents, principal recruitment letters were emailed to each school leader to outline the purpose of the study and seek their support in soliciting teacher participation on their campus (see Appendix H). Once approval was obtained from the district superintendents and school principals, recruitment letters were emailed to teachers in District A and District B to solicit their participation (see Appendix G). Every teacher in the population sample was invited to participate in the study.

Gall et al. (2007) urged researchers to design studies that are representative with high external validity due to real-world interventions and generalizability of the findings. This study was conducted in an educational setting; therefore, it can be generalized to classroom use with the population being studied. The participants included many environmental variations which included many elementary and secondary teachers, various years of experience, and diverse cultural backgrounds.

The sample consisted of 60 elementary teachers and 40 secondary teachers with varying ages and years of teaching experience in naturally occurring groups. The participants consisted of 86 female teachers and 14 male teachers with more teachers being in the elementary level (N=60) than in the secondary level (N=40). The anonymity of the teachers was protected using a coding system when submissions were received. Degree levels of the participants were 35%
received a bachelor’s degree, 51% of teachers have a master’s degree, 11% have a specialist
degree, and 3% have a doctoral degree. Teaching experience included 20% having 0-3 years of
experience, 33% having 4-10 years of experience, 32% having 11-20 years of experience, and
15% having 21 and greater years of experience.

Instrumentation

The instrument chosen for this study is the Teacher’s Sense of Efficacy Scale (long form)
(TSES) (see Appendix A) which was created and tested for validity by Tschannen-Moran and
Hoy (2001). The purpose of this instrument was to determine self-reported teacher efficacy. The
development of this instrument began at a seminar regarding self-efficacy in teaching and
learning at Ohio State University in their College of Education. These researchers explored
various instruments to determine an effective method to measure teacher efficacy. For
complexity of measuring personal teaching efficacy and general teaching efficacy, many
challenges arose in developing an effective instrument to measure teacher efficacy (Tschannen-

Tschannen-Moran & Hoy (2001) began their search by exploring instruments of other
peer reviewed studies which utilized Rotter’s social learning theory as the foundational theory
(Rotter, 1966). The first instrument, Rand measure, attempted to measure teacher perception of
their self-efficacy and locus of control (Armor et al., 1976). The second instrument, developed
by Guskey, focused on a teacher’s sense of responsibility for student achievement. It was called
RSA and produced information on the amount of responsibility teachers felt for student success
or failure (Guskey, 1981). Rose and Medway (1981) created an instrument which focused on a
teacher’s sense of student responsibility, but it sought to identify explanations for student
outcomes. The Webb Scale was also reviewed to expand teacher efficacy measurement while not expanding the construct of teacher efficacy (Ashton et al., 1982).

Tschannen-Moran & Hoy (2001) then focused on additional theories such as the social cognitive theory (Bandura, 1977) which focused on outcome expectancy and not just Rotter’s social learning theory to determine which theory best supported self-efficacy. The Ashton vignette instrument, created by Ashton et al. (1984), addressed the assumptions of context specific teacher efficacy; however, this instrument has not been widely used. The teacher efficacy scale (TES) created by Gibson and Dembo (1984) utilized the foundations of the Rand study but also utilized the theories from Bandura. Although this instrument was promising at identifying teacher efficacy, there were issues both conceptually and statistically with the outcomes. Several other instruments were reviewed which attempted to combine several of the above-mentioned theories and scales (Bandura, 1997; Brookover et al., 1978; Lee et al., 1991; Midgley et al., 1989; Newmann et al., 1989).

The TSES instrument was developed after three research studies were completed and revisions made to the instrument to improve its effectiveness. The TSES (long form) includes an overall self-efficacy score and three subscales: Instructional Strategies, Student Engagement, and Classroom Management. A 9-point Likert scale is utilized to rate twenty-four items with a score of nine indicating a highest score, and a one indicating the lowest score. This scale has been used in numerous educational studies to determine teacher competence in instructional and assessment strategies (Wolmer et al., 2016; Herman et al., 2018; Smul et al., 2018).

Construct validity was achieved by overall TSES ($M=7.1, SD=0.94, \alpha = 0.94$) student engagement ($M=7.3, SD=1.1, \alpha = 0.87$); instructional strategies ($M=7.3, SD=1.1, \alpha = 0.91$); and classroom management ($M=6.1, SD=1.1, \alpha = 0.90$). Cronbach’s alpha for the TSES (long form)
is overall TSE 0.94, student engagement 0.87, instructional strategies 0.91, and classroom management 0.90. The 24-question long form of the TSES instrument consists of three headings: Efficacy in student engagement (8 questions), efficacy in instructional strategies (8 questions), and efficacy in classroom management (8 questions) (Tschannen-Moran & Hoy, 2001). The Likert-type scale consists of responses of one (not at all), three (very little), five (some degree), and seven (quite a bit), and nine (a great deal). The lowest score possible in this study is 24 and a score of 231 is the highest. Higher scores indicated a stronger teacher self-efficacy. The ranges included 24 to 93 for low self-efficacy, and 162 to 231 to indicate high self-efficacy. Permission to use this instrument was provided (See Appendix B).

**Table 1**

*TSES Question Correspondence*

<table>
<thead>
<tr>
<th>Category Title</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy in Student Engagement</td>
<td>1, 2, 4, 6, 9, 12, 14, 22</td>
</tr>
<tr>
<td>Efficacy in Instructional Strategies</td>
<td>7, 10, 11, 17, 18, 20, 23, 24</td>
</tr>
<tr>
<td>Efficacy in Classroom Management</td>
<td>3, 5, 8, 13, 15, 16, 19, 21</td>
</tr>
</tbody>
</table>

Likert scales are a non-parametric design that aims to rank ordinal data (Mircioiu & Atkinson, 2017; Schnell et al., 2013; Yoo, 2016). Although there is disagreement regarding the use of non-parametric designs to analyze Likert design results, the use of graphical representations with the addition of chi-square analysis assures the results are analyzed appropriately. The TSES is appropriate for this study as the results are reliable with Cronbach’s alpha of $\alpha = 0.94$ as noted in Table 2. The TSES relates back to the null hypothesis to determine if professional development in TIPs creates a difference in mean scores of a teacher’s self-efficacy.
Table 2

*Teacher Sense of Efficacy Scale (TSES) Reliability*

<table>
<thead>
<tr>
<th>Cronbach’s alpha coefficient of 0.94</th>
<th>Range of Values</th>
<th>Pearson r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>.62 - .75</td>
<td>r = .87</td>
</tr>
<tr>
<td>Instructional Strategies</td>
<td>.63 - .75</td>
<td>r = .91</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>.61 - .83</td>
<td>r = .90</td>
</tr>
</tbody>
</table>

The TSES will be sent to participants through district email to reduce bias. The survey will be completed individually by each teacher online, and participants were urged not to share or discuss their responses. The participants will be given two weeks to complete the survey, and a follow-up reminder will be emailed to participants to urge completion of the survey. The average time to complete the survey is estimated to be less than five minutes. The data will be analyzed and scored by the researcher.

**Procedures**

After receiving permission from the district superintendents (see Appendix C for letter to superintendents) an application was submitted for the Internal Review Board (IRB) of Liberty University (see Appendix D). Upon obtaining approval from the superintendent and IRB approval (see Appendices E & F), an email was sent to principals (see Appendix H) in the district to recruit participants for the study (see Appendix G for Teacher recruitment letter). The email to each principal described the purpose of the research, procedures for conducting the study, and requested they share the consent letter with teachers (see Appendix H). The email stated that the information in the survey would be kept confidential and explained how the information would be coded to protect their identity. The email reminded the participants that they could withdraw from participation in the study at any point. All participants were notified that the survey will be completed electronically. The email included a link to the study and
informed consent to collect the information (see Appendix I). The survey instrument was sent to all participants in District A and District B two days after sending the teacher recruitment email requesting their participation. Participants were given two weeks to complete the survey instrument. The information was collected electronically via a digital spreadsheet. Anonymity was ensured by coding the data immediately upon receipt. Due to the anonymity of the study, individual participants or schools cannot be identified. The demographic information collected in the study was coded with unique identifiers to identify if the teacher worked in either an elementary or secondary school setting.

At the conclusion of the study, a letter of gratitude was sent to each principal and superintendent to thank them for participating in the study (see Appendix J). Results were sent to the school board members and principals with full explanations of the findings. The results of this study guided further implementation of professional development in the district for TIPs. The data results were stored electronically, and all participant information were coded for confidentiality.

Data Analysis

This study sought to determine how teacher self-efficacy in instructional strategies, student engagement, and classroom management were impacted by professional development in TIPs. The data was analyzed utilizing an independent-samples t test due to the fact that the independent variables were categorical, the dependent variables were continuous, and this research study sought to examine the difference between groups. Aggregate matching occurred due to the similar characteristics of the groups (Check & Schutt, 2012). This researcher chose to complete three independent t tests to determine if there were any statistically significant differences between the means of the independent variables.
Assumptions

There were six assumptions considered to run an independent-samples t test. Assumption one states that one dependent variable was to be measured at a continuous level. The dependent variables of self-efficacy in instructional strategies, student engagement, and classroom management were all measured on a continuous level using the TSES. Assumption two stated that one independent variable must contain independent categories or groups. This assumption was met since the two participant groups in this study were from two separate school districts, and either received training in TIPs or they did not receive training in TIPs. Assumption three states that no relationship should exist between independent variables. In the present study, the participants did not overlap between the two school districts, and the groups were completely independent of each other (Laerd Statistics, 2015).

Assumption four stated that there should be no outliers that were significant between the two groups. Outliers are scores that are unusual in that they could be much smaller or larger than the remainder of the data set. Since outliers can have a negative effect on results, it is important to alter or remove this data. Once the outliers were identified by analyzing all of the data to determine if any data points are outside of the scatterplot and removed or altered, assumption of normality will be determined which is assumption number five. Assumption of normality is important to determine how each group is distributed. The Shapiro-Wilk test for normality will be completed to test for assumption of normality. Data will be determined as normally distributed if $p > .05$ (Laerd Statistics, 2015).

Assumption number six relates to the determination of whether the variance is equal in each of the independent variable groups. The Levene’s test of equality of variances was completed during the independent-samples t test. Descriptive statistics of each independent
group was identified to understand and interpret the data and identify variability. Mean and standard deviation were identified and reported, and the magnitude or size of the difference between the means was calculated. To decrease the chance of a Type I error, an assumption was made that the variances of the two groups were equal utilizing the information from the descriptive statistics. The population variance of both groups will be equal when $p > .05$. If $p < .05$, the population variances are unequal and the assumption of homogeneity of variances has been violated. The mean difference or magnitude between the two groups was determined with a confidence interval of 95% (Laerd Statistics, 2015). Difference in means for both districts was determined by looking at teacher populations. The sample size was 100 which satisfied the requirement of the minimum of 100 participants required for an independent sample $t$ test when assuming a medium effect size, .7 statistical power, and alpha level of .05 (Gall et al., 2007).

Effect size, Cohen’s $d$, was utilized to determine the significance of the results of the data analysis (Cohen, 1988). An effect size of .2 was considered small, .5 was a medium effect, and an effect size larger than .8 was considered large. Effect size was determined by analyzing the difference between the means of the groups as a ratio of the standard error. Statistical significance was determined if $p < .05$. If $p < .05$, the researcher rejected the null hypothesis. If $p > .05$, the test was not significant and the research failed to reject the null hypothesis (Laerd Statistics, 2015).

Three independent $t$ tests were conducted for all three research questions to determine whether there was a difference in the mean value of self-efficacy in instructional strategies, student engagement, and classroom management. To limit Type 1 error, a Bonferroni correction was used since there were 3 tests of significance being conducted (Warner, 2013). The calculation for a Bonferroni correction typically uses an alpha level of .05 and then divides by
the number of hypothesis tests run. For that reason, the alpha level for this study was calculated thus: 0.05/3 = .017 rounded to .02. Therefore, alpha level was set at $p < 0.02$. Difference in means for both districts was determined by looking at teacher populations.
CHAPTER FOUR: FINDINGS

Overview

This quantitative, quasi-experimental, static-group comparison design study had the purpose of determining the self-efficacy of elementary and secondary teachers regarding instructional strategies, student engagement, and classroom management who did or did not participate in professional development in trauma-informed practices (TIPs). Three research questions guided this study to examine how self-efficacy in instructional strategies, student engagement, and classroom management is affected by TIPs. A statistical analysis was conducted utilizing a t test, and this chapter will review the research questions, null hypothesis, descriptive statistics, and then the findings will be provided from the statistical analysis.

Research Questions

RQ1: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ instructional strategies who do or do not participate in TIPs?

RQ2: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ student engagement who do or do not participate in TIPs?

RQ3: Is there a significant difference in the mean self-efficacy scores of elementary and secondary teachers’ classroom management who do or do not participate in TIPs?

Hypotheses

H₀₁: There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’ instructional strategies who do or do not participate in TIPs.

H₀₂: There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’ student engagement who do or do not participate in TIPs.
**H03**: There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’ *classroom management* who do or do not participate in TIPs.

**Descriptive Statistics**

Descriptive statistics were compiled from both sample groups for each of the research questions. Participants from two school districts in south Mississippi were invited to complete the survey instrument. School District A had a total of 103 responses, and School District B had 50 responses. The data was scanned visually to identify any discrepancies per each variable; however, none were found. The data was then analyzed using SPSS 28® software (Green & Salkind, 2018). Microsoft Excel was also utilized to sort the data to identify and label the factors. A random sample of 50 responses was obtained from School District A to create a total survey participation of 100 from School Districts A and B. Of the 100 participants in the study, 86 were female (86%), and 14 were male (14%). Degree level varied from bachelors at 35%, master’s at 51%, specialist’s degree at 11%, and doctorate at 11%. Years of teaching experience ranged from 0-3 years at 20%, 4-10 years at 33%, 11-20 years at 32%, and 21 and greater at 15%. Table 3 presents the demographic characteristics of the study sample.
Table 3

Frequency Counts for Selected Demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Degree level</td>
<td>Bachelors</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Masters</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>Specialist</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Doctorate</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Teaching Level</td>
<td>Elementary</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>Years of Teaching Experience</td>
<td>0 - 3</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>4 - 10</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>11 – 20</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>21 and greater</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 4 displays the descriptive statistics of both school districts for the factor groups of student engagement which had eight questions, instructional strategies which had eight questions, and classroom management which had eight questions as measured by the TSES (long form). The lowest score possible for each factor group was 8 and a score of 72 was the highest. Higher scores indicate a stronger self-efficacy. The subsequent Cronbach alpha reliability coefficients were $\alpha = 0.833$ for student engagement, $\alpha = 0.891$ for instructional strategies, and $\alpha = .885$ for classroom management. This data suggested that the scales demonstrated acceptable level of internal validity due to Cronbach’s reliability coefficient being greater than 0.7 (Gall et al., 2007).
Table 4

Descriptive Statistics for Each Factor Group for Both School Districts

<table>
<thead>
<tr>
<th>Factor Group</th>
<th>$N$</th>
<th>$M$</th>
<th>$\sigma^2$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement (SE)</td>
<td>8</td>
<td>54.00</td>
<td>61.737</td>
<td>7.857</td>
</tr>
<tr>
<td>Instructional Strategies (IS)</td>
<td>8</td>
<td>57.15</td>
<td>69.442</td>
<td>8.333</td>
</tr>
<tr>
<td>Classroom Management (CM)</td>
<td>8</td>
<td>58.16</td>
<td>67.186</td>
<td>8.197</td>
</tr>
</tbody>
</table>

The lowest score possible in this study was 24 and a score of 231 was the highest. Higher scores indicated a stronger teacher self-efficacy. The ranges included 24 to 93 for low self-efficacy, and 162 to 231 to indicate high self-efficacy. The total mean score for all factor groups of student engagement, instructional strategies, and classroom management for District A indicated high teacher self-efficacy ($M = 164.24$, $SD = 20.42$), and the total mean score for all factor groups of student engagement, instructional strategies, and classroom management for District B indicated medium teacher self-efficacy ($M = 160.45$, $SD = 22.02$) (see Table 5).

Table 5

Total Self-Efficacy Score for Both Districts

<table>
<thead>
<tr>
<th>School District</th>
<th>$N$</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>District A</td>
<td>50</td>
<td>164.240</td>
<td>20.42064</td>
</tr>
<tr>
<td>District B</td>
<td>50</td>
<td>160.460</td>
<td>22.02059</td>
</tr>
</tbody>
</table>

Results

The following section contains the results of the data screening for the research questions contained in this study. Boxplots were utilized to determine if any extreme outliers were present in the data.
Data Screening

The data sets were screened for the predictor variables of overall self-efficacy scores and the criterion variables of instructional strategies, student engagement, and classroom management for possible outliers. First, data screening was conducted to determine if any possible outliers existed or if any data was missing for the predictor variable of overall teacher self-efficacy scores and the criterion variable of *instructional strategies*. No data was removed from the study for missing information due to the nature of the online study requiring an answer for each question. The Shapiro-Wilks test of normality was found to be normally distributed with a significance value of $p = .111$ (Gall et al., 2007).

A scatterplot was performed to determine normality, and the assumption of bivariate normal distribution was met due to the appearance of the classic cigar-shaped data as illustrated in Figure 1 (Gall et al., 2007).

**Figure 1**

*Scatter Plot of Overall Self-Efficacy of Instructional Strategies*
A histogram was used in order for a visual inspection for possible outliers to be conducted (see Figure 2) (Gall et al., 2007).

**Figure 2**

*Histogram of Overall Self-Efficacy of Instructional Strategies*

The data was then sorted and scanned for any inconsistencies. A box-and-whisker plot was used to test for extreme outliers, and none were found (see Figure 3) (Gall et al., 2007). Therefore, all data points were included in the final analysis.
Data screening was conducted to determine if any possible outliers existed or if any data was missing for the predictor variable of overall teacher self-efficacy scores and the criterion variable of student engagement. No data was removed from the study for missing information due to the nature of the online study requiring an answer for each question. A scatterplot was performed to determine normality, and the assumption of bivariate normal distribution was met due to the appearance of the classic cigar-shaped data as illustrated in Figure 4. The Shapiro-Wilks test of normality was found to be normally distributed with a significance value of $p = .788$ (Gall et al., 2007).
Figure 4

*Scatterplot of Overall Self-Efficacy by Student Engagement*

A histogram was used in order for a visual inspection for possible outliers to be conducted. The data was then sorted and scanned for any inconsistencies (see Figure 5) (Gall et al., 2007).
A box-and-whisker plot was used to test for extreme outliers, and none were found (see Figure 6) (Gall et al., 2007). Therefore, all data points were included in the final analysis.
Data screening was conducted to determine if any possible outliers existed or if any data was missing for the predictor variable of overall teacher self-efficacy scores and the criterion variable of *classroom management*. No data was removed from the study for missing information due to the nature of the online study requiring an answer for each question. A scatterplot was performed to determine normality, and the assumption of bivariate normal distribution was met due to the appearance of the classic cigar-shaped data as illustrated in Figure 7 (Gall et al., 2007).
Figure 7

Scatter Plot of Overall Self-Efficacy by Classroom Management

A histogram was used in order for a visual inspection for possible outliers to be conducted (see Figure 8) (Gall et al., 2007).
The data was then sorted and scanned for any inconsistencies. A box-and-whisker plot was used to test for extreme outliers, and none were found (see Figure 9) (Gall et al., 2007). Therefore, all data points were included in the final analysis.
This section includes the results of the assumption testing and a discussion of the results of the independent samples $t$ test for Research Question One. The data from the analyses can be found in the tables within this section.

**Assumptions**

Before examining the independent sample $t$ test results, the assumptions for absence of outliers, normality, reliability, and variance was reviewed. The dependent variables were all measured on a continuous level, and the independent variable contained two independent groups. No relationship existed between the groups in the independent variable. A boxplot was utilized to identify any outliers for the dependent variable of *instructional strategies*. None were found (see Figure 3). The assumption of normality of all respondent data was assessed with a Kolmogorov-Smirnov Test of normality with a $p > 0.05$. Results were not statistically significant $W(100) = .052$, $p = .200$ which indicates that assumption of normality was met (see Table 6).
Table 6
*Kolmogorov-Smirnov Teacher Self-Efficacy in Instructional Strategies*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional Strategies</td>
<td>.052</td>
<td>100</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance
a. Lilliefors Significance Correction

Utilizing the Levene’s test for equality of variances, the researcher tested the homogeneity of variances. There was homogeneity of variances for the overall self-efficacy in instructional strategies as assessed by Levene’s test of equality of variances ($p = .521$; see Table 7). There was no violation of assumptions.

Table 7
*Levene’s Test for Equality of Variances*

<table>
<thead>
<tr>
<th>Overall Self-Efficacy in Instructional Strategies</th>
<th>Equal variances Assumed</th>
<th>Levene’s Test for Equality of Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$F$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.416</td>
</tr>
</tbody>
</table>

Results

An independent samples $t$ test was conducted to evaluate the hypothesis that there were no differences in the mean scores of elementary and secondary teachers’ self-efficacy in instructional strategies who do or do not participate in TIPs. Equal variance was assumed. The researcher failed to reject the null hypothesis at a 95% confidence level were $t(98) = .778$, $p = .219$, $d = .548$ which is a medium effect size. School District A who received training in TIPs ($M = 57.8$, $SD = 7.88$) had a higher self-efficacy score in instructional strategies than School District B who did not receive training in TIPs ($M = 56.5$, $SD = 8.79$); however, the results were
not significant enough to indicate that TIPs had a significant enough impact to increase self-efficacy in instructional strategies.

**Table 8**

<table>
<thead>
<tr>
<th>Instructional Strategies</th>
<th>Equal variances assumed</th>
<th>$t$</th>
<th>$df$</th>
<th>Sig (2-tailed)</th>
<th>Mean Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.778</td>
<td>98</td>
<td>.219</td>
<td>1.300</td>
<td>1.6696</td>
<td>-2.01399</td>
<td>4.61399</td>
</tr>
</tbody>
</table>

**Results for Hypothesis Two**

This section includes the result of the assumption testing and a discussion of the results of the independent samples $t$ test for Research Question Two. The data from the analyses can be found in the tables within this section.

**Assumptions**

Before examining the independent sample $t$ test results, the assumptions for absence of outliers, normality, reliability, and variance was reviewed. The dependent variables were all measured on a continuous level, and the independent variable contained two independent groups. No relationship existed between the groups in the independent variable. A boxplot was utilized to identify any outliers for the dependent variable of student engagement. None were found (see Figure 6). The assumption of normality of all respondent data was assessed with a Kolmogorov-Smirnov Test of normality with a $p > 0.05$. Results were not statistically significant $W(100) = .055, p = .200$ which indicates that assumption of normality was met (see Table 9).
Table 9

*Kolmogorov-Smirnov Teacher Self-Efficacy for Student Engagement*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Engagement</td>
<td>.055</td>
<td>100</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance
a. Lilliefors Significance Correction

Utilizing the Levene’s test for equality of variances, the researcher tested the homogeneity of variances. There was homogeneity of variances for the overall self-efficacy in student engagement as assessed by Levene’s test of equality of variances (p = .380; see Table 10). There was no violation of assumptions.

Table 10

*Levene’s Test for Equality of Variances*

| Overall Self-Efficacy in Student Engagement | Equal variances Assumed | 0.78 | 0.380 |

Results

An independent samples t test was conducted to evaluate the hypothesis that there were no differences in the mean scores of elementary and secondary teachers’ self-efficacy in student engagement who do or do not participate in TIPS. Equal variance was assumed. The researcher failed to reject the null hypothesis at a 95% confidence level were t(98) = .329, p = .743, d = .458 which is a small effect size. School District A who received training in TIPS (M = 54.26, SD = 8.20) had a higher self-efficacy score in student engagement than School District B who did not receive training in TIPS (M = 53.74, SD = 7.57); however, the results were not significant enough
to indicate that TIPs had a significant enough impact to increase self-efficacy in student engagement.

Table 11

*t* tests for *Equality of Means of Student Engagement*

<table>
<thead>
<tr>
<th>Instructional Strategies</th>
<th>Equal variances assumed</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>t</em></td>
<td><em>df</em></td>
<td>Sig (2-tailed)</td>
<td>Mean Difference</td>
<td>Std. Error Difference</td>
<td>95% Confidence Interval of the Difference</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.329</td>
<td>98</td>
<td>.743</td>
<td>.52000</td>
<td>1.57859</td>
<td>-2.61265</td>
<td>3.65265</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results for Hypothesis Three**

This section includes the result of the assumption testing and a discussion of the results of the independent samples *t* test for Research Question Three. The data from the analyses can be found in the tables within this section.

**Assumptions**

Before examining the independent sample *t* test results, the assumptions for absence of outliers, normality, reliability, and variance was reviewed. The dependent variables were all measured on a continuous level, and the independent variable contained two independent groups. No relationship existed between the groups in the independent variable. A boxplot was utilized to identify any outliers for the dependent variable of *classroom management*. None were found (see Figure 9). The assumption of normality of all respondent data was assessed with a Kolmogorov-Smirnov Test of normality with a *p* > 0.05. Results were not statistically significant *W*(100) = .066, *p* = .200 which indicates that assumption of normality was met (see Table 12)
Table 12

*Kolmogorov-Smirnov Teacher Self-Efficacy for Classroom Management*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Management</td>
<td>.066</td>
<td>100</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance

Lilliefors Significance Correction

Utilizing the Levene’s test for equality of variances, the researcher tested the homogeneity of variances. There was homogeneity of variances for the overall self-efficacy in classroom management as assessed by Levene’s test of equality of variances ($p = .201$; see Table 13). There was no violation of assumptions.

Table 13

*Levene’s Test for Equality of Variances*

<table>
<thead>
<tr>
<th>Overall Self-Efficacy in Classroom Management</th>
<th>Equal variances Assumed</th>
<th>Levene’s Test for Equality of Variances</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.654</td>
<td>.201</td>
</tr>
</tbody>
</table>

Results

An independent samples $t$ test was conducted to evaluate the hypothesis that there were no differences in the mean scores of elementary and secondary teachers’ self-efficacy in classroom management who do or do not participate in TIPs. Equal variance was assumed. The researcher failed to reject the null hypothesis at a 95% confidence level were $t(98) = 1.448$, $p =$
.151, \( d = .683 \) which is a medium effect size. School District A who received training in TIPs (\( M = 59.34, SD = 7.33 \)) had a higher self-efficacy score in classroom management than School District B who did not receive training in TIPs (\( M = 56.98, SD = 8.89 \)); however, the results were not significant enough to indicate that TIPs had a significant enough impact to increase self-efficacy in classroom management.

**Table 14**

*\( t \) tests for Equality of Means of Classroom Management*

<table>
<thead>
<tr>
<th>Instructional Strategies</th>
<th>Equal variances assumed</th>
<th>( t )</th>
<th>( df )</th>
<th>Sig (2-tailed)</th>
<th>( M ) Difference</th>
<th>Std. Error Difference</th>
<th>95% Confidence Interval of the Difference Lower</th>
<th>95% Confidence Interval of the Difference Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1.448</td>
<td>98</td>
<td>.151</td>
<td>2.36000</td>
<td>1.63035</td>
<td>-.87538</td>
<td>5.59685</td>
</tr>
</tbody>
</table>
CHAPTER FIVE: CONCLUSIONS

Overview

This concluding chapter will examine the results of this quasi-experimental design study that sought to determine the self-efficacy of elementary and secondary teachers regarding instructional strategies, student engagement, and classroom management who do or do not participate in professional development on trauma-informed practices (TIPs). This study sought to add to the current knowledge of best practices to increase teacher self-efficacy. The researcher failed to reject Null Hypothesis One, Null Hypothesis Two, and Null Hypothesis Three. This chapter will discuss the results of the statistical analysis for the research questions, and a review of the implications of the results of the study will be included. The chapter will conclude with limitations of the study and recommendations for further research.

Discussion

The goal of this study was to determine the self-efficacy of elementary and secondary teachers regarding instructional strategies, student engagement, and classroom management who did or did not participate in professional development in TIPs. The study examined whether TIPs increased a teacher’s self-efficacy utilizing three research questions. The following sections will examine the study results in light of Bandura’s (1977) self-efficacy theory, Richardson et al.’s (1990) theory of resilience, and the existing literature regarding increasing teacher self-efficacy.

Research Question One

The null hypothesis for Research Question One stated, “There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’
instructional strategies who do or do not participate in TIPs?” 50 teachers from School District A and 50 teachers from School District B completed the Teacher Self-Efficacy Scale (TSES) (long form). An independent samples t test was completed to determine if there were differences in teachers’ self-efficacy in instructional strategies who participated in TIPs. While School District A scores who received training in TIPs \( (M = 57.8, SD = 7.88) \) had a higher self-efficacy score in instructional strategies than School District B who did not receive training in TIPs \( (M = 56.5, SD = 8.79) \), the results were not significant to indicate that TIPs had a significant enough impact to increase self-efficacy in instructional strategies \( (p = .219) \). Therefore, the researcher failed to reject the null hypothesis.

Yoo (2016) identified the importance of professional development in adding effective instructional strategies to increase self-efficacy. Instructional strategies are the teaching pedagogy that a teacher utilizes to instruct students to promote positive academic achievement (Tschannen-Moran & Hoy, 2001). Quality of instructional strategies utilized in the classroom are causally related to teacher self-efficacy (TSE) (Künsting et al., 2016). Instructional quality includes the climate of the classroom, classroom management, and overall cognitive engagement of students. Teachers who exhibit strong self-efficacy are more willing to experiment with instructional strategies that can be differentiated to accommodate student needs.

While this study did not support the findings by Whitaker (2019) who stated that professional development in TIPs creates additional pedagogical knowledge which results in increased teacher-self-efficacy, this study could confirm the findings of Yoo (2016) who found that external factors, which were often uncontrollable, decreased self-efficacy despite increased pedagogical knowledge. External factors such as curriculum expectations, student abilities, and social-economic status of the school setting could have been negative factors for the participants
of this study; however, the present study did not measure the effects of external factors on increasing or decreasing teacher self-efficacy.

**Research Question Two**

The null hypothesis for Research Question Two stated, “There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’ student engagement who do or do not participate in TIPs?” 50 teachers from School District A and 50 teachers from School District B completed the Teacher Self-Efficacy Scale (TSES) (long form). An independent samples \( t \) test was completed to determine if there were differences in teachers’ self-efficacy in student engagement who participated in TIPs. While School District A who received training in TIPs \( (M = 54.26, SD = 8.20) \) had a higher self-efficacy score in student engagement than School District B who did not receive training in TIPs \( (M = 53.74, SD = 7.57) \), the results were not significant enough to indicate that TIPs had a significant enough impact to increase self-efficacy in student engagement \( (p = .743) \). The researcher failed to reject the null hypothesis.

Tschannen-Moran & Hoy (2001) identified student engagement as the level of enthusiasm, engagement, motivation, and involvement that students exhibit in the learning process. This engagement could be behavioral, emotional, agentic, or cognitive. Reeve (2013) found that when students exhibited agentic engagement or initiative, there was an increased student perception of increased autonomy-supporting teaching strategies that increased engagement in the learning process. Havik & Westergård (2020, p. 489) defined student engagement as “energy in action” with various subtypes which include academic, cognitive, emotional, and behavioral to name a few. Olivier et al. (2021) further defined student
engagement as a student’s involvement in the learning process that includes the behavioral, emotional, and cognitive dimensions.

While this study did not support the findings by Crosby et al. (2018) who found that professional development for educators in TIPs was important to provide tools and strategies for recognizing how trauma effects behavior in the classroom, the slight increase in means for increased self-efficacy in student engagement for School District A could indicate a small positive effect. Roman et al. (2022) found that trauma-informed teachers exhibit heightened focus on social engagement and affective indicators such as connectedness to school and sense of learning which could offer an explanation for the small increase in self-efficacy scores of School District A.

**Research Question Three**

The null hypothesis Research Question Three stated, “There is no statistically significant difference in the mean self-efficacy scores of elementary and secondary teachers’ classroom management who do or do not participate in TIPs?” 50 teachers from School District A and 50 teachers from School District B completed the Teacher Self-Efficacy Scale (TSES) (long form). An independent samples t test was completed to determine if there were differences in teachers’ self-efficacy in classroom management who participated in TIPs. While School District A who received training in TIPs \((M = 59.34, SD = 7.33)\) had a higher self-efficacy score in classroom management than School District B who did not receive training in TIPs \((M = 56.98, SD = 8.89)\), the results were not significant enough to indicate that TIPs had a significant enough impact to increase self-efficacy in classroom management \((p = .151)\). The researcher failed to reject the null hypothesis.
The teacher’s ability to manage disruptive behavior in a way that is safe and supportive is the hallmark of trauma-informed classroom management (Brunzell et al., 2016b). Through the trauma-informed lens, disruptive behavior and/or withdrawal should not be seen as acts of defiance but as responses to overwhelming stress or anxiety and lack of social-emotional skills (Anderson et al., 2015.) Classroom management relates to the tools that teachers utilize to engage students in the learning process with minimal disruptive behaviors (Tschannen-Moran & Hoy, 2001). Slater & Main (2020) identified classroom management skills as essential for effective teaching. Classroom management is tied to self-efficacy as the teacher must believe in their ability to create certain outcomes. Researchers have found a correlation between effective classroom management skills and a mastery-learning classroom structure (Lazarides et al., 2018; Wolters & Daugherty, 2007). Lazarides et al. (2018) further found that teachers identified by students as having high self-efficacy regarding classroom management created mastery-learning classroom environments.

While this study did not support the findings by Crosby et al. (2018) who found that professional development for educators in TIPs was important to provide tools and strategies for recognizing how trauma effects behavior in the classroom, the slight increase in means for increased self-efficacy in classroom management for School District A could indicate a small positive effect. This strengthens the findings of Lazarides et al (2018) who stressed the importance of teachers having strong classroom management skills to create classrooms that focus on adaptive academic achievement of students.

**Implications**

Due to the traumatic effects of COVID-19 on the learning environment for schools, it is even more important for schools to be trauma-informed. Watson et al. (2022) stated while there
is no consensus-based model for what a trauma-informed school should look like, there are several important components identified in the literature. Recognizing trauma symptoms and understanding the prevalence of trauma underscores the importance of school staff understanding how trauma can affect the learning environment. Responding to trauma through effective practices and adaptations of school policy are also important components for a school to be trauma-informed. Effective practices and school policy changes could include flexibility in the classroom to match student needs, elimination of zero-tolerance discipline policy, exclusionary practices, predictable activities in the classroom, and quiet spaces for cool-down for students.

Watson et al. (2022) identified the importance of establishing a sense of physical, psychological, and even emotional safety in a trauma-informed environment. Schools must address physical safety to create an environment that has adequate space, appropriate lighting, security, and is accessible to all students. Psychological and emotional safety are centered around the removal of triggering materials, ensuring respectful interactions with others, and an adherence to privacy. This confirms the research of Roman et al. (2022) who found that trauma-informed teachers exhibit heightened focus on social engagement and affective indicators.

Watson et al (2022) identified the importance of positive relationships in creating a trauma-informed school model. Open and transparent decision-making, effective collaboration, and autonomy for students and staff support further support positive relationships. Positive relationships between peers and teachers should fortify feelings of safety in the classroom setting. Experiencing the feeling of belonging aids in coping with healthy stressors as well (Brunzell et al., 2016a). Behavioral interventions that focus on social-emotional skills enable students to internalize skills needed to regulate behavior and develop positive peer relationships.
Trauma-informed models for schools should include cultural awareness and responsiveness (Watson et al., 2022). These components are accomplished by recognizing individuals in the context of their family situations, neighborhood, religion, and racial or ethnic groups, and a willingness to seek to understand another’s position. Teachers can demonstrate cultural awareness by asking about student backgrounds, diverse classroom materials, and encouraging celebration of variety of holidays. Whitaker (2019) stated that professional development in TIPs creates additional knowledge, improved attitudes, and supportive teacher behaviors that can increase the awareness of trauma in the classroom environment and improve teacher-student relationships. Avoiding re-traumatization should be the overarching rational that guides schools who are implementing a trauma-informed approach.

As a school leader at the elementary level, this researcher has taken special precautions when responding to disciplinary infractions to ensure that trauma-informed practices are implemented effectively. This has created a major shift in how school staff should respond proactively instead of reactively to student disruptions to the learning environment. This shift has positively changed the culture of the school and increased student engagement in the classroom. While this study included teachers from pre-kindergarten to twelfth grade, this researcher has seen positive educational effects from trauma-informed practices at the elementary level. These positive effects were confirmed by the research of Phifer & Hull (2016) who found that a shift in the thinking at the organizational level must occur that includes not only discipline practices, but also the impacts of trauma on students in their academic achievement.

Teacher retention continues to be an issue for school districts; therefore, the use of evidence-based professional development should be implemented to improve the outcomes for teachers, improvements in the school environment, increase the efficacy for teachers and
students, and reduce the number of teachers who experience burnout (Domitrovich et al., 2016). McLennan et al. (2017) stated that teacher self-efficacy (TSE) and perceived self-efficacy resulting from cognitive processes has a profound effect on a teacher’s performance. Even though the findings of this study were found to be not statistically significant, the findings do support the overall body of research which supports the use of TIPs in the school setting at increasing teacher self-efficacy. Due to the higher overall mean score in teacher self-efficacy from School District A ($M = 164.240$) which had implemented trauma-informed professional development, compared to School District B ($M = 160.460$) who had not implemented trauma-informed professional development, the results of this study indicate that TIPs in the school setting may increase overall teacher self-efficacy even though the results of this study were not statistically significant. Teacher self-efficacy (TSE) is associated with positive school culture, recognition for efforts, higher salaries, effective feedback, realistic job demands, positive administrator attitudes, and self-care (Wolmer et al., 2016). McLennan et al. (2017) stated that TSE is directly associated with teaching effectiveness, job satisfaction and performance, and ultimately, teacher retention.

**Limitations**

This study sought to examine the relationship of professional development in trauma-informed practices (TIPs) in increasing or decreasing a teacher’s self-efficacy. Although this researcher attempted due diligence in researching, planning, and conducting the study, there were several limitations. The sample size was a limitation due to the researcher having access to only two school districts. The next limitation was the low response rate of District B. Even though the surveys were sent to all teachers in the district, only 50 responded to the survey request that was not equal to the response rate from District A. No incentive was offered for
participants to complete the survey instrument which could have limited the number of responses. Future researchers could offer a financial incentive in an effort to increase participation. Threats to internal validity could be that teachers who participated in the study had naturally high self-efficacy that was not impacted by TIPs they received in professional development. Threats to external validity could be that some of the respondents had received professional development that was not TIPs that increased their self-efficacy. These threats could have impacted the study either negatively or positively. Steps to decrease this limitation would be to gather more information from respondents on previous trainings that focused on increasing self-efficacy in student engagement, classroom management, or instructional strategies.

The findings of this study can be generalized across all school levels and demographics due to the various types of trauma children encounter. The COVID-19 epidemic has increased trauma that has had a profound impact on every school across the world; therefore, this study is certainly generalizable due the pandemic affecting so many children and teachers. The population of this study were from low-income school districts which should be recognized when examining the generalization of this study.

Recommendations for Future Research

In this study, an analysis was conducted to compare the self-efficacy of teachers who do or do not participate in TIPs in student engagement, instructional strategies and classroom management. This study could not confirm that professional development in TIPs increase a teacher’s self-efficacy which in turn provides outcomes for students and schools; however, due the slight increase in overall mean scores from School District A, further research is warranted. Based on the findings, further research is recommended to further the understanding of how TIPs
increase a teacher’s self-efficacy. The following recommendations should be considered for further study:

1. Although this study did not address how a teacher’s self-efficacy evolves as classroom teaching experience increases, a careful examination could be given to determine if teachers with less than two years of experience have a higher self-efficacy than experienced teachers. The results could drive instruction in colleges who are preparing preservice teachers for the classroom.

2. Levels of self-efficacy can be different for male and female teachers; therefore, an interesting study would be to determine how self-efficacy is different for males and females when accounting for upbringing, home environment, and social class. Teaching roles for males and females in the school environment are often different, so future research could study how gender effects self-efficacy in various teaching roles.

3. Classroom management can be a struggle for any teacher no matter how many years of teaching experience. Future research could examine the role of classroom management and overall teacher self-efficacy when measured against student achievement.

4. A qualitative study could be completed to determine exactly how TIPs effect a teacher’s self-efficacy in student engagement, instructional strategies, or classroom management. Allowing participants to offer a narrative response instead of structured responses could offer helpful insight into how TIPs truly impacts a classroom and student achievement.

5. How is the wellbeing of the school environment impacted by TIPs? The school environment can change multiple times over a school year; therefore, a useful study would be to examine how the environment of a school is measured by all stakeholders at various times during the school year through the lens of TIPs.
6. This study could benefit from surveying a larger sample size from school districts that do not include students who have a history of trauma and/or poverty. Since trauma has impacted schools across the world, a study with a larger sample size, various demographics of students/staff, various student population sizes, and school location would be beneficial to determine what factors can increase teacher self-efficacy.
References


to leave education within underserved elementary schools. *Child Abuse & Neglect.*

https://doi.org/10.1016/j.chiabu.2020.104437


doi: http://dx.doi.org.ezproxy.liberty.edu/10.1007/s10826-017-0774-9


http://dx.doi.org.ezproxy.liberty.edu/10.1002/job.322


https://doi.org/10.22555/joeed.v1i2.218

https://doi.org/10.1016/0361-476X(82)90009-1


doi: http://dx.doi.org.ezproxy.liberty.edu/10.1371/journal.pone.0222518


https://doi.org/10.1016/j.learninstruc.2020.101389


https://link-gale-


Watson, K. R., Capp, G., Astor, R. A., Kelly, M. S., & Benbenishty, R. (2022). “We need to address the trauma”: School social workers’ views about student and staff mental health


APPENDICES

Appendix A Teacher Self-Efficacy Scale (TSES) (long-form)
Appendix B Permission to use TSES
Appendix C Letters to superintendents
Appendix D IRB Application to Liberty University
Appendix E Superintendents’ letters of approval
Appendix F IRB Approval from Liberty University
Appendix G Teacher recruitment letter
Appendix H Principal recruitment letter
Appendix I Informed consent
Appendix J Demographic questions
Appendix K Thank you letters to principals and superintendents
Appendix A

Teachers’ Sense of Self-Efficacy Scale

Removed to comply with copyright
April 15, 2021

Christina,

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 Anita Woolfolk Hoy, in your research.

You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mytisch.

Please use the following as the proper citation:


I will also attach directions you can follow to access my password protected web site, 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

Appendix C: Letters to Superintendents Seeking Site Approval
October 26, 2021

RE: Teacher Survey of Self-Efficacy

Dear [Name]

As a graduate student of the School of Education at Liberty University, I am conducting research as part of the requirements of the doctoral degree in Educational Leadership. The title of my research project is “The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher’s Feeling of Self-Efficacy.” The outcomes of this research will help drive further professional development to increase teacher retention.

I am writing to request your permission to conduct my research in your school district. Participants will be asked to follow this link ** to complete the attached anonymous survey. Participants will be presented with informed consent information prior to participating in the survey. Taking part in this survey is completely voluntary, and participants can withdraw at any time during the survey process.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval. I have received IRB approval through Liberty University.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
October 26, 2021

RE: Teacher Survey of Self-Efficacy

Dear [Name]:

As a graduate student of the School of Education at Liberty University, I am conducting research as part of the requirements of the doctoral degree in Educational Leadership. The title of my research project is “The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher’s Feeling of Self-Efficacy.” The outcomes of this research will help drive further professional development to increase teacher retention.

I am writing to request your permission to conduct my research in your school district. Participants will be asked to follow this link ** to complete the attached anonymous survey. Participants will be presented with informed consent information prior to participating in the survey. Taking part in this survey is completely voluntary, and participants can withdraw at any time during the survey process.

Thank you for considering my request. If you choose to grant permission, please provide a signed statement on official letterhead indicating your approval. I have received IRB approval through Liberty University which I am attaching.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University

Attach: IRB Approval
Appendix D: IRB Application to Liberty University

**Submission Type:** Initial  **Date:** 10-26-2021

**IRB #:** IRB-FY21-22-238  
**Title:** The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher's Feeling of Self-Efficacy  
**Creation Date:** 9-13-2021  
**Status:** Review Complete  
**Principal Investigator:** Christina Cumbest

---

**IRB Overview**

**Application for the Use of Human Research Participants**

Before proceeding to the IRB application, please review and acknowledge the below information:

---

**Administrative Withdrawal Notice**

*This section describes the IRB's administrative withdrawal policy. Please review this section carefully.*

Your study may be administratively withdrawn if any of the following conditions are met:

- Inactive for greater than 60 days and less than 10% of the app has been completed  
- Duplicate submissions  
- Upon request of the PI (or faculty sponsor for student submissions)  
- Inactive for 90 days or more *(does not apply to conditional approvals, the IRB will contact PI prior to withdrawal)*

---

*required

✔️ I have read and understand the above information.
Appendix E: Superintendents’ letters of approval

---

Christy Cumbest <ckcumbest@pgsd.ms>

Re: Dissertation Survey of Staff

1 message

Vincent, Dr. Shannon
<vvincent@mpsdnow.org>

Tue, Nov 10, 2020 at 10:16 AM

To: Moss Point School District Contact Form for Shannon Vincent <ckcumbest@pgsd.ms>

approved - SVR

On Fri, Nov 6, 2020 at 10:18 AM Moss Point School District Contact Form for Shannon Vincent <automailer@edlio.com> wrote:

From: Christy Cumbest <ckcumbest@pgsd.ms>
To: Shannon Vincent
Subject: Dissertation Survey of Staff

Good morning! I am working on my dissertation which will include a survey of the self-efficacy of teachers when dealing with students who have experienced trauma. There will be no student contact, and I will be seeking responses from pre-kindergarten-twelfth grade teachers. The results of this study will help to guide PGSD and MPSD in crafting professional development for staff in increasing their self-efficacy which can often result in increased teacher retention.

I will not be completing my IRB application until the spring, but I need a “verbal” approval so that I can craft my first three chapters correctly.

I will be happy to e-mail you a copy of my first three chapters for your review if you would like before you give verbal permission.

When I begin my spring semester, I will be sending you the official IRB and request letters.

Thank you for your time in reviewing my request. I hope you are having a great school year in these unprecedented times.

Be safe. Sincerely,
Christina Cumbest, Ed.S

This email was automatically sent at https://www.mpsdnow.org/apps/staff/ by IP address 69.85.233.5 (computer id: 0.14142540140765603) on Friday, November 6, 2020 at 10:18 AM US/Central timezone.

--
Dr. Shannon Vincent, Superintendent
4924 Church Street
Moss Point, MS 39563
Office: 228-475-0691
Challenge - Achieve - Succeed
#strongerTOGETHER
Appendix F: IRB Approval from Liberty University

LIBERTY UNIVERSITY
INSTITUTIONAL REVIEW BOARD
October 26, 2021

Christina Cumbest
Vivian Jones

Re: IRB Exemption - IRB-FY21-22-238 The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher's Feeling of Self-Efficacy

Dear Christina Cumbest, Vivian Jones,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with 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 mentioned in your approved 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). 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.

Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB. Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that 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, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office
Dear Teachers:

As a graduate student of the School of Education at Liberty University, I am conducting research as a part of the requirements of a doctoral degree. The purpose of my research is to determine the impacts of professional development in trauma informed practices (TIPs) in a teacher’s feel of self-efficacy. This researcher is particularly interested in the impacts on instructional strategies, student engagement, and classroom management after professional development. I am writing to invite you to participate in this research study.

If you are a teacher and are willing to participate, you will be asked to complete a demographic survey and a 24-question survey on a teachers’ sense of self-efficacy. It should take approximately 5 – 10 minutes to complete the survey, and your participation will be completely anonymous. No personal or identifying information will be collected.

To participate, go to **, read the consent document for further information about the research, and complete the survey. The consent document will not need to be signed and returned. Your responses will be anonymous, and there will be no cost for you to participate.

Thank you for choosing to participate in this research study.

Sincerely,

Christina Cumbest
Doctoral Candidate, Liberty University
October 27, 2021

RE: Teacher Survey of Self-Efficacy

Dear Principal:

As a graduate student of the School of Education at Liberty University, I am conducting research as part of the requirements of the doctoral degree in Educational Leadership. The title of my research project is “The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher’s Feeling of Self-Efficacy.” This research will help drive further professional development to increase teacher retention.

I am writing to request your permission to conduct my research in your school, and I have already received permission from your superintendent, [REDACTED]. You will simply need to forward this link to your “certified” teachers ** for them to complete the anonymous survey. Participants will be presented with informed consent information prior to participating in the survey which should take approximately 5-10 minutes to complete. Taking part in this survey is completely voluntary, and participants can withdraw at any time during the survey process.

Thank you for considering my request.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
September 13, 2021

RE: Teacher Survey of Self-Efficacy

Dear Principal:

As a graduate student of the School of Education at Liberty University, I am conducting research as part of the requirements of the doctoral degree in Educational Leadership. The title of my research project is “The Impact of Professional Development on Trauma Informed Practices (TIPs) in a Teacher’s Feeling of Self-Efficacy.” This research will help drive further professional development to increase teacher retention.

I am writing to request your permission to conduct my research in your school, and I have already received permission from your superintendent, [NAME], to complete the study in your school district. Participants will be asked to follow this link [https://www.surveymonkey.com/r/R366DY8](https://www.surveymonkey.com/r/R366DY8) to complete the anonymous survey. Participants will be presented with informed consent information prior to participating in the survey. Taking part in this survey is completely voluntary, and participants can withdraw at any time during the survey process.

Thank you for considering my request.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
Appendix I: Consent

Title of the Project: The Impact of Professional Development on Trauma Informed Practices (TIPs) In a Teacher’s Feeling of Self-Efficacy
Principal Investigator: Christina Kay Cumbest, Liberty University

Invitation to be Part of a Research Study
You are invited to participate in a research study. Taking part in this research project is voluntary.

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

What is the study about and why is it being done?
The purpose of the study is to understand whether professional development in trauma informed practices increases teacher self-efficacy in the areas of instructional strategies, student engagement, and classroom management. Instructional decisions, teaching pedagogy, and classroom management are all determined by the strength of the teacher’s belief in their self-efficacy. A teacher’s personal efficacy is the most important predictor of a teacher’s self-perception, motivation, organizational planning, and tolerance towards students; therefore, further research is needed to determine how professional development can support teacher self-efficacy in the school setting.

What will happen if you take part in this study?
If you agree to be in this study, I will ask you to click on the link to complete the survey at https://www.surveymonkey.com/r/R366DY8. This anonymous survey should take approximately 5 to 10 minutes to complete, and can be completed at no charge to you. No identifying information will be collected.

How could you or others benefit from this study?
The benefits of your participating in this study include improved professional development in your school district aimed at increasing teacher self-efficacy. Your school district will receive the results and analysis of this study which will drive future professional development planning.

What risks might you experience from being in this study?
The risks involved in this study are minimal, and your responses are completely anonymous.

How will personal information be protected?
- The records of this study will be kept private. Research records will be stored securely, and only the researcher will have access to the records.
• All participants will receive an identifying code when their data is received by the researcher. The only identifying information will be general demographic information which will identify school district and grade level taught.
• Research records will be kept secure, and pseudonyms will be used for each school district for identification purposes only. The researcher will store all information in a password protected computer for a period of three years.
• The data may be used for presentations concerning the current study, and all data will be destroyed at the end of three years.

How will you be compensated for being part of the study?
Participants will not be compensated for participating in this study.

What are the costs to you to be part of the study?
There is no cost to participate in this research study.

Does the researcher have any conflicts of interest?
The researcher serves as an administrator at one of the participating districts, but has no decision-making authority for either school district regarding professional development planning. To limit potential or perceived conflicts the study will be anonymous, so the researcher will not know who participated. This disclosure is made so that you can decide if this relationship will affect your willingness to participate in this study. No action will be taken against an individual based on his or her decision to participate or not participate in this study.

Is study participation voluntary?
Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with 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 choose 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 Christina Kay Cumbest. You may ask any questions you have now. If you have questions later, you are encouraged to contact her at ccumbest@liberty.edu. You may also contact the researcher’s faculty sponsor.

Whom do you contact if you have questions about your rights as a research participant?
If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at 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 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 the [researcher/study team] 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.

TO BE COMPLETED ELECTRONICALLY

____________________  ______________________
Printed Subject Name

____________________  ______________________
Signature & Date
Appendix J: Demographic Questions

1. Choose your school district
   Moss Point School District
   Pascagoula-Gautier School District

2. Gender
   Male
   Female

3. Degree level
   Bachelors
   Masters
   Specialist
   Doctorate
   Post-Doctorate

4. How many years of experience in the teaching field?
   0-3
   4-10
   11-20
   21 and greater

5. What grade level do you teach?
   Elementary (PK-6)
   Secondary (7-12)
April 1, 2022

RE: Teacher Survey of Self-Efficacy

Dear [Redacted],

Thank you for allowing me to present my survey to your staff. I am enclosing a brief summary of the results of the research study; however, I can provide the full analysis upon your request.

Your staff provided helpful feedback which will guide further professional development in the areas of teacher self-efficacy and trauma informed practices. I hope you are able to utilize this data to guide improvements in professional development in your school district.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
April 1, 2022

RE: Teacher Survey of Self-Efficacy

Dear [Name],

Thank you for allowing me to present my survey to your staff. I am enclosing a brief summary of the results of the research study; however, I can provide the full analysis upon your request.

Your staff provided helpful feedback which will guide further professional development in the areas of teacher self-efficacy and trauma informed practices. I hope you are able to utilize this data to guide improvements in professional development in your school district.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
April 1, 2022

RE: Teacher Survey of Self-Efficacy

Dear Principal:

Thank you for allowing me to present my survey to your staff. I am enclosing a brief summary of the results of the research study; however, I can provide the full analysis upon your request.

Your staff provided helpful feedback which will guide further professional development in the areas of teacher self-efficacy and trauma informed practices. I hope you are able to utilize this data to guide improvements in professional development in your school district.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University
April 1, 2022

RE: Teacher Survey of Self-Efficacy

Dear Principal:

Thank you for allowing me to present my survey to your staff. I am enclosing a brief summary of the results of the research study; however, I can provide the full analysis upon your request.

Your staff provided helpful feedback which will guide further professional development in the areas of teacher self-efficacy and trauma informed practices. I hope you are able to utilize this data to guide improvements in professional development in your school district.

Sincerely,

Christina Cumbest
Doctoral Candidate
Liberty University