TEACHERS' PERCEPTIONS, AWARENESS, AND RESPONSES TO STUDENTS WITH CHILDHOOD TRAUMA

by

Jonathan J. Tomlin

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

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ABSTRACT

The role of trauma-informed education is becoming a topic of discussion for many school leaders and administrators during the COVID-19 pandemic. The purpose of this study was to explore the relationship between trauma training, education, experience, and teacher self-efficacy, and teachers' self-reported perceptions of student behavior, teaching, and managing behaviors of students with trauma history. Previous research highlighted a lack of teacher input when developing trauma-informed education within school settings. This correlational study investigated factors associated with educator trauma training, education, experience, and self-efficacy. Data were collected from a city school system in a large, urban district in the northeast United States. Three multiple regression analyses were conducted; each analysis used the predictor variables educator trauma training, education, experience, and self-efficacy scores. This research study found a significant positive correlation between educator trauma training, education, experience, self-efficacy, and teaching traumatized children. It also found a significant positive correlation between trauma training, education, experience, self-efficacy, and teacher responses to student behavior. There was no correlation between trauma training, education, experience, self-efficacy, and perceptions of student behavior. . The implications of this research are to find potential professional development gaps for administrators, school leaders, and researchers in developing trauma-informed care programs.

Keywords: trauma, urban, school, trauma-informed

Dedication

This research is dedicated to helping educators create healing relationships. I would not be here without the healing power of loving and caring relationships of exceptional educators. This one is for y'all! I spent the first ten years of my life in the foster care system facing every form of abuse, from sexual, emotional, physical abuse to starvation and torture shipped around to numerous foster homes. At eleven years old, I accepted Jesus Christ into my life, thanks to loving house parents at an orphanage who took a chance on a wild child. Later that year, I was adopted by the most beautiful, empathetic, and caring people. As I reflect on my life journey and examine the trauma, pain, healing, and the paths God has led me on, I am thankful for loving and caring educators who took the time to invest in me. Tom and Karen Tomlin, Victoria Granja, Rich and Dot Maybaum, Brian Foster, SGT. Barrett, 1SGT Hampton, Ms. Jenkins, Karina Barrett, Ms. Brooks, Adam Crain, Ozzie Wright, Dr. Marsha Richardson, Karen Kolsky, Will Martinez. You all took a chance and invested. I have spent the last ten years training to become a certified life coach, falling in love with positive psychology, leading to a master's degree and license in school and mental health counseling, and now a doctorate in traumatology. God, you make me laugh; my biological last name was Foster; I spent ten years in foster care. I suffered and healed from so much trauma, and you brought me to the path of a doctorate in traumatology. Lord, you led me to be a counselor and continue to take me places I never imagined myself doing. Jesus, your love for me has been mighty and undeserving; I will live out your command. "A new command I give you: Love one another. As I have loved you, so you must love one another. By this, everyone will know that you are my disciples if you love one another." John 13:33-34.

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Mom and Dad, I would probably be dead if you never adopted me. Thank you for all your love and wisdom and for always pointing me towards Christ.

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CHAPTER ONE: INTRODUCTION

Overview

The COVID-19 pandemic has transformed society's norms and brought instability, intensifying the complexity of traumatized adolescents' symptoms (Oosterhoff et al., 2020). How well are educators trained to handle the repercussions of such a traumatic event as the COVID-19 pandemic? This chapter explores the concepts of trauma, specifically childhood trauma and its origins, and how an understanding of how trauma-informed educational frameworks has developed over time. This introductory historical overview reveals the frequent lack of educator input when implementing a trauma-informed approach. Teachers' input based on their perspective and understanding of problem behaviors can provide valuable practical information for generating professional development training and schoolwide implementation of trauma-informed practices.

Background

One historical focal point for advancing the research on traumatic childhood exposure and its effect on humans during early development was the CDC-Kaiser Permanente adverse childhood experiences (ACEs) study (Felitti et al., 1998). This study was one of the most extensive analyses on childhood abuse, neglect, household challenges, and later-life health and overall welfare. The original ACEs study was conducted in Southern California at Kaiser Permanente from 1995 to 1997 with two sets of data collection (Felitti et al., 1998). Over 17,000 participants completed confidential surveys regarding their childhood experiences and current health status and behaviors. Results from the study indicated that adverse childhood experiences are common across all populations (Felitti et al., 1998). Almost two-thirds of study participants reported at least one ACE, and more than one in five reported three or more ACEs (Felitti et al.,

1998). Other significant findings included specific populations being more vulnerable to experiencing ACEs because of the social and economic circumstances (Felitti et al., 1998). Ultimately this study proposed that as the number of ACEs increases, so does the risk for adverse health outcomes. This study took trauma mainstream and changed how researchers and clinicians perceived trauma and its effects during early childhood development. The ACEs study was the basis on which research for trauma-informed practices would begin to develop as an answer to the negative adult outcomes of early adverse childhood experiences.

Following the results of the ACEs study, various national initiatives, methods, and training models have emerged to develop more trauma-informed childcare systems. Of particular note is the work of the National Child Traumatic Stress Network (NCTSN) in the United States. Established by Congress in 2000, the NCTSN is a group of 70 treatment and research centers across the United States, which has been instrumental in implementing trauma-informed child welfare initiatives in the United States and internationally (Steele & Malchiodi, 2012). Strategies include professional development, trauma screening and referral, and the dissemination of trauma-focused evidence-based treatments (EBTs; Steele & Malchiodi, 2012). Responding to students' social, relational, and emotional needs is now directly within the school's, teachers', and school support staff's scope and responsibility. Furthermore, there is an ongoing public awareness and concern over what is reported to be escalating violence in schools and severe behavioral and mental distress problems among some students (Department of Education, 2018).

In 2008, the Office of Juvenile Justice and Delinquency Prevention supported by the Centers for Disease Control and Prevention (CDC), conducted the National Survey of Children's Exposure Violence with a representative sample of U.S. children ages 0-17. The survey revealed

that 60.6% of participants reported at least one direct victimization, and 25.3% reported indirect victimization in the last year (Gollub et al., 2019).

School violence is on the rise, with school shootings almost becoming a nightly news regular appearance. In September 2014, the Federal Bureau of Investigation released, "A Study of Active Shooter Incidents in the United States Between 2000 and 2013" (Towers et al., 2015). The report revealed that the number of mass shooting incidents has increased over the past four years (Towers et al., 2015). Additionally, research indicates that there have been 220 school shootings in the United States from 1997 to 2013 (Towers et al., 2015). Children are exposed to violence through media today more than ever before, supporting the need for the implementation of trauma-informed practice throughout educational facilities. In the past 10 years, the U.S. Department of Education has invested approximately $70 million in district and state education agencies for school climate improvement (Voight & Nation, 2016).

In 2012, approximately 686,000 children in the United States were victims of child abuse and neglect (Negele et al., 2015). More than half of all victims were between birth and eight years of age, and more than one quarter (26.8%) were younger than three years old, 19.9% were between three and five years old, and another 16.6% were between six and eight (Negele et al., 2015). Over 80% of these identified traumatic events involved the child's family and/or caregivers as the abusers (Negele et al., 2015).

The impact of trauma can lead to severe emotional, developmental, and neurobiological challenges that develop well beyond childhood into adulthood (Steele & Malchiodi, 2012). Children who experience trauma are two and one-half times more likely to fail a grade in school than their non-traumatized peers (NCTSN, 2012). Furthermore, children with a history of traumatic exposure score lower on standardized tests, have higher suspension and expulsion

rates, and are more likely to be given individual education plans (IEPs) and labeled as special education students (NCTSN, 2012). As a result, the school environment must be a thoughtful, safe, and nurturing space where students can work with trauma-informed caregivers to cope with traumatic events from the past and build a safer, educational future.

Elementary school teachers are likely to encounter young children who have experienced trauma (NCTSN, 2012). These traumas may include separation issues related to experienced loss of a loved one, abuse (i.e., sexual, emotional, and/or physical), and numerous forms of violence (Steele & Malchiodi, 2012). Trauma research demonstrates that all types of trauma can negatively impact children's abilities to learn, create healthy attachments, form supportive relationships, and fulfill classroom expectations (NCTSN, 2012).

Today, children are exposed to trauma more than ever before (Jennings et al., 2017). Schools need to play an integral role in supporting the mental health and well-being of children and serve as their access point for mental health services as a response to critical incidents such as the COVID-19 pandemic and the rise of school violence. Classroom teachers play a crucial role in identifying student trauma and employing trauma-informed practices. For example, teachers are often the primary individuals in the school asked to implement school-based interventions and refer students in need of additional emotional support (Levers, 2012).

Problem Statement

This quantitative correlational study explored the relationship between trauma training, education, experience, and teaching self-efficacy, and teachers' self-reported perceptions of student behavior, teaching, and managing behaviors of students with trauma history. The research's assumptions are to highlight the perspectives of educators' knowledge regarding the classroom culture, structures, skills, and techniques they can employ in their classrooms to

minimize the impact of trauma. Administrators and policymakers in positions of authority within the education system must seek to assuage the impact of trauma within educational establishments suffering from the outcomes of the COVID-19 pandemic. Since the start of the COVID-19 the pandemic, has created serious concerns leading to increased anxiety (Roy et al., 2020). A copious amount of research has been conducted on trauma and its impact on an individual's learning and achievement in schools (Steele & Malchiodi, 2012). Little research has presented the perspective of educators' knowledge regarding the classroom culture, structures, skills, and techniques they can employ in their classrooms to minimize the impact of trauma and change the lives of children. Therefore, a gap in the literature exists, resulting in the necessity to explore trauma-informed instruction. More specifically, the focus should be on the perceptions of schoolteachers who have had training that can guide our thinking about what best practices look like in different educational settings.

According to recent research (Skinner et al., 2019), teachers were capable of identifying their students' mental health problems based on impressions alone. By advantage of their position and time spent with their students, teachers were able to identify a broad range of severe mental health concerns among their learners (Skinner et al., 2019). Based on the teachers' knowledge of the children, they were able to make essential annotations on both the causes of these problems and their impacts.

Despite the current magnitude of research on trauma and student learning, the majority of educators lack training about trauma and trauma-informed practices and, consequently, feel unprepared to support the needs of such students adequately (Jennings et al., 2017). There is limited research surrounding the relationship between interacting with and teaching traumatized students in an urban area and teacher professional development. The information outlined above

solidified the need to conduct this study by identifying significant gaps in the literature. The problem is researchers, clinicians, administrators, and many organizations see the need for trauma-informed care; however, little to no evidence exists regarding their frontline workers on their experiences, knowledge, and skills in working with children with a history of traumatic exposure. Gathering data on teachers' training, education, and self-efficacy can help shape the way individual schools in different cultural settings modify and implement trauma-informed care as a response to school-level traumatic events such as the COVID-19 pandemic, school shootings, or other school violence while also possibly creating new avenues of research centered on different factors and influences from teachers on trauma-informed care.

Purpose Statement

The purpose of this study was to research the relationship between teacher training, education, experience, and self-efficacy as predictor variables and perceptions, management and teaching of trauma-exposed students as the criterion variables. This quantitative correlational research study used several instruments to examine this relationship. The instruments included a demographics survey, the Teachers' Sense of Efficacy Scale, Teacher Perceptions of Student Behavior Scale, Teaching Traumatized Students Scale, and the Teacher Responses to Student Behavior Scale (Crosby et al., 2018).

The survey collected data from a city school system in a large, urban district in the northeast United States. The study's predictor variables included the highest degree held, length of time teaching, information about previous training and education related to trauma, and Teacher Sense of Efficacy Scale scores. This study had three criterion variables: teacher perceptions of student behavior, perceptions of teaching traumatized students, and teaching responses to student behavior. This study's purpose was to survey teachers' perceptions of

student behavior, perceptions of teaching traumatized students, and responses to student behavior to highlight potential professional development gaps that could inform the implementation of districtwide trauma-informed education policies. Research shows in trauma-informed environments, teachers commonly develop and take the time to get to know the lived experiences of the students they teach, paying close attention to their actions and the environment they have created, watching the impact that it has on each child (Steele & Malchiodi, 2012). Such an atmosphere creates an understanding of belonging and prioritizes social and emotional learning (Jennings et al., 2017).

Significance of the Study

Teachers are often not provided support for trauma-affected students in the classroom, even though educators are the first contact for children with a history of traumatic exposure (Jennings et al., 2017). The COVID-19 pandemic is proceeding into the third academic school year; the short- and long-term effects will be complicated. In addition to schools, states across the country and the globe mandated the closure of businesses to slow the spread of the virus for almost 18 months (Minkos & Gelbar, 2021). The scope of this study was to explore the relationship between teacher training, education, experience, and self-efficacy and perceptions, management, and teaching of trauma-exposed students. For decades, research has shown that ACEs, including family dysfunction and community-level stressors, negatively reshape children's health and well-being throughout life development. Similar to previous Kaiser ACE studies, research (Wade et al., 2016) was conducted among Philadelphia residents ages 18 or older from November 2012 to January 2013 for the PHL ACE. The average age of respondents was 48.6 years, with a majority of respondents being female (58.3%), either White (45.2%) or Black (43.6%), employed (87.8%), single (56.8%), insured (87.7%), and most of the respondents

had at least a high school education (89.7%). From that survey, nearly 20% of Philadelphia respondents subscribed to 4 or more ACEs.

Teachers function as the primary connecting relationship between families and counseling services at schools performing an essential entry point to mental health care (Alisic et al., 2012). Despite the prevalence of trauma in the classroom, most educators have no trauma-informed training and feel hesitant in their role, insufficiently supporting students with histories of trauma (Jennings et al., 2017). Additionally, there is limited research about teachers' perceptions about working with students with histories of trauma. Therefore, this research gathered and analyzed teachers' experiences with trauma in the classroom and their perceptions of self-efficacy. The implications of this research are to provide information on the opportunity to train and support teachers to shift into trauma-informed practices.

Last, the data collected within this study provided information on the reality of the impact that trauma can have on our most vulnerable children. Additionally, this study may provide support for improvement in student outcomes and wellness by leveraging the unique opportunity existing in the teacher student relationship.

Research Question(s)

RQ1: What is the relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behavior, as measured by the Teacher Perceptions of Student Behavior Scale?

RQ2: What is the relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure, as measured by the Teaching Traumatized Students Scale?

RQ3: What is the relationship between trauma training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale?

Definitions

In this section, definitions are provided for the theoretical and operational terms that were the fundamental concepts of this study. The following significant terms are defined: *trauma, complex trauma, posttraumatic stress disorder (PTSD), trauma-informed practice, ACEs, Centers for Disease Control and Prevention (CDC),* and *EBTs*.

- *Adverse childhood experiences*—include economic adversity, living in disrupted households, and household violence, with recent research connecting ACEs with school absenteeism, repeated grades, and nonengagement (Blodgett, & Lanigan, 2018; Felitti et al., 1998).
- *Complex trauma*—In contrast to trauma, complex trauma is the continued damage and abuse of trust from a person meant to be a protector to the victimized individual, which leads to symptoms such as dissociation, alterations in the sense of self, and a fear of intimacy in relationships (Kliethermes et al., 2014).
- *Posttraumatic stress disorder* (PTSD)—According to the U.S. Department of Veterans Affairs, "PTSD is a mental health problem that some people develop after experiencing or witnessing a life-threatening event, like combat, a natural disaster, a car accident, or sexual assault" (Schupp, 2015, p. 52).
- *Trauma*—to experience actual or threatened death, serious injury, or sexual harm in which extreme fear, horror, or helplessness prevails, occurring either through a single event or multiple and repeated traumatic events (Sanderson, 2013).

- *Trauma-informed practice (TIP)*—TIP is defined as an organizational structure and treatment framework that involves understanding, recognizing, and responding to the effects of all types of trauma (Steele & Malchiodi, 2012).

Summary

This correlational study examined schoolteachers' perceptions of student behavior concerning trauma, their experiences of teaching students with trauma, and the education and their responses to students with a history of trauma. The research surrounding teachers' relationships with students with a history of trauma in an urban area and teacher professional development is underdeveloped. Future implications of this research are to postulate information on the commitment to train and support teachers to move toward trauma-informed teaching as a standard educational best practice. Researchers tell us the relationship a teacher can form with students is valuable and important (Steele & Malchiodi, 2012). The goal of this research was to determine what factors make these relations so vital to a trauma-informed education.

CHAPTER TWO: LITERATURE REVIEW

Conceptual or Theoretical Framework

Professionals working in the field of traumatology have proposed that the increased trauma on individuals is a public health issue. Research literature has highlighted the impact of early childhood adversity on later health across the lifespan (Blodgett & Lanigan, 2018; Felitti et al., 1998). Since schools often represent a developmental system within a child's lifespan, a whole-school approach to trauma-informed methods must be taken to cultivate a healthy school climate (Skinner-Osei & Levenson, 2018). Due to the nature of the teacher/student relationship and teacher/family relationship, an ecological perspective offers a way to simultaneously emphasize individual and contextual systems and the interdependent relations between these two systems (Skinner-Osei & Levenson, 2018). Developmental psychologist, Urie Bronfenbrenner, was among the most prominent contributors to ecological thinking in health research (Levers, 2012). Bronfenbrenner's ecological theory might theoretically be useful for guiding school mental health interventions because it is based on the idea that a person's development is affected by everything in their surrounding environment (Levers, 2012). Bronfenbrenner divided the person's environment into five levels: the microsystem, the mesosystem, the exosystemic, the macrosystem, and the chronosystem (Levers, 2012). Under Bronfenbrenner's ecological theory, during a child's development, the school environment occurs during all five developmental cycles during the microsystem, as the child develops relationships with school adult peers. The mesosystem represents the school's structure and function for a child to navigate through their experiences. The school board leaders, policymakers, and administrators at the exosystem level make decisions like TIPs that ultimately affect students' development. Throughout these

different levels of interaction, one develops their dominant macrosystem beliefs and ideologies as a human being and how to navigate life.

Based on his research, Bronfenbrenner (1979) created what is now known as the bioecological model of human development. In this human development model, Bronfenbrenner supported child development as a bidirectional, mutual relationship between the child and the world around them. Bronfenbrenner contended that systems exert influence over every aspect of a child's life in differing ways, resulting in a host of developmental patterns and behavioral outcomes. These systems interact with the child to create their world and shape their growth and development physically, mentally, emotionally, intellectually, and socially. Bronfenbrenner's human development model is fundamental to this research because the model outlines the systems that exert pressure and influence on the daily lives of individuals, families, and communities most impacted by ACEs and trauma.

One systematic approach to addressing the impact of trauma on children is the sanctuary model, developed by Dr. Sandra Bloom (Blitz & Lee, 2015). The sanctuary model builds a respectful culture in schools so that troubled children and adults who work with them are not subject to victimization (Bloom & Sreedhar, 2008). The therapeutic community addresses the needs of traumatized youths through a psychoeducational model called SELF, which deals with the challenges of safety, emotional management, loss, and the future (Bloom & Sreedhar, 2008). The trauma-informed sanctuary model offers ways to recognize the impact of trauma on school climate and guides schools to encourage healing and resilience for all school members (Blitz & Lee, 2015.) The sanctuary model supports culturally responsive practices and aligns well with other socioemotional learning and character education initiatives (Blitz & Lee, 2015). Organizational assurances to nonviolence, including psychological and moral safety, and

recognition of emotional intelligence, social learning, and social responsibility, are critical aspects of the sanctuary model (Blitz & Lee, 2015). The sanctuary model also encourages open communication processes for decision making that validate the perspectives of all individuals involved with the school, including teachers, staff, students, and family members, which can promote culturally responsive practices (Blitz & Lee, 2015).

According to Bloom and Sreedhar (2008), the sanctuary model is based on trauma theory and applies to any organization that serves individuals who have a history of trauma. The sanctuary model has been identified as a practical approach in treatment centers, public and private schools, and other human service organizations (Bloom & Sreedhar, 2008). The sanctuary model attempts to generate organizational cultures with seven components: a culture of nonviolence, a culture of emotional intelligence, a culture of social learning, a culture of shared governance, a culture of open communication, a culture of social responsibility, and a culture of growth and change (Bloom & Sreedhar, 2008).

Related Literature

Research shows a need for TIPs because of the effects of trauma on early childhood development (Levers, 2012). Nevertheless, the introduction of TIPs is relatively recent, and its implementation still needs to be explored. This literature review provides a comprehensive appraisal of the history of trauma, children facing trauma, and educators' perceptions of TIPs. According to the Substance Abuse and Mental Health Services Administration (SAMHSA; 2014), 61% of men and 51% of women report exposure to at least one lifetime traumatic event, and 90% of individuals in public health care sites have experienced trauma.

Trauma

Before gathering information on teachers' perceptions of trauma and problematic behavior, it is essential to establish a definition of trauma. Briere and Scott (2014) defined trauma as an exceedingly upsetting event that temporarily hinders an individual's ability to self-regulate while producing lasting psychological symptoms. Trauma is often defined as an experience with actual or threatened death, serious injury, or sexual harm, in which extreme fear, horror, or helplessness prevails, occurring either through a single event or multiple and repeated traumatic events (Sanderson, 2013). According to the definition provided by the American Psychological Association, "Trauma is an emotional response to a terrible event like an accident, rape or natural disaster" (Bisson, 2014, p. 494). In general, trauma is the body's response to an event or an experience that is deeply distressing or disturbing (Briere & Scott, 2014).

SAMHSA (2014) employed the following definition:

> Individual trauma results from an event, series of events, or set of circumstances experienced by an individual as physically or emotionally harmful or life-threatening with lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. (p. 3)

The definition of trauma varies in different occupational fields. Others define trauma as the observed or actual experience threatening injury, death, or physical safety, causing feelings of fear, panic, and powerlessness (Dye, 2018). The DSM-V defined trauma as "actual or threatened death, serious injury, or sexual violence" (American Psychological Association, 2014, p. 1). Trauma is an issue that extends beyond races and economics and can affect any person. When educators understand the effects of trauma, they can be trained to help students since school is

sometimes the only place in their lives where they know they are safe and can create trusted stable relationships.

Complex Trauma

Complex trauma is linked with continued, repetitive traumatic experiences that involve numerous violations co-occurring, such as sexual assaults, physical violence, emotional abuse, and neglect, often perpetrated by an individual intimately known by the victim (Sanderson, 2013). In contrast to trauma, complex trauma is the continued destruction and abuse of trust as a person meant to be a protector to the victimized individual is the actual perpetrator. This leads to symptoms such as dissociation, alterations in the sense of self, and a fear of intimacy in relationships (Kliethermes et al., 2014). Complex trauma indicates traumatic events that are continuing, relational, and occur within caregiving relationships; the term also depicts the pattern of indicators associated with such experiences (Sanderson, 2013). When discussing complex trauma in the clinical sense, it often involves exposure to chronic/multiple traumas during developmentally vulnerable periods (Kliethermes et al., 2014). Areas of impairment associated with sophisticated trauma experience may include discrepancies in relationships and attachment, emotional and behavioral outbursts, as well as cognitive/attentional deficits (Hurd et al., 2019). Research studies indicate that children and adolescents in the foster care system have high rates of trauma exposure, including complex trauma exposure (Greeson et al., 2011). A recent analysis of foster children referred for treatment found that 70% reported at least two forms of chronic interpersonal trauma perpetuated by caregivers, meaning sexual abuse, physical abuse, emotional abuse, neglect, or domestic violence. Around 12% reported having experienced all 5 trauma types (Greeson et al., 2011).

According to the NCTSN Complex Trauma Task Force, the term *complex trauma* depicts the twofold problem of children's exposure to traumatic events and the influence of this experience on direct and long-term effects (Cook et al., 2003). Complex traumatic exposure refers to a child's experiences of numerous traumatic events that occur within the caregiving structure. This communal structure is supposed to be the foundation of safety and permanency in an adolescent's life. Complex trauma indicates the multiple incidences of child maltreatment that are persistent and begin in early childhood development (Cook et al., 2003). Complex trauma involves but is not limited to child sexual, physical, and emotional abuse; neglect; witnessing domestic violence; and the exposure of being in a refugee camp (Wamser-Nanney & Vandenberg, 2013). Complex trauma occurrences are speculated to damage self-regulation abilities, ensuing in problems with behavior, impulses, attention, and consciousness, as well as interpersonal and identity problems (Wamser-Nanney & Vandenberg, 2013). Unsafe environments, such as poverty, community violence, and household violence, have been shown to harmfully influence psychological development (Cook et al., 2003).

Exposure to community violence during childhood and adolescence has been linked to internalizing and externalizing problems, PTSD, low school attendance, challenging relationships, substance abuse issues, and sexually deviant behaviors (Voisin & Berringer, 2015). A research study with a sample of 218 Peruvian adolescents aged between 11 and 18 examined the effects of complex trauma in a sample of adolescents from a severely disadvantaged district in Lima, Peru (Yearwood et al., 2017). The study revealed that 40% of the sample suffered at least one type of moderate to severe trauma, with girls having higher rates of trauma than boys compared to studies in the United States that report trauma rates of about 25% in children and adolescents (Yearwood et al., 2017).

Trauma and Warfare

Descriptions of traumatic symptomatology are found in ancient history in literary works. The *Iliad* and the *Odyssey* speak of mental wounds caused by partakers of endless warfare (Tatu et al., 2016). Numerous other Greek writers cited the mental stress fashioned by combat, including Hesiod and Tyrtaeus in the 7th century B.C., Thucydides in the 5th century B.C., Aeneas Tacticus and Xenophon in the 4th century B.C. and Onasander in the 1st century B.C. (Tatu et al., 2016). Herodotus reported one of the first written examples of chronic psychological symptoms caused by sudden fear during the war in a report on the battle of Marathon, written in 440 B.C., about a soldier who went permanently blind when a soldier standing beside him was killed. The blinded soldier had no wounds on his body (Tatu et al., 2016).

The start of recognized medical endeavors to address problems of military veterans who have experienced combat began after the American Civil War (1861-1865) and the Franco-Prussian War (1870-1871). Post-Civil War, the term *soldier's heart* was coined by Dr. Jacob Mendez Da Costa, a Philadelphia physician linking what we now know as PTSD with an increased proclivity for cardiovascular disease (Pollard et al., 2016). By World War I, psychiatry began to establish itself as an independent clinical field of study. Psychiatrists turned to the texts of Freud, Jung, and others for their understanding of ailments of the mind and engaged these concepts in formulating methodologies for treatments (Shively & Perl, 2012). During this time, soldiers coined the term *shell shock*, which was initially believed to be the result of untold damage to the brain caused by the impact of the heavy artillery machinery (Shively & Perl, 2012). During World War II and the Korean War, individuals were identified and diagnosed with "combat or battle fatigue." During and following the Vietnam War, clinicians worked with many combatants, particularly on return to the United States, with psychiatric/behavioral symptoms

such as anxiety, depression, mood swings, sleep disturbance, substance abuse, and suicide (Shively & Perl, 2012). In 1980, the *Diagnostic and Statistical Manual of Mental Disorders* third edition (DSM III) was published with the introduction of a new psychiatric condition that was predominantly derived from military conflict called PTSD (Shively & Perl, 2012).

Posttraumatic Stress Disorder

According to the U.S. Department of Veterans Affairs (2019), "PTSD is a mental health problem that some people develop after experiencing or witnessing a life-threatening event, like combat, a natural disaster, a car accident, or sexual assault" (p. 7). The contemporary psychiatric taxonomy in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5) defined PTSD by 20 symptoms clustered into 4 symptomatic domains: intrusive symptoms, active avoidance, disturbed emotional states, and alterations of arousal and reactivity (Jorge, 2015). The development of PTSD is entwined to a specific event or sequence of occurrences that encompass experience to actual or threatened death, serious injury, or sexual violence (Jorge, 2015). According to the DSM-5, a PTSD diagnosis necessitates symptoms of at least one month that substantially impact social and occupational performance that is not the product of another medical condition or the effects of drugs or other chemical substances (Jorge, 2015). Individuals with PTSD can also experience powerful physiologic reactions to trauma-related triggers that can be categorized as intrusive experiences (Jorge, 2015).

It is critical to understand that anyone can develop PTSD; however, not everyone does develop PTSD. Moreover, several dynamics can increase the chance of developing PTSD, many of which are not under that person's control. For example, having a very intense or long-lasting traumatic event or becoming injured during the event can make it more likely that a person will develop PTSD. PTSD can be more common after certain types of trauma, such as combat and

sexual assault (Briere & Scott, 2014). PTSD symptoms are grouped into intrusive memories, avoidance, negative changes in thinking and mood, and physical and emotional reactions. Symptoms can vary over time or vary from person to person (Briere & Scott, 2014). Symptoms of PTSD can include flashbacks, nightmares, severe anxiety, and overpowering thoughts about the event (Briere & Scott, 2014). PTSD symptoms may start within one month of a traumatic event, although sometimes symptoms may not appear until years following the incident. Symptoms can cause significant problems in social and work settings and personal relationships (Skaine, 2015). PTSD symptoms can also interfere with an individual's ability to go about routine daily tasks.

Children and teens can develop PTSD if they have lived through an event that could have caused them to be killed or severely injured (Briere & Scott, 2014). Such circumstances also include but are not limited to sexual or physical abuse or other violent crimes. Disasters such as floods, school shootings, car crashes, or fires might also have the potential to cause PTSD in children (Briere & Scott, 2014). Other events that can cause PTSD are war, a loved one's suicide, or seeing violence in the child's residential area. Child protection services in the United States get around three million reports each year involving over 5.5 million children; of the reported cases, there is evidence of abuse in about 30% of cases (Skaine, 2015). Children who have PTSD may exhibit detachment, difficulty sleeping, and irritability. PTSD can interrupt all aspects of a person's life. An individual with PTSD may be affected by reexperiencing the event, avoiding anything related to the event, or being hyper-aroused (Skaine, 2015).

Childhood Trauma

There is an increasing amount of research surrounding the school climate, which can be defined as the school's physical and social environment and the behaviors and perceptions of

students and staff (Voight & Nation, 2016). Research highlights that exposure to a traumatic event or series of traumatic events during childhood, like child maltreatment, can deregulate the body's stress response systems to the appropriate environmental stressors (De Bellis & Zisk, 2014). This means that when children are exposed to trauma early on, it can lead to the development of anxiety and stress-related disorders as well as to a variety of other psychiatric disorders, including depression, panic attacks, borderline personality disorder, and substance abuse (De Bellis & Zisk, 2014). This highlights the fact that educators are on the frontlines of mental health. An essential component of healthy relationships is disrupted when a child encounters traumatic experiences during their development when the development of secure healthy attachments to a loving caregiver occurs (Steele & Malchiodi, 2012). Research shows that children who do not have secure attachments and positive relationships with adults are more vulnerable to stress and depression (De Bellis & Zisk, 2014). In situations where children face extraordinarily abusive and neglectful environments, their brain development could be at risk, limiting brain growth. Schools can no longer be a place of only learning to read and write; schools must focus on social and emotional development. They also need to be places that mitigate and provide early interventions for youths who have been exposed to trauma. Incorporating training for all workers in the school environment is essential in creating a trauma-informed school. A trauma-informed school approach is an organizational, structural, and treatment framework that involves understanding, recognizing, and responding to all kinds of trauma (Steele & Malchiodi, 2012). Gathering educators' thoughts, perceptions, and experiences concerning children's problematic behavior and traumatic exposure can better help administrations train and educate staff on TIPs when servicing youths who have experienced trauma exposure.

Prevalence of Childhood Trauma

Childhood trauma is one of the most under-recognized public health problems; it is the leading cause of mortality, disability, and socioeconomic burden among children and adolescents worldwide (Larson et al., 2017). The World Health Organization (WHO) defined child maltreatment as:

> The abuse and neglect of people under 18 years of age. It includes all forms of physical and emotional ill-treatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust or power. (Tarantola, 2018, p. 1119)

According to the 2017-2018 National Survey of Children's Health, nearly four million children in the United States live with an emotional, behavioral or developmental problem with two or more ACEs (CAHMI, 2018). Having a parent arrested, jailed, or imprisoned is considered one of the 10 primary ACEs identified by the CDC. In the United States, 1 in every 14 children has had an incarcerated parent, and 58% of children experienced their first episode of parental incarceration before age 10 (Skinner-Osei & Levenson, 2018). Research conducted on the prevalence of child maltreatment from 133 countries in 2014 estimated that nearly 1 in 4 adults worldwide had been physically abused as children, while 20% of women and 5% to 10% of men reported being sexually abused as children (Tarantola, 2018). In 2012, the United States Child Protective Services data determined that approximately 676,000 children were victims of child maltreatment, and about 1,750 children die every year because of abuse or neglect (Tarantola, 2018). This estimate could be much higher because of the common underreporting of such events.

Figures collected from the National Child Abuse and Neglect Data System Child Files from 2003 until 2014 and U.S. Census data concluded that approximately 37.4% of all children in the United States experience a child services investigation by age 18 (Kim et al., 2017). Research also indicated that African American children had the highest rate of child protective service investigations at around 53%, and Asians/Pacific Islanders had the lowest rate for investigations at 10.2% (Kim et al., 2017). According to a report on child maltreatment issued by the U.S. Department of Health and Human Services, in 2011, an estimated 2 million children across the United States received an investigation, and about 681,000 children were estimated to have been actual victims of maltreatment (Kim & Maguire-Jack, 2015). In 2014, U.S. girls had marginally higher rates of maltreatment victimization than boys overall, although, for children under six years of age, boys had slightly higher rates for child maltreatment deaths, and boys had a higher overall rate than girls (Thurston et al., 2017).

Recent research analyzing U.S. civilian child maltreatment reports against military child maltreatment reports from 2003 to 2010 found that the overall child maltreatment rate in the military was only about one-half of the civilian rate (Milner, 2015). Interestingly enough, this research on child maltreatment rates in the U.S. military is consistent with previous research reports that found from 1995 to 1999 the overall rate of child maltreatment in the Army was about half of the civilian population rate (Milner, 2015). However, researchers and authors cautioned against solely relying on these comparisons because several limitations present themselves in the data between comparisons of child maltreatment referral rates and victimization rates in the U.S. military and U.S. general population, and they fail to take in encompassing community dynamics and variables.

Research is consistent in correlating child maltreatment as a risk factor for specific psychopathology (WHO, 2016). Research examining whether age at first exposure to abuse is associated with depression and suicidal ideation showed that children exposed to abuse, particularly physical abuse, at any age, had a higher probability of depression and suicidal ideation in young adulthood than non-maltreated children (Dunn et al., 2013). Among abused children, experiencing abuse during early childhood, ages birth to five, was most strongly associated with depression. Children first exposed to physical abuse during preschool (ages 3-5) had a 77% increase in the odds of depression, and those first exposed to sexual abuse during early childhood (ages 0-2) had a 146% increase in the odds of suicidality compared to children maltreated as adolescents aged 14-17 (Dunn et al., 2013).

A recent study in Singapore analyzed the prevalence of childhood trauma among outpatient mental disorders receiving treatment in a tertiary psychiatric institute. The study involved 354 outpatients, 169 males and 185 females, aged 14-35, with mood disorders, schizophrenia, other psychotic disorders, adjustment disorder, and anxiety disorder. The findings showed that the two highest reported trauma types during childhood were emotional abuse (59.1%) and physical neglect (54%) (Devi et al., 2019). This study's outcomes are consistent with other studies that demonstrated that childhood trauma is more predominant among individuals with mental illness than healthy individuals.

Levenson et al. (2014) analyzed the adverse childhood events among more than 700 California inmates; the survey discovered that 28% of inmates were emotionally or physically neglected, and 45% experienced physical or sexual abuse during their childhoods. A notable feature of this research study is that the first part of the instrumentation involved utilizing the ACE scale. The second section of the survey asked questions about criminal history using

forced-choice categorical responses to safeguard anonymity. Results from the investigation indicated that 16% of inmates said they experienced no ACEs, and nearly half endorsed four or more (Levenson et al., 2014). Outcomes revealed that sex offenders were more likely to experience all ACE items than males in the general population. Results revealed that higher ACE scores were considerably correlated with young victims, contact victims, more nonsexual arrests, and measures of violence and aggression, suggesting that indicators of both sexual deviance and antisocial behaviors were associated with early adverse experiences (Levenson et al., 2014).

In a recent scientific research study on the implementation and outcomes of an evidence-based trauma intervention, Cognitive Behavioral Intervention for Trauma in Schools, 49% of students screened positive for moderate to severe PTSD symptoms (Hoover et al., 2018). The study consisted of a 2-year statewide learning collaborative effort that included 73 Cognitive Behavioral Intervention for Trauma in Schools groups led by 20 clinicians from 5 different school-based mental health provider organizations comprising a total of 350 racially and ethnically diverse (66.9% Hispanic, 26.2% Black/African American, 43.7% White, and 30.1% Other), majority female (61%) children, averaging 12.2 years (Hoover et al., 2018). Overall, students demonstrated improvements in PTSD symptoms and behavioral problem severity. The excessively high rate of children who screened positive for PTSD symptoms in this analysis (49%) supports the need for school-based trauma services (Hoover et al., 2018).

Impact of Childhood Trauma

Trauma in childhood is a psychosocial, medical, and public policy problem with severe consequences for its victims and society. The impact of childhood trauma includes significant problems with attachment, affect regulation, biological regulation, dissociation, behavioral regulation, cognition, and self-concept (Dye, 2018). These aspects can impede an individual's

capabilities and development in the short and long term. Children and teenagers vary in their responses to traumatic exposure. The reactions of a young person can be influenced by developmental stages, ethnic/cultural dynamics, previous traumas, resources available, and preceding family problems. Hagan et al. (2015) examined dissociation symptoms in 140 children who experienced trauma, such as witnessing violence and suffering abuse. The study established that almost one-fourth of the sample population demonstrated subclinical or clinical levels of dissociation (Hagan et al., 2015). The research also concluded that children with higher trauma exposure had advanced posttraumatic stress symptoms relative to children with nonclinical dissociation. It is important to note that findings in this study revealed that victimized children presented with higher dissociation compared to those exposed to other traumas (Hagan et al., 2015).

Jones et al. (2017) utilized a 14-year longitudinal cohort design to provide evidence on the association between maternal child maltreatment and child internalizing and externalizing difficulties in preadolescence. The study demonstrated that a mother's previous abuse, directly and indirectly, predicts preadolescent internalizing and externalizing complications while simultaneously emphasizing the fundamental role of maternal depression during pregnancy, which presents an augmented risk of the child being exposed to abuse and developing psychopathology even in the absence of post-delivery depression. Findings revealed that maternal emotional symptomatology during pregnancy increases the risk for child psychopathology (Jones et al., 2017).

There is substantial scientific research with increasing evidence showing that trauma exposure during childhood has long-term outcomes (Dye, 2018). Exposure to childhood trauma is associated with academic, emotional, and behavioral difficulties, sexually risky behavior, and

substance use (Larson et al., 2017). Trauma exposure during childhood has been associated with childhood and adult psychopathology, involving attention deficit and hyperactive disorder, anxiety, personality disorders, and depression (Dye, 2018). Trauma exposure during childhood can also overwhelmingly influence cognitive, social, and emotional competencies that can continue into adulthood. Research shows that adults who face trauma during childhood have higher risks of physical and psychological problems (Dye, 2018). Experiencing complex trauma in early childhood can trigger long-term neurobiological alterations that impact human development and substantially affect brain function (Dye, 2018). Studies show that trauma survivors can often suffer from depression, anxiety, anger, abandonment concerns, volatile relationships, and trust issues (Dye, 2018). Scholars and clinicians have concluded that child maltreatment can inhibit the neurotransmitter and neurotrophic molecules leading to reduced neurotransmission, decreased neurogenesis, reduced synaptic plasticity, and augmented neurodegeneration, resulting in atrophy of key developmental brain regions (Jawahar & Baune, 2018).

Investigation is consistent in correlating child abuse as a risk factor for specific psychopathologies in adulthood, including depression and suicidal ideations (WHO, 2016). Reckless or self-destructive behaviors include but are not limited to dangerous driving, alcohol/drug abuse, self-injurious, and suicidal behavior (Friedman, 2015). Research on abuse during childhood is associated with adverse outcomes, including but not limited to inability to deal with stress, weakened physical health, elevated levels of self-destructive behaviors, mental health problems, impaired intellectual and cognitive development, increased violent and criminal acts, and increased mortality through adulthood (Kim et al., 2017). Syed Sheriff et al. (2019) investigated the association between childhood trauma and mental disorders in military and

civilian men to identify early life factors associated with PTSD. In both populations, there is evidence that PTSD was associated with high counts of childhood trauma.

Signs and symptoms of maltreatment are varied but can include frequent injuries, poor hygiene, lack of medical care, frequent absence from school, being excessively withdrawn or fearful, and displaying knowledge of sexual acts inappropriate for age (WHO, 2016). Child maltreatment can sometimes result in injury and death in children and long-term disability, mental health problems, and substance abuse (WHO, 2016). Research has found a strong correlation between child maltreatment and lifelong adverse health conditions such as social and economic consequences; behavioral problems and mental health conditions such as PTSD increased the risk for delinquency (Kim et al., 2017). Child maltreatment has also been correlated with increased adult criminal behaviors, and violent behavior has increased the risk of chronic disease, lasting impacts or disability from physical injury, reduced health-related quality of life, and lower levels of adult economic well-being (Kim et al., 2017).

A history of child maltreatment is associated with more severe psychotic symptoms, higher rates of suicidal ideations and attempts, elevated symptoms of depression and anxiety, higher rates of comorbid PTSD diagnosis, as well as higher rates of comorbid alcohol and substance use disorders (Kaufman & Torbey, 2019). Child maltreatment significantly affects individuals' ability to function through the life cycle and has noteworthy delays and disruptions in brain development. Child abuse has been found to predict reductions in global cortical thickness and reductions in the following brain regions in patients with psychotic disorders: amygdala, hippocampus, cerebellum, inferior frontal gyrus, and whole-brain gray matter (Kaufman & Torbey, 2019).

Childhood trauma affects individuals' mental and medical health concerns throughout their lifetime (Kuhlman et al., 2013). Survivors are likely to be less attached to their parents if they have experienced abuse, including those exposed to domestic violence by the offending parents (Kuhlman et al., 2013). Survivors of childhood trauma sometimes suffer from the thoughts of having feelings of not being adequate as adults, leading to a feeling of worthlessness (McCormack & Thomson, 2017). Developments in mental functions also transpire in trauma survivors. Survivors who have a history of trauma and trauma-related psychopathologies can have more difficulty remembering pleasant interactions than negative interactions (McWilliams et al., 2014). Individuals with childhood trauma and schizophrenia have more difficulty with emotional recognition and can be easily more aggressive than a control group (Bigli et al., 2017). Survivors of sexual abuse are also more likely to attempt suicide multiple times, whereas survivors of physical abuse, emotional abuse, and neglect were up to five times more likely to attempt suicide (Hadland et al., 2015).

Child maltreatment can cause possible developmental risk factors for heightened anxiety disorders in adulthood (Wilson & Newins, 2018). Another adverse psychological effect from child maltreatment is PTSD. Wilson and Newins (2018) conducted a study that measured the indirect effects of child maltreatment severity toward adult PTSD and concluded that the rate of PTSD among survivors of child maltreatment is high.

Research on child abuse indicates that some children who have a history of abuse are more likely to show internalizing behaviors such as anxiety and depression, while others can show externalizing behaviors such as violence and aggression (Muniz et al., 2019). Muniz et al. (2019) ascertained that sexual abuse and a history of family mental illness increased the risk of internalizing behaviors, and emotional abuse, physical abuse, domestic violence, substance

abuse, and family member incarceration increased the odds of externalizing behaviors. Muniz et al. (2019) discussed that it could be unclear why some abused children externalize their trauma when others internalize trauma.

Current research in the field of neuroscience suggests the prospect of the human brain regrowing and healing itself following trauma (Uhernik, 2016). This research helps counselors connect human experiences and develop new forms of therapy for stress and traumatic disorders (Uhernik, 2016). Thanks to advancements in medical imaging technology, clinicians and doctors can now better understand the brain during developmental stages, pre- and post-brain-damage, and better understand how internal and external stimuli affect brain development (Uhernik, 2016). Medical advancements in the field of neuroscience emphasize new focal points for those in the medical and counseling-based professions, shattering previously held beliefs about the brain concerning trauma. An example of such ideas in the clinical field was that healing of the brain was not possible or very unlikely. However, new treatment modalities and therapeutic tools are being developed to promote neurogenesis and neuroplasticity in those suffering from traumatic exposure (Uhernik, 2016).

Adverse Childhood Experiences

In 1998, the Centers for Disease Control and Prevention conducted a study entitled "Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults" (Jacob et al., 2018, p. 238). Commonly referred to as the ACEs study, it recognized that cumulative ACEs could have long-lasting influences on human development and health consequences throughout life (Jacob et al., 2018). The findings of the study showed that 52% of 17,421 participants had experienced at least one ACE. Of this population, 87% of those in the "at least one ACE" group had experienced two or more ACEs (Jacob et al., 2018). Just

over 6% of the total number of individuals had experienced four or more ACEs. The study found that individuals with four or more ACEs were much more likely than those with no ACEs to have diabetes, chronic breathing problems, skeletal fractures, hepatitis, and poor self-rated health. Individuals with four or more ACEs were significantly more likely to smoke, use illicit drugs, abuse alcohol, have a history of more than 50 sexual partners, have a history of suicide attempts, and have severe obesity than individuals with no ACEs (Jacob et al., 2018). An overwhelming 22% of the participants reported facing childhood sexual abuse (Jacob et al., 2018). With a sample size of over 17,000 people, clinical and medical fields would no longer be able to dismiss the role of childhood trauma in human services. The topic of ACEs has become an area of research since 1998.

The original ACEs study examined childhood trauma exposure to abuse, neglect, domestic violence, and household dysfunction. Subsequent studies have encompassed other adverse experiences, such as experience in the foster care system, poverty, and exposure to violence (Jacob et al., 2018). Today, ACEs include economic adversity, living in disrupted households, and household violence, with recent research connecting ACEs with school absenteeism, repeated grades, and nonengagement in school (Crouch et al., 2019). Since the original study in 1998, numerous scientific journals have documented the effects of child maltreatment in correlation with assorted biological structures linked with depression and facilitating long-lasting effects in the development of adult depression (Jawahar & Baune, 2018).

A recent study found that children who experienced abuse during childhood (i.e., physical, verbal, or sexual), witnessing domestic violence, experiencing divorce, and living with someone who was depressed, abused substances, or who had been imprisoned, were associated with one or more of the following health outcomes: functional health limitations, diabetes, and

heart attack (Monnat & Chandler, 2015). The study analyzed data from 14 states from 2009 to 2012 using the Behavioral Risk Factor Surveillance System, an annual cross-sectional telephone survey conducted by the Centers for Disease Control and Prevention in U.S. states to collect information on health outcomes and behaviors, health care utilization, and demographic characteristics among the civilian, noninstitutionalized population (Monnat & Chandler, 2015). The analytic sample included 52,250 adults aged 18 to 64. The study established that poor mental health and poor stress-related coping behaviors, such as smoking, obesity, and lack of exercise, were more predominant among adults who experienced ACEs (Monnat & Chandler, 2015). A critical aspect of this study is that it combined ACEs into a single summed construct by integrating all nine adverse experiences into the same analysis. For example, experiencing childhood physical abuse was significantly and substantively linked with all different health outcomes. In contrast, verbal abuse was associated only with self-rated health and functional limitations, and witnessing parental domestic violence was only related to odds of diabetes diagnosis (Monnat & Chandler, 2015).

Classroom Behavior and Emotion Regulation

Schools are currently seeing a dramatic increase in students of all ages carrying in anxiety, adversity, and trauma from various adverse childhood experiences (ACEs). Schools can be an environment where students feel safe and connected even when they make poor choices. The pressing focus on academic demands leaves many teachers, principals, and policymakers overlooking the importance of embedding emotional regulation strategies into the curriculum (Crouch et al., 2019). Research has suggested that changes in the interrelated brain circuits and hormonal systems that regulate stress become disrupted with the presence of trauma during childhood development (Dye, 2018). Studies indicate that the long-term effects of childhood

trauma exposure involves alternations of the neural substrate (Huh et al., 2016). Individuals with a history of childhood trauma often show heightened amygdala hyperactivation to threatening cues and altered connectivity in brain systems relevant to perceiving and processing information (Huh et al., 2016).

A recent neuroimaging study offered verification that sexual trauma associated neural change occurring in brain areas involved in processing harmful stimuli (Huh et al., 2016). The study included sexual trauma victims and studied the long-term effects of their trauma. More than 70% of participants conveyed that past childhood sexual abuse had some adverse outcomes in their current life (Huh et al., 2016). Several research studies have recognized the relationship between sexual abuse in childhood and depression in adulthood (Negele et al., 2015).

Investigation shows that children living in a disrupted household had higher odds than children who did not, across all categories of challenges to school success, including higher odds of absenteeism, nonengagement in school, and repeated grades (Crouch et al., 2019). Children with economic hardship are more likely to have increased school absenteeism and nonengagement rates than children without economic hardship (Crouch et al., 2019). Children with a history of violence exposure had higher rates of nonengagement in school than children not exposed to violence (Crouch et al., 2019). Children exposed to racial/ethnic mistreatment had higher odds of nonengagement rates than children not exposed to racial/ethnic mistreatment (Crouch et al., 2019). Current research on childhood trauma and academic performance suggests that childhood trauma impacted a child's IQ over time, proposing that childhood trauma can impact cognitive function while impeding learning and development (van Os et al., 2017). Children exposed to family violence show poorer executive functioning abilities than their peers, even in the absence of trauma-relevant indications (DePrince et al., 2009). Young children

exposed to traumatic natural disasters, such as earthquakes, hurricanes, and fires, have the potential to develop behavior problems and posttraumatic stress (Liberty et al., 2016). A recent scientific study analyzing posttraumatic stress and teacher-reported problem behaviors in children before and after earthquakes concluded that rates of teacher-reported behavior problems in young children more than doubled following earthquakes (Liberty et al., 2016).

These research articles highlight the importance of training educators about how trauma can disrupt a student's learning and increase problematic behaviors. If teachers lack effective strategies to engage students affected by trauma, and if they often address problematic behaviors in negative ways, that can interrupt the flow of teaching and learning. A need for TIPs arises because of the effects of trauma on early childhood development.

Trauma-Informed Care/Trauma-Informed Practices

TIPs are delivery practices that reflect on childhood trauma and its impacts on development, learning, and welfare for individuals (Langley et al., 2013). Trauma-informed care (TIC) is a framework that incorporates knowledge about the effects of trauma into policies and practices that promote dependable, empathetic, and respectful practices (Langley et al., 2013). Studies indicate that trauma interventions in schools primarily use teachers to deliver and support the interventions (Langley et al., 2013). Numerous trauma-informed school interventions have concentrated on general policy and training support, comprising professional training for educators on the effects of trauma on learning and development (Hoover et al., 2018).

A recent study was conducted on the effectiveness of professional development training on TIPs in schools (McIntyre et al., 2019). The research goal was to measure early ratings of acceptability as an indicator of teacher attitudes before applying trauma-informed training. McIntyre et al. (2019) hypothesized that knowledge progression would be positively associated

with acceptability ratings for TIPs. The study included associations between demographic and school variables, including teachers' age, teacher gender, and school level (i.e., elementary school or secondary school) and knowledge, knowledge growth, system fit, and acceptability. Results indicated that younger teachers performed better on the knowledge measure at both pre- and post-training. Female teachers were more likely to recognize TIPs as suitable and a good fit within their school context. Secondary school teachers were less optimistic about the fit of TIPs in their schools than teachers in primary schools. The research exhibited that teacher knowledge of trauma-informed approaches grew significantly from pre- to post-training. The percentage of teachers who answered at least 80% of the test items correctly increased from just 20% pretraining to 70% post-training (McIntyre et al., 2019). A critical aspect of this study is that the sample encompassed various work experience, from new teachers to veteran teachers.

Forster et al. (2017) analyzed relations between ACEs and nonmedical prescription medication use from the 2013 Minnesota Student Survey, an in-school survey administered every three years to students throughout Minnesota with a sample size totaling 104,332 participants comprised of 8th, 9th, and 11th graders. The study's primary focus was to analyze the direct effects of ACEs and positive student-teacher relationships on nonmedical prescription medication use and whether positive student-teacher relationships mediate this relationship (Forster et al., 2017). Findings from the study supported evidence that strong student-teacher relationships can counterpoise the adverse outcomes of harmful family environments for nonmedical use of prescription medication behaviors, has relevant suggestions for prevention work in the school environment (Forster et al., 2017). This research highlighted the significance of student and teacher relationships involving ACEs, the beginning stages of substance abuse, and TIPs. In schools, TIPs involve a framework for systemic strategies that merge foundational

knowledge of trauma into staff training, school culture, and student support systems. In the framework of education, the idea of TIPs is particularly crucial because most children spend a large part of their days in a school building, and having staff trained to support students with a history of trauma exposure can benefit school communities. A trauma-sensitive school is one in which all individuals feel safe, welcomed, and supported and can provide services to address trauma's impact on learning (Steele & Malchiodi, 2012). Another study examined trauma-informed school interventions with girls in a residential school facility, leading to positive outcomes for them (Day et al., 2015). This research shows the importance of examining how the trauma-informed teaching intervention model affects levels of trauma, self-esteem, and student attitudes toward teachers, learning, and school climate. One of the major themes from the study was that students reported substantial levels of PTSD; however, significant symptom reduction occurred after participation in the trauma-informed teaching curriculum (Day et al., 2015).

Jimenez et al. (2016) examined the relationships between teacher-reported academic and behavioral outcomes and ACE scores. The study indicated that children experiencing ACEs in early development were linked with adverse teacher-reported academic and behavioral incidents in kindergarten. Compared to students with no ACEs, students exposed to ACEs had increased probabilities of having below-average academic abilities, including lower literacy proficiencies and attention complications, social difficulties, and aggressive tendencies. These outcomes emphasize the significance of integrated approaches that promote informed trauma practices during the development of vulnerable children.

Educational professionals have the personal opportunity to identify stress and trauma symptoms in children because of their daily contact with them in the classroom. Research shows that educators receive little professional development on how trauma impacts students and

supports learning (Goodwin-Glick, 2017). Evidence exists that TIC approaches potentially could reduce the reoccurrence of childhood trauma and promote educational, mental, and physical health outcomes that are substantial and consistent (Broughton, 2017). It is crucial to remember that schools can have the most rigorous curriculum, but if the student is not coming to school or comes to school without their basic needs being met, they will not achieve their highest potential (Koch, 2018). Creating safe environments in schools for students by increasing the overall awareness of TIC by educators can encourage healthier urban school environments. Schools in urban areas with limited resources could benefit from a low-cost intervention such as professional developments focused on TIC and interventions to help lessen trauma's significant impact on students. An additional study examined the effectiveness of applying a school-based intervention, Cognitive Behavioral Intervention for Trauma in Schools, with Spanish-speaking Latino youths residing in New Orleans, Louisiana, to address presenting symptoms of trauma and depression (Allison & Ferreira, 2017). The 10-week program was primarily conducted in Spanish and consisted of 23 children and adolescents ages 10 to 14, in fifth, sixth, and seventh grades. The majority of the participants were females presenting with symptoms of trauma and depression (Allison & Ferreira, 2017). Results from the study revealed improved symptoms of trauma and depression related to experiencing and witnessing traumatic events. This research emphasized providing mental health services to children and adolescents within a school setting, where they spend most of their day (Allison & Ferreira, 2017). School-based trauma-informed interventions can reduce treatment barriers that limit youths from accessing interventions due to lack of insurance and access to transportation.

In summary, developing trauma-informed approaches in schools is frequently recommended, given that the prevalence of students with trauma continues to increase (McIntyre

et al., 2019). Trauma-informed approaches provide a framework for educators to expand their knowledge, improve school culture, and promote student mental health support (McIntyre et al., 2019). Research has also shown the effectiveness of school-based interventions based on trauma-informed frameworks such as using mindfulness methods when working with students and improving overall well-being (Dove & Costello, 2017).

Teachers Perceptions of Disruptive Behavior

This section reports on an investigation into schoolteachers' perceptions of disruptive behavior. Educational research offers insights into the relationship between disruptive behavior and learning, suggesting that trauma can adversely affect early brain development. Researchers in Spain evaluated teachers' perceptions of disruptive behavior in the classroom (Álvarez Martino et al., 2016). One of the strengths of this study was that it analyzed a wide variety of educators throughout different educational placements (Álvarez Martino et al., 2016). Teachers were grouped into specializations (e.g., individual education teachers, primary school teachers, preschool teachers, speech and hearing therapists, school counselors, educational assistants). One of the survey's goals was to discern the ratings teachers gave to the measures to improve teaching in the classroom. Overall, results indicated a theme among teachers, specifically a need for coordination among different educational services (Álvarez Martino et al., 2016). These results show that there is a need for more research on trauma training.

One educational study on teacher perceptions examined 492 teachers in the U.S. Midwest. The study focused on teachers' appraisals of the circumstances surrounding disruptive classroom behavior (Chang, 2013). Results established that the intensity of unpleasant emotions from one memorable disruptive classroom event is a significant variable for teachers' overall feelings of burnout (Chang, 2013). Findings such as this indicate that teachers need to be

informed and trained about the emotional challenges they face in the classroom. This study reinforced the idea that there is a significant practice gap in trauma training interventions concerning educators' perceptions of trauma in schools

Research has indicated that teachers in urban schools serving minority and low-socioeconomic students experience significantly more stress and lower job satisfaction than their colleagues serving students in suburban settings (Ouellette et al., 2018). Survey results from urban teachers revealed that training in classroom management interventions had no impact on teacher stress or fulfillment (Ouellette et al., 2018). Results indicated that the best predictor for teacher stress and satisfaction overall was organizational health (Ouellette et al., 2018). The practice gap in educator trauma training concerning their perceptions of trauma in schools highlights the importance of this research.

Research was conducted concerning school staff perspectives on the challenges and solutions to working with court-involved students. Participants involved were school personnel in a Midwest, urban, public charter school during the 2012-2013 academic year (Crosby et al., 2015). One theme that emerged from the survey results included teachers' agreement that working with traumatized students can be stressful, affecting them personally and instigating feelings of burnout. Results also indicated a need for administrative guidelines that can emotionally support teachers in their work with students exposed to trauma (Crosby et al., 2015). Another emerging theme from the study was how teachers expressed a lack of structure concerning trauma-informed intervention execution (Crosby et al., 2015). This article highlights the research to practice gap in the area of educational trauma training interventions.

In summary, it is imperative that students who have suffered trauma and exhibit trauma-related symptoms be treated as rapidly and efficiently as possible to reduce the likelihood of

adverse adult outcomes. This literature review examined comprehensive research on the history of trauma, children facing trauma, TIPs, and educators' perceptions of TIPs.

Teacher Self-Efficacy

Self-efficacy is an essential individual characteristic. It refers to a cognitive process in which individuals construct beliefs about their capabilities to achieve desired goals, and it determines how individuals feel, think, behave, and motivate themselves (Bandura, 1977, 1997). A teacher's self-efficacy is defined as "a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 684).

In the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), teacher self-efficacy is a task-specific, three-dimensional construct reflecting instructional practices, classroom management, and student engagement. Researchers using the Teacher Sense of Efficacy Scale have reported satisfactory reliability and construct validity evidence for this instrument across grades and several countries (Tschannen-Moran & Woolfolk Hoy, 2001).

Research suggests that teacher self-efficacy shows positive associations among students' academic improvement, patterns of teacher behavior and systems related to classroom quality, and factors underlying teachers' emotional well-being, including personal accomplishment, job satisfaction, and commitment (Yoo, 2016). Research findings have shown that online teachers' professional development training positively affects teacher efficacy (Zee & Koomen, 2016). Negative associations were found between teacher self-efficacy and burnout factors (Yoo, 2016). Research findings also supported that professional development positively affects teacher efficacy; vital teacher training programs are positively associated with teacher efficacy (Zee & Koomen, 2016).

Educational research indicates that teachers with higher self-efficacy levels have a higher combined responsibility, engage more in thoughtful dialogue, and are more open to collaborating or taking mutual responsibility (Valckx et al., 2020). This study also discovered that male teachers engage less in reflective dialogue than female teachers (Valckx et al., 2020).

Covid-19 Pandemic

In March 2020, schools across the United States began to face an unparalleled period of complexity (Minkos & Gelbar, 2021). Due to the spread of the COVID-19 global pandemic, 48 states, 4 U.S. territories, the District of Columbia, and the Department of Defense Education Activity legislated or recommended school building closures that would continue for the remainder of the 2020 academic year (Minkos & Gelbar, 2021). School closures resulted in an unmatched disturbance to academic education for at least 124,000 U.S. public and private schools and 55.1 million students nationwide (Minkos & Gelbar, 2021).

The coronavirus disease (COVID-19) pandemic has caused concern among experts about increases in suicide in the general population and vulnerable groups because of the profound effects of the pandemic on suicide risk factors, including mental health, the economy, isolation due to social distancing, and increases in domestic violence and substance abuse, bereavement and grief, and exposure to media reporting (Gunnell et al., 2020). COVID-19 has spread swiftly across the globe, and with it, an increased risk of child maltreatment and domestic violence due to its spread (Campbell, 2020). Mental health researchers warn that the distress caused by the pandemic leaves many people, with and without psychiatric disorders, vulnerable to suicidal behavior and that the consequences on an individual's suicidality are likely to be present for a more extensive peak longer than the pandemic itself (Gunnell et al., 2020).

Research exploring the associations between previous trauma exposure and psychological distress during the COVID-19 pandemic is still in its infancy. Current research literature supports the notion that trauma-exposed individuals could be even more prone to the implications of the COVID-19 crisis than their unexposed peers. In numerous cross-sectional studies, people who experienced adverse experiences during childhood or previous traumatic events showed elevated levels of psychological distress, including anxiety, depression, and PTSD, during the COVID-19 pandemic compared to individuals who did not experience such events (Seitz et al., 2021). Furthermore, in a longitudinal study, a higher perceived risk of COVID-19 predicted higher levels of depressive symptoms during the COVID-19 pandemic, particularly among adults with ACEs evaluated before the COVID-19 pandemic (Seitz et al., 2021).

Some fundamental concerns of COVID-19 lockdowns are students' loss of learning, the potential increase in dropout rates, and missing meals, and these negative impacts are felt disproportionately by low-socioeconomic children (Reimers et al., 2020). The COVID-19 lockdowns have created a need for school systems to develop ways to recover and renew a better understanding of this sense of urgency to close the teacher and trauma-informed training gap.

As schools reopen, educators and school leaders must be prepared to ensure that learning environments are emotionally and physically safe to reduce potential long-term adverse reactions to the pandemic. Special consideration needs to be exercised for planning to assist all students with reacclimating to the school climate. Therefore, it is fundamental for schools and districts to provide staff with trauma-focused training to understand the signs and symptoms of trauma and respond in ways that circumvent re-traumatization.

Summary

In summary, the reviewed literature confirmed the responsibility to explore further urban school teachers' perceptions of TIPs and direction to improve all students' social, emotional, and educational experience. The studies conducted by researchers thus far provide insight into the effects of traumatic and adverse experiences on students and learning; however, this research is limited regarding teachers' experiences in employing TIPs. One area of TIPs that lacks in-depth study is the teachers' perceptions of childhood trauma and problematic behaviors. The research argues that relationships in schools play an essential part in teachers' ability and willingness to manage behavior. Educators are feeling unequipped to support the needs of youths with a history of trauma exposure whom they interact with and support every day (Alisic et al., 2012). As a result of the absence of knowledge and training on TIPs, educators who work with students with histories of trauma are at grave risk of experiencing burnout, which causes many to leave the teaching profession (Alisic et al., 2012). Evaluating teachers' perceptions, experiences, and knowledge around TIPs is necessary to understand students' experiences better and to begin exploring how to serve students in the 21st century. Students in urban schools challenged with trauma and poverty deserve the best possible chance of academic success. The training of school educators and administrators in the facilitation and implementation of TIC and trauma-informed systems unequivocally renders students the opportunities they deserve.

CHAPTER THREE: METHODS

Overview

In Chapter Three, the research design is reviewed, including the research questions and the independent and dependent variables. Then the intended research procedure is described, including the selection and sampling of participants. Validity aspects will be considered. Finally, the proposed measures, the survey protocols, and the projected plan for statistical analysis are discussed.

Design

Following approval by the Liberty University Institutional Review Board, the study utilized a correlational research design to investigate the relationship between teacher trauma training, education, experience, self-efficacy, and teachers' perceptions of student trauma and teaching and responding to students with trauma.

Research Questions

RQ1: What is the relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behavior, as measured by the Teacher Perceptions of Student Behavior Scale?

RQ2: What is the relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure, as measured by the Teaching Traumatized Students Scale?

RQ3: What is the relationship between trauma training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale?

Hypotheses

H01: There is no significant relationship between trauma training, education, experience, and self-efficacy, and teacher perceptions of student behavior, as measured by the Teacher Perceptions of Student Behavior Scale.

H02: There is no significant relationship between trauma training, education, experience, and self-efficacy and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale.

H03: There is no significant relationship between training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale.

Participants and Setting

Urban School Teachers Sample

All participants were licensed teachers currently employed in a large, urban district in the northeast United States.

Power Analyses

A priori power analyses were conducted through G*Power software (Faul et al., 2007). For the multiple regression analysis, the total sample size deemed appropriate to detect a medium effect was 129 participants (f2 = .15), power ($1 - \beta$) = .95, and a significance level of $\alpha = 0.05$ - four predictors. For this study, the researcher chose to use the number of participants that would detect a medium effect size for the analyses, N= 129.

Recruitment

Participants were recruited through their public school district emails. Participants were asked to fill out the survey using the online software Qualtrics to gather responses. An

incentivization in the form of a drawing for 1 of 10 $25 Amazon gift cards was offered for completing the survey. The survey was sent to principals and teachers in an urban area school district via email. This research study utilized convenience sampling because of the accessibility to teachers' public work emails.

Inclusion and Exclusion Criteria

An initial informed consent was employed to screen all potential participants for their eligibility and willingness to participate. Inclusion criteria required that participants self-report as an adult over 18 years of age, currently teaching with a teaching license, and demonstrate the ability to comprehend and sign an informed consent form.

Instrumentation

Demographic Information

The demographic section of the survey consisted of 10 questions. The purpose of the demographic section was to gather essential demographic information for description and analysis purposes. Demographic items included grade taught, gender, age, highest degree held, length of time teaching, and information about previous training and education related to trauma.

Teachers' Self-Efficacy Scale

This study utilized the Teacher Sense of Efficacy Scale to measure teachers' sense of efficacy in student engagement, instructional practices, and classroom management. Tschannen-Moran and Woolfolk Hoy (2001) developed the Teacher Sense of Efficacy Scale, which comprises three subscales: student engagement, instructional practices, and classroom management (Yoo, 2016). The Teacher Sense of Efficacy Scale has 24 items rated on a 9-point Likert scale, with 1 indicating "Nothing" and 9 designating "A great deal" (Yoo, 2016). The Teacher Sense of Efficacy Scale instrument has been extensively used in the education field to

assess teachers' ability to use various instructional and evaluation strategies in their teaching contexts (Yoo, 2016). One research article analyzed the Teacher Sense of Efficacy Scale on large representative samples of Polish schoolteachers and concluded the Teacher Sense of Efficacy Scale is a reliable measurement tool (Koniewski, 2019). Support was observed in the Polish data for the Teacher Sense of Efficacy Scale measurement invariance of form, factor loadings, factor variances, and covariances across primary and lower-secondary school teachers (Koniewski, 2019). This study showed that teachers with a higher sense of self-efficacy offered more support and provided a more positive classroom environment than teachers with lower self-efficacy (Koniewski, 2019). Teachers with a heightened sense of self-efficacy also engaged more in relationships with other teachers and parents (Koniewski, 2019). These research findings support the fact that the Teacher Sense of Efficacy Scale can effectively measure self-efficacy among primary and lower-secondary teachers.

Trauma Scales

Three complementary measures were developed by researchers to evaluate academic staff on their readiness to work with traumatized students. These measures were developed by Crosby et al. (2018) with a detailed analysis of the literature on childhood trauma, its impression on educational well-being, and academic responses to traumatized students; the instruments assess academic staff perceptions of student behavior (Teacher Perceptions of Student Behavior Scale), awareness of trauma (Teaching Traumatized Students Scale), and responses to student behavior (Teacher Responses to Student Behavior Scale). Crosby et al.'s (2018) research resulted in a list of concepts associated with the target constructs of school staff perceptions of, awareness of, and responses to student trauma. Crosby et al. (2018) reported on the preliminary psychometric properties of three instruments to help evaluate teachers' perceptions of student trauma: the

Teacher Perceptions of Student Behavior Scale, Teaching Traumatized Students Scale, and the Teacher Responses to Student Behavior Scale. These measures were used in this current study to evaluate educational staff perceptions of student behavior, responses to disruptive behavior, and overall experience of trauma in the classroom and its impact on learning. Researchers described the psychometric properties, indicating that these measures may be potentially useful for helping researchers, program administrators, and academic organizations to achieve a greater understanding of the school environment for traumatized students (Crosby et al., 2018).

Teacher Perceptions of Student Behavior Scale

The Teacher Perceptions of Student Behavior Scale focuses on educator assumptions about student behavior and motives. The Teacher Perceptions of Student Behavior Scale consists of one set of nine questions and one set of seven items, based on "acting out" (e.g., being disruptive, loud, argumentative, threatening) and "shutting down" (e.g., being nonresponsive to prompting, withdrawn, putting head down). Teachers report how often they perceive particular motives for students acting out and shutting down using a five-point scale: 1 = never, 2 = sometime/less than half of the time, 3 = often/about half of the time, 4 = most of the time/more than half of the time, 5 = always. Responses of each subscale are summed individually. For interpretation, higher scores on each subscale represent higher staff perception of students exposed to trauma, where the staff was more likely to attribute student behavior to trauma-related factors.

Two separate exploratory factor analyses were conducted for the Teacher Perceptions of Student Behavior Scale, one for the initially acting out items and one for the shutting down items. For the acting out items, 9 of the original 17 questions reached eigenvalues greater than 0.30 and were included in the scale. A Cronbach's α internal consistency coefficient was

computed for those 9 items and resulted in $\alpha = 0.83$. For the shutting down items, 7 of the original 17 questions reached eigenvalues > 0.30, and the Cronbach's α internal consistency coefficient for the 7 items resulted in $\alpha = 0.83$ (Crosby et al., 2018). Example questions include: Students who ACT OUT in class are:

1. responding to change or transition
2. seeking attention

See Appendix B for the full scale.

Teaching Traumatized Students Scale

The Teaching Traumatized Students Scale includes internalizing and externalizing student behaviors and comprises nine questions focusing on educator actions that display overall knowledge and efficacy with traumatized youths. Participants described their awareness using a five-point scale, 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. Responses were summed, with higher scores representing greater overall awareness of student trauma and trauma-related educational needs.

The Teaching Traumatized Students Scale construct was best measured by a single set of items, rather than two separate subscales for "acting out" and "shutting down" behaviors. A Cronbach's α internal consistency coefficient was computed for the nine items, resulting in $\alpha = 0.91$ (Crosby et al., 2018). Example questions include:

1. Rewarding students help change problematic behavior
2. I am aware of the effects of trauma on the behavior of students in my classroom

See Appendix C for a full scale.

Teacher Responses to Student Behavior Scale

The Teacher Responses to Student Behavior Scale includes two sets of eight questions based on students "acting out" and "shutting down," similar to the student behaviors defined in the Teacher Perceptions of Student Behavior Scale. The Teacher Responses to Student Behavior Scale focuses on academic staff's instructional and teaching responses when students are demonstrating such behaviors. Participants rate how often they utilize appropriate responses to students acting out and shutting down using a five-point scale, as follows: 1 = never, 2 = sometime/less than half of the time, 3 = often/about half of the time, 4 = most of the time/more than half of the time, 5 = always. Each subscale's responses are summed individually, with higher scores representing more significant usage of trauma-sensitive instructional practices with students. A Cronbach's α internal consistency coefficient was computed across all three trauma scales (i.e., Teacher Perceptions of Student Behavior Scale, Teaching Traumatized Students Scale, Teacher Responses to Student Behavior Scale) to determine inter-scale correlation, resulting in $\alpha = 0.66$. Example questions include:

1. I use frequent breaks
2. I deliberately use wait time (i.e., pauses) after giving a direction

See Appendix D for a full scale.

Variables

This research study examined how much change in the criterion variables was accounted for by the predictors. Predictors included trauma training, education, experience, and Teacher Sense of Efficacy Scale scores. The first research question was, "What is the relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behaviors as measured by the Teacher Perceptions of Student Behavior Scale?" The predictor

variables were self-reported scores on demographic questions, including previous training on trauma, highest degree held, length of time teaching, and the Teacher Sense of Efficacy Scale survey. The criterion variable was the scores on the Teacher Perceptions of Student Behavior Scale. The researcher hypothesized a significant relationship between trauma training, education, experience, and self-efficacy and teacher perceptions of student behavior as measured by the Teacher Perceptions of Student Behavior Scale. The null hypothesis stated no significant relationship existed between trauma training, education, experience, and self-efficacy and teacher perceptions of student behavior as measured by the Teacher Perceptions of Student Behavior Scale.

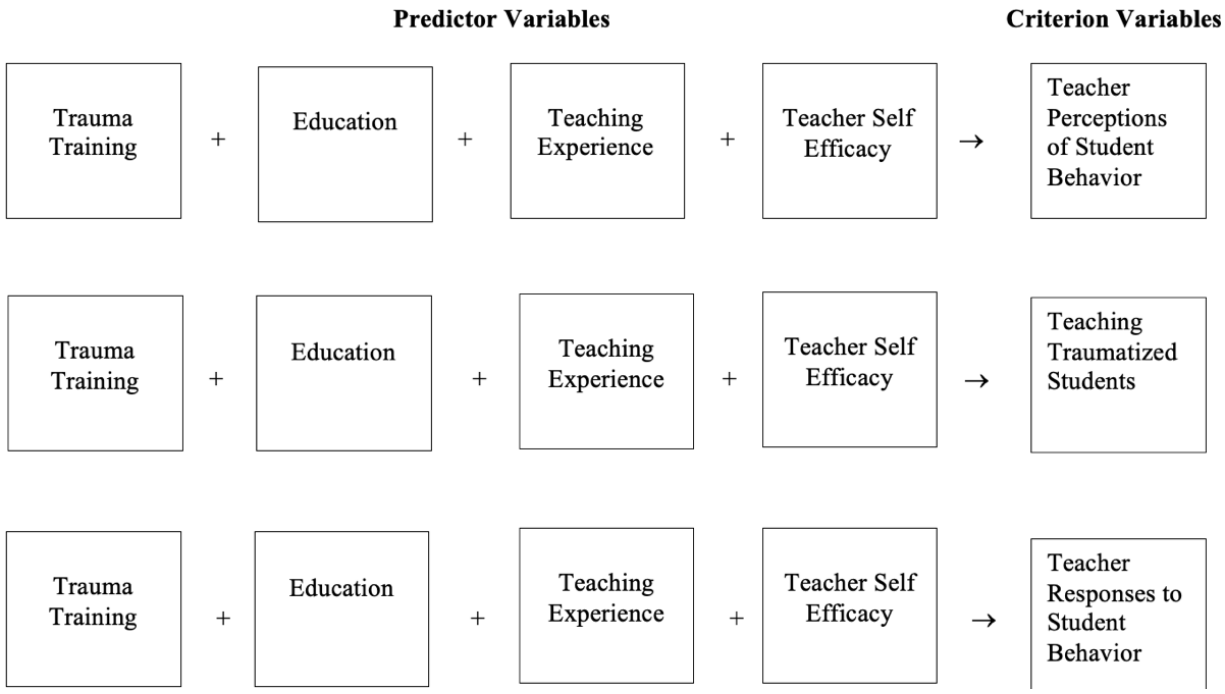
The second research question was, "What is the relationship between trauma training, education, experience, and self-efficacy, and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale?" The predictor variables were self-reported scores on demographic questions, including previous training on trauma, highest degree held, length of time teaching, and Teacher Sense of Efficacy Scale survey. The criterion variable was scored on the Teaching Traumatized Students Scale. The researcher hypothesized that there would be a significant relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale. The null hypothesis was that there would be no significant relationship between trauma training, education, experience, and self-efficacy and teaching students with a history of trauma exposure, as measured by the Teaching Traumatized Students Scale.

The third research question was, "What is the relationship between trauma training, education, experience, and self-efficacy, and teacher responses to student behavior as measured

by the Teacher Responses to Student Behavior Scale?" The predictor variables were self-reported scores on demographic questions, including previous training on trauma, highest degree held, length of time teaching, and the Teacher Sense of Efficacy Scale survey. The criterion variable was scored on the Teacher Responses to Student Behavior Scale. The researcher hypothesized a significant relationship between training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale. The null hypothesis stated that there would be no significant relationship between training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale.

Figure 1

List of Variables



Additional Variables

The researcher used a questionnaire to gather demographic information. Additional variables included gender, age, race/nationality, teaching grade, teaching specialty, and school setting. These data were used for descriptive purposes only.

Procedures

Participant Screening

To begin the screening process, participants were emailed instructions and background information about the researcher and the investigation being conducted, with a link that took them to the confidentiality and consent form process. Screened participants who met the inclusion criteria completed the informed consent form that detailed the risks and benefits of participation, the limits of confidentiality, and participation compensation.

Confidentiality

Survey data were collected through Qualtrics, an online survey system, and were kept confidential. No identifying information was gathered from participants as part of the survey, and the researcher did not know the participants' identities. Data were stored on a password-protected hard drive. A chance to enter a drawing for 1 of 10 a $25 Amazon gift cards was offered as an incentive for participation in the survey study. Email addresses were collected on Qualtrics independently from survey answers and were not interconnected to contributors' answers on any survey question. After completing the survey, participants were prompted to continue to a separate page to enter their email addresses to participate in the drawing. After data collection was complete, 10 participants were chosen randomly as winners of the drawing and emailed $25 Amazon gift certificates for their participation.

Consent

Individuals who participated in the survey were informed that taking the survey was entirely voluntary, and they could decline or withdraw at any time. Participants were required to read and acknowledge an informed consent page before proceeding to the survey questions. The informed consent page was the first screen of the online survey, which included material about the purpose of the study, the voluntary and confidential nature of the study, the potential risks and benefits related to the research, information about the prize drawing, and contact information for the researcher. Before continuing to the survey, respondents were required to indicate consent by checking a box stating that they had read and agreed to the consent information, were at least 18 years of age, and consented to participate in the study.

Data Analysis

A multiple regression analysis was conducted to determine how teacher experience, highest degree held, length of time teaching, information about previous training and education related to trauma, and self-efficacy scores correlated with teacher perceptions of teaching students with a history of trauma exposure, teacher perceptions of students behaviors, and teacher responses to traumatized students.

The researcher used IBM SPSS Statistics to calculate all statistical analyses. Multiple regression was conducted to describe how the predictor variables, highest degree held, length of time teaching, information about previous training and education related to trauma, and Teacher Sense of Efficacy Scale scores were related to the criterion variables (i.e., teacher perceptions of student behavior, teaching students with a history of trauma exposure, and teacher responses to student behaviors).

Three multiple regression analyses were conducted. Each analysis used the predictor variables, highest degree held, length of time teaching, information about previous training, education related to trauma, and Teacher Sense of Efficacy Scale scores. The criterion variable for each analysis was comprised of the scores from the individual trauma scales: the Teacher Perceptions of Student Behavior Scale, the Teaching Traumatized Students Scale, and the Teacher Responses to Student Behavior Scale.

In multiple regression analysis, the relationship between the dependent variable and a set of multiple independent variables is expressed as the multiple correlation coefficient *R*, which measures how well the predictor scores correspond to actual scores of dependent variables (Heppner et al., 2015). The square of the multiple correlation coefficient (R^2) is the proportion of the variability of the dependent variable explained by the independent variables (Heppner et al., 2015).

Statistical Assumptions

The data were examined to determine if the assumptions for multiple regression were met. Fundamentally, there must be a linear relationship between the outcome variable and the independent variables. The relationship between the dependent variable and the independent variables should be linear, and all observations should be independent. Therefore, the assumptions were independence, linearity, normality, and homoscedasticity. A reliable multiple linear regression analysis model should be normally and randomly distributed (i.e., the unknown does not depend on X; Alexopoulos, 2010). This researcher utilized scatterplots to determine whether there was a linear or curvilinear relationship and homoscedasticity. A scatterplot of residuals versus predicted values is a reliable method for checking homoscedasticity (Alexopoulos, 2010). Multiple regression assumes that the independent variables are not highly

correlated with each other. This assumption is tested through the multiple regression itself using variance inflation factor (VIF) values. If the VIF is equal to 1, there is no multicollinearity among regressors, but the regressors may be moderately correlated if the VIF is greater than 1 (Akinwande et al., 2015). A VIF between 5 and 10 indicates a high correlation that may be challenging (Akinwande et al., 2015). Furthermore, if the VIF goes above 10, it can be assumed that the regression coefficients are poorly estimated due to multicollinearity (Akinwande et al., 2015).

Missing Data

Data were examined for missing values. Incomplete responses were eliminated from the final data set employing listwise deletion. Missing data causes distinct challenges for the researcher; the most commonly used counseling survey research method to deal with missing data is listwise deletion (Curley et al., 2019). Curley et al. (2019) examined 1,087 published studies in education and psychology, of which 48% contained missing data; within that subset, they found that authors used listwise deletion 97% of the time.

Outliers

The researcher completed a preliminary screening of the data. For each predictor variable, the researcher set up a histogram to examine the shape of the scores' distribution. The researcher assessed for outliers by using *Z* scores for values greater than/less than ± 3.29 and multivariate outliers by assessing the Mahalanobis distance.

Reliability and Validity

Construct validity assesses whether a measurement tool represents the entity researchers are interested in measuring (Warner, 2013). One of the goals of this research was to highlight any relationships between teacher self-efficacy and their understanding of trauma and

demographic information. The internal consistency of each scale was assessed for internal reliability by obtaining the Cronbach α for each scale. All instruments used in this study were based on self-report from participants. While this information is essential, there may be some apprehension about the accuracy of the data collected from participants. For the purposes of this study, the researcher assumed that the participants answered truthfully. However, there may be some partiality involved, which is characteristic in self-reported assessments.

Summary

This chapter described the process of the completed study utilizing a correlational research design to investigate the relationship between teacher trauma training, education, experience, self-efficacy, and teachers' perceptions of student trauma and teaching and responding to students with trauma. This chapter included a description of the population, sample, instruments, and methods used to obtain data. Data collection procedures and steps in the analysis were also discussed. Assumptions about the data analyses were discussed, as well as validity and reliability related to the study.

CHAPTER FOUR: RESULTS AND ANALYSIS

This chapter summarizes the actual data collection procedures and presents the findings that correspond to the research questions and hypotheses of the study.

Preliminary Analysis

Missing Data

A total of 312 ($N = 312$) completed the survey. All data were examined for missing scores. Thirty participants (9.6% of total N value) had missing scores and were eliminated from the final data analysis using listwise deletion. The analysis was conducted with $N = 289$ participants.

Outliers

The data were examined for both univariate and multivariate outliers. Univariate outliers were identified through examining box and stem-and-leaf plots. Both univariate box and stem-and-leaf plots indicated potential outliers. The raw scores from the Teacher Sense of Efficacy Scale were converted to Z scores. Z scores were then examined for scores in excess of ± 3.29. Two cases had scores greater than 3.29 and were deleted from the data set.

Multivariate outliers were identified by calculating the Mahalanobis distance in a preliminary regression procedure. Based on $df = 8$, $p = .001$, the cutoff value for multivariate outliers was 26.125 (X^2 crit = 26.125). These cases were eliminated from the final analysis by deleting the cases from the final dataset (listwise deletion).

Summary of Demographics

For this study, the researcher requested information on participants' grade taught, gender, age, highest degree held, length of time teaching, and information about previous training and education related to trauma. A summary of demographic data is presented in Table 1.

Table 1

Demographic Questionnaire

Demographics	*N*	%
English language learner (ELL/ESOL) teacher	72	23.1%
Other	3	1.0%
Regular education	136	43.6%
Special education	79	25.3%
10th grade	3	1.0%
12th grade	3	1.0%
1st grade	6	1.9%
2nd grade	16	5.1%
3rd grade	21	6.7%
4th grade	7	2.2%
5th grade	11	3.5%
6th grade	77	24.7%
7th grade	63	20.2%
8th grade	71	22.8%
9th grade	3	1.0%
Kindergarten	9	2.9%
1-5 years	119	38.1%
12-18 years	16	5.1%
19-24 years	12	3.8%
25+ years	5	1.6%
6-11 years	138	44.2%
Elementary school (K-5th grade)	60	19.2%
High school (9th-12th grade)	12	3.8%
Middle school (6th-8th grade)	218	69.9%
20-25 years old	46	14.7%
26-35 years old	98	31.4%
36-45 years old	89	28.5%
46-55 years old	52	16.7%
56+ years old	5	1.6%
Female	167	53.5%
Male	123	39.4%
American Indian or Alaska Native	42	13.5%
Asian	60	19.2%
Black or African American	58	18.6%
Other	1	0.3%
White	129	41.3%
Bachelor’s degree	141	45.2%
Master’s degree	147	47.1%
Ph.D./doctorate degree	2	0.6%
0-4 hours	74	23.7%
10-15 hours	65	20.8%

Demographics	*N*	%
16-20 hours	64	20.5%
21+ hours	8	2.6%
5-9 hours	79	25.3%

Statistical Assumptions

The data were examined for both univariate and multivariate assumptions and to determine if the assumptions for multiple regression were met. Assumptions for multiple regression are linearity, normality of distribution, and homoscedasticity. Additionally, data were examined for multivariate normality. Descriptive statistics were also calculated, and skewness results were examined. Most variables had skewness and kurtosis values close to zero, indicating a normal distribution. Finally, data were assessed for multicollinearity. The absence of a pattern and the data points assembled around the mean line indicated that all assumptions had been met. Descriptive statistics were also calculated, and skewness results were examined. Most variables had skewness, and kurtosis values were above zero, indicating a non-normal distribution. A summary is presented in Table 2.

Table 2

Skewness and Kurtosis Values

Variable	Transformed	
	Skewness	Kurtosis
TSES_new	.767	−.161
Highest degree	−.003	−1.801
Amount of trauma training	.192	−1.138
Total years teaching	−.210	−.971

Univariate Normality

For the Teacher Sense of Efficacy Scale (question 11) univariate normality was assessed for Teacher Sense of Efficacy Scale question 11 indicating skewness = 1.266; kurtosis = 1.293;

Kolmogorov-Smirnov: $p < .001$. The question had 25 extreme scores > 167. Initial data transformation included transforming scores with extreme values to the next lowest non-extreme value. Specifically, scores ≥ 167 were transformed to a value of 166. Following the initial transformation, skewness was reduced to .767 and kurtosis to −.161. Finally, a mathematical transformation was used in an attempt to improve the normality of the distribution. Following a logarithmic transformation, skewness was reduced to .493, and kurtosis was reduced to −.326. The results of the Kolmogorov test still indicated nonnormality of the distribution with $p < .001$. However, following a visual inspection of histograms and normality plots, the researcher concluded the departure from normality to be acceptable for the purpose of multiple regression.

Univariate normality was assessed for Q12-15. Skewness, kurtosis, and the results of the Kolmogorov-Smirnov test are indicated in Table 3. Violations of normality were determined to be only moderate. Therefore, no data transformations were performed.

Table 3

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	*df*	Sig.	Statistic	*df*	Sig.
What is the highest degree you hold?	0.345	280	0.000	0.653	280	0.000
Amount of trauma training during career	0.189	280	0.000	0.883	280	0.000
TSES (Q11)	0.155	280	0.000	0.888	280	0.000
Q14	0.162	280	0.000	0.954	280	0.000
Q12 and 13	0.074	280	0.001	0.988	280	0.022
Q15	0.078	280	0.000	0.987	280	0.010

Note. a. Lilliefors significance correction.

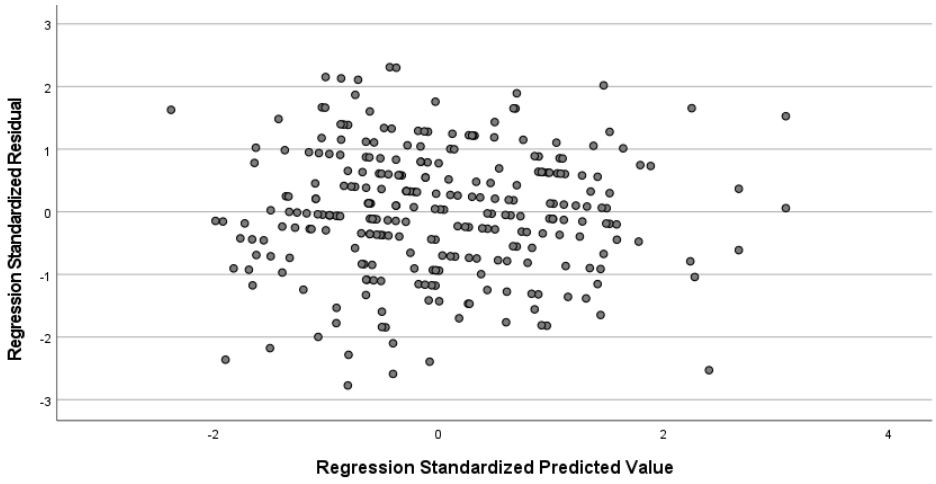
Multivariate Assumptions

The assumptions of multivariate normality, linearity, and homoscedasticity for each quantitative variable were assessed by visual inspection of residual scatterplots. In Q12 and 13, following visual inspection of the residual scatter plot, the assumption of multivariate normality

appeared to be satisfied. The assumption of linearity also appeared to be satisfied, as evidenced by a lack of a visual curvilinear pattern in the data. Finally, the assumption of homoscedasticity appeared to be partially violated, as evidenced by a greater clustering of scores on the left side of the scatterplot. However, the violation did not appear substantial, and multiple regression was robust to moderate violation of assumptions. Therefore, no further data transformation was indicated.

Figure 2

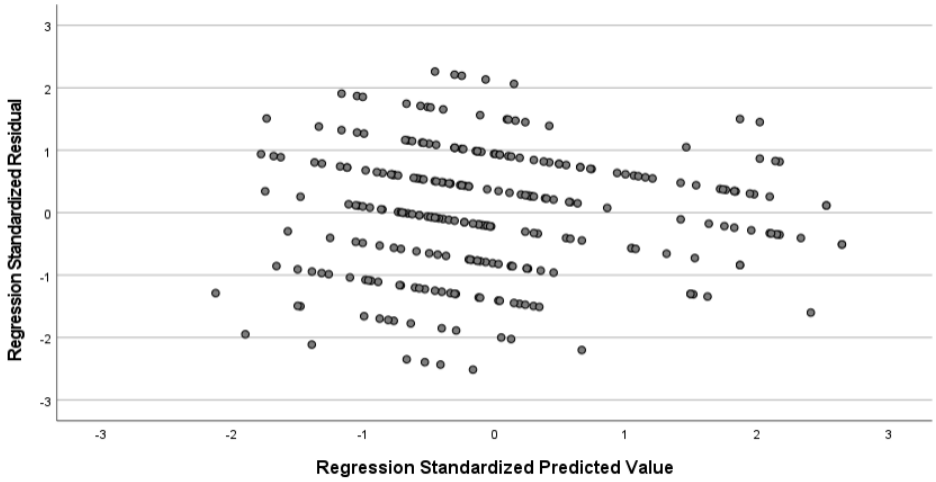
Scatterplot Dependent Variable Q12 and 13



In Q14, the scatterplot resembled concentration toward the middle, clustered around the mean line, with no particular shape or pattern. There was no pattern to indicate nonnormality, nonlinearity, or heteroscedasticity, based on the scatterplot. The lack of a pattern and the data points clustered around the mean line indicated that all assumptions had been met.

Figure 3

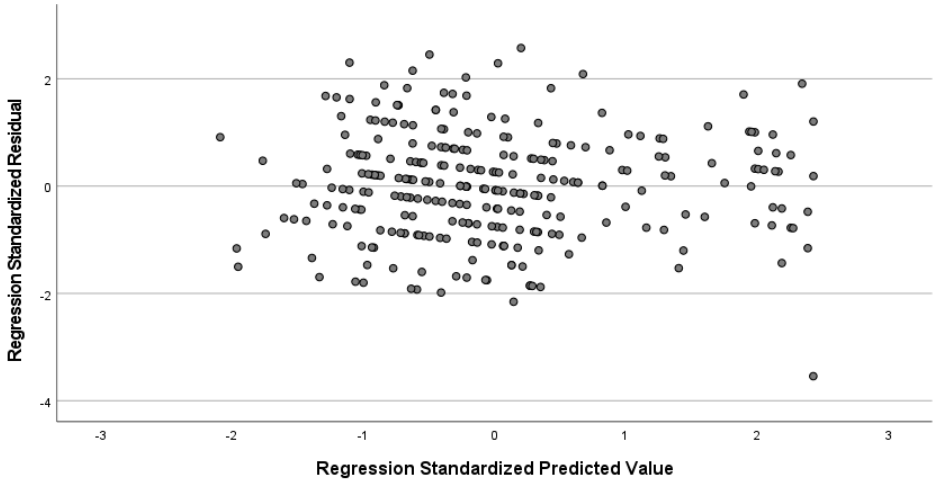
Scatterplot Dependent Variable Q14



In Q15, following visual inspection of the residual scatter plot, the assumption of multivariate normality appeared to be satisfied. There was no pattern to indicate nonnormality, nonlinearity, or heteroscedasticity, based on the scatterplot. The scatterplot resembled attention toward the middle, clustered around the mean line, with no particular shape or pattern.

Figure 4

Scatterplot Dependent Variable Q15



Results of Statistical Analysis

The multiple regression was conducted with $N = 289$ participants. The first research question was, "What is the relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behavior, as measured by the Teacher Perceptions of Student Behavior Scale?" The predictor variables were training, education, experience, and self-efficacy. The criterion variable was the Teacher Perceptions of Student Behavior Scale scores. Multicollinearity was tested with the multiple regression itself. The first null hypothesis stated no correlation between trauma training, education, experience, and self-efficacy, as measured by the Teacher Perceptions of Student Behavior Scale. Results of the regression analysis were not statistically significant, $R^2 = .023$, adjusted $R^2 = .009$, $F(4,275) = 1.631$, $p = .167$. Therefore, the researcher failed to reject the null hypothesis and concluded the model did not significantly predict teacher perceptions of student behavior. The results are presented in Tables 4 and 5.

Table 4

Model Summary[b]

				Std. Error	Change Statistics				
Model	*R*	R^2	Adjusted R^2	of the Estimate	R^2 Change	*F* Change	*df*1	*df*2	Sig. *F* Change
1	.152[a]	0.023	0.009	4.08671	0.023	1.631	4	275	0.167

Notes. a. Predictors: (constant), total years teaching, What is the highest degree you hold?, Amount of trauma training received during career, TSES_new. b. Dependent variable: Q12 and 13.

Table 5

Unstandardized and Standardized Regression Coefficients

	Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
Variable	*B*	*SE B*	*β*	*t*	*p*	Zero-order	Partial	Part	Tolerance	VIF
Constant	21.913	1.846		11.867	.000	0.095	0.084	0.083	0.844	1.185
TSES_new	.021	.015	.091	1.40	.163	0.103	0.090	0.089	0.962	1.039
Highest degree	.733	.491	.091	1.492	.137	0.075	0.070	0.069	0.978	1.022
Amount of trauma training	.245	.210	.070	1.166	.245	0.001	−0.050	−0.049	0.851	1.175
Total years teaching	−.261	.316	−.053	−.826	.410	0.095	0.084	0.083	0.844	1.185

The second research question was, "What is the relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure, as measured by the Teaching Traumatized Students Scale?" The predictor variables were training, education, experience, and self-efficacy. The criterion variable was the Teaching Traumatized Students Scale scores. The second null hypothesis stated no correlation between trauma training, education, experience, and self-efficacy and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale. Results of the regression analysis were statistically significant, $R^2 = .098$, adjusted $R^2 = .085$, $F(4,275) = 7.455$, $p < .001$. Therefore, the researcher rejected the null hypothesis and concluded the model significantly predicted teaching traumatized students. There was a small but significant positive correlation between trauma training, education, experience, and self-efficacy, as measured by the Teaching Traumatized Students Scale, although the correlation accounts for only 9.8% of the variation ($R^2 = .098$, $p < .001$). The beta weights show that Teacher Sense of Efficacy Scale predictor variable significantly predicted the dependent variable based on *t*-scores $t = 4.8$ and *p*-values $p = .000$. The results are presented in Tables 6 and 7.

Table 6

Model Summary[b]

Model	*R*	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
					R^2 Change	*F* Change	*df*1	*df*2	Sig. *F* Change
1	.313[a]	0.098	0.085	1.70928	0.098	7.455	4	275	0.000

Notes. a. Predictors: (constant), total years teaching, What is the highest degree you hold?, Amount of trauma training received during career, TSES_new. b. Dependent variable: Q14.

Table 7

Unstandardized and Standardized Regression Coefficients

Variable	Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
	B	*SE B*	β	*t*	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Constant	2.279	.772		2.951	.003	0.303	0.283	0.280	0.844	1.185
TSES_new	.030	.006	.305	4.889	.000	0.072	0.018	0.017	0.962	1.039
Highest degree	.060	.206	.017	.294	.769	0.098	0.074	0.071	0.978	1.022
Amount of trauma training	.109	.088	.072	1.237	.217	0.093	−0.030	−0.029	0.851	1.175
Total years teaching	−0.66	.132	−.031	−.501	.617	0.303	0.283	0.280	0.844	1.185

The third research question was, "What is the relationship between trauma training, education, experience, self-efficacy, and teacher responses to student behavior, as measured by the Teacher Responses to Student Behavior Scale?" The predictor variables were training, education, experience, and self-efficacy. The criterion variable was the Teacher Responses to Student Behavior Scale scores. The third null hypothesis stated no correlation existed between training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale. Results of the regression analysis were statistically significant, $R^2 = .089$, adjusted $R^2 = .076$, $F(4,275) = 6.732$, $p < .001$. Therefore, the researcher rejected the null hypothesis and concluded the model significantly predicted teacher response to student behavior. There was a small but significant positive correlation between trauma training, education, experience, and self-efficacy, as measured by the Teacher Responses to Student Behavior Scale, although the correlation accounted for only 8.9% of the variation ($R^2 = .089$, $p < .001$). The Teacher Sense of Efficacy Scale predictor variable significantly predicted the dependent variable based on *t*-scores $t = 4.04$ and *p*-values $p = .000$. The results are presented in Tables 8 and 9.

Table 8

Model Summary[b]

				Std. Error	Change Statistics				
Model	*R*	R^2	Adjusted R^2	of the Estimate	R^2 Change	*F* Change	*df*1	*df*2	Sig. *F* Change
1	.299[a]	0.089	0.076	2.94930	0.089	6.732	4	275	0.000

Notes. a. Predictors: (constant), total years teaching, What is the highest degree you hold?, Amount of trauma training received during career, TSES_new. b. Dependent variable: Q15.

Table 9

Unstandardized and Standardized Regression Coefficients

Variable	Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
	B	*SE B*	β	*t*	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Constant	5.475	1.333		4.109	.000					
TSES_new	.043	.011	.253	4.044	.000	0.274	0.237	0.233	0.844	1.185
Highest degree	.688	.035	.114	1.940	.053	0.160	0.116	0.112	0.962	1.039
Amount of trauma training	.102	.151	.039	.675	.501	0.067	0.041	0.039	0.978	1.022
Total years teaching	−.039	.228	−0.11	−.173	.863	0.102	−0.010	−0.010	0.851	1.175

CHAPTER FIVE: DISCUSSION

Introduction

The purpose of this study was to explore the relationship between trauma training, education, experience, and teacher self-efficacy and teachers' self-reported perception of student behavior, teaching, and managing behaviors of students with trauma history. Specifically, the researcher sought to answer the following research questions: (1) What is the relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behaviors as measured by the Teacher Perceptions of Student Behavior Scale? (2) What is the relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure, as measured by the Teaching Traumatized Students Scale? and (3) What is the relationship between trauma training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale?

For the first question, the researcher hypothesized a significant relationship between trauma training, education, experience, self-efficacy, and teacher perceptions of student behaviors as measured by the Teacher Perceptions of Student Behavior Scale. For the second question, the researcher hypothesized a significant relationship between trauma training, education, experience, self-efficacy, and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale. For the third question, the researcher hypothesized a significant relationship between training, education, experience, and self-efficacy and teacher responses to student behaviors as measured by the Teacher Responses to Student Behavior Scale.

Summary of Results for Research Question One

For RQ1, the results of the regression analysis were not statistically significant. Therefore, the researcher failed to reject the null hypothesis and concluded the model did not significantly predict teacher perceptions of student behaviors as measured by teacher perceptions of student behavior. This model accounted for 2.3% of variance in teacher perceptions of student behavior (R^2 = .023, adjusted R^2 = .009, $F(4,275) = 1.631$, p = .167). Therefore, the null hypothesis stating no correlation between trauma training, education, experience and self-efficacy, and teacher perception of student behavior as measured by the Teacher Perceptions of Student Behavior Scale resulted in the researcher failing to reject the null hypothesis. None of the predictor variables (i.e., Teacher Sense of Efficacy Scale score, total years teaching, amount of trauma training, and highest degree held) significantly predicted the dependent variable based on *t*-scores and *p*-values (Teacher Sense of Efficacy Scale score $t = 1.40$ p =.163, total years teaching $t = -.826$, $p = -.053$, amount of trauma training $t = 1.16$, p = .245, and highest degree held $t = 1.492$, p = .137). All *p*-values were greater than .05.

Discussion of Results for Research Question One

The predictor variables, Teacher Sense of Efficacy Scale score, total years teaching, amount of trauma training, and highest degree held, did not significantly predict teacher perceptions of student behavior. These results were somewhat unexpected, as literature supported differences between teachers' perceptions of student behavior ratings of the same student. However, research shows that students' perceptions vary systematically by teacher and student race, and other demographic characteristics have a relationship with teacher perceptions (Weathers, 2019). A credible explanation for the lack of significance in the overall model could be an outcome of teacher bias of students with a history of trauma. Literature provides evidence

that the racial match between teachers and students influences teachers' perceptions of students; students are perceived more favorably when assessed by teachers of the same race (Weathers, 2019).

A plausible explanation for the lack of significance in the overall model is that more participants were necessary to show significant results. While the final number of participants for this analysis ($N = 312$) exceeded the predicted number of necessary participants calculated a priori for a medium-size effect ($N = 129$), it is possible that the analysis could have been significant if a larger number of participants contributed with responses and shown a small-size effect. Several educational researchers have proposed that the adverse influence of perceived student problematic behavior on teacher well-being is due to teachers' negative responses in their interactions with students (Chang, 2013; Evans et al., 2019). According to the literature, students' ratings of their own behavior problems predicted teachers' negative affective experiences (Becker et al., 2015), and teachers' classroom experiences were correlated with burnout (Evans et al., 2019). The impact of teachers' perceptions on students' development is immense and not limited to the content information they provide. The environment a teacher creates directly and indirectly impacts their students' academic and social development. Critical aspects of the teacher-student relationship are the expectations the teacher has for the student.

Research literature supports that teacher are often not given the proper support to understand the developmental context of their students; thus, educators often struggle to move past their students' disruptive behavior (Zimmerman, 2018). After the immediate family, schools are the most crucial developmental system in the lives of children (Bronfenbrenner, 2006). Research has shown the relationship between students d teachers to be a pivotal contributor to the development of student academic and social competences. Student-teacher relationships are

characterized by the degree of involvement between teacher and child and the positive or negative emotional quality of that involvement (Zimmerman, 2018). Interventions that attempt to decrease teacher bias may help teachers better understand and assess students' skills and assets. Professional development centered around increasing educators' understanding of implicit bias and empathy toward marginalized students could be potential research on decreasing bias. This researcher's results promote the notion of examining how teachers' perceptions of children's behaviors affect student-teacher relationships. The nature of children's relationships with their teachers has a powerful effect on students' educational experiences and outcomes.

Summary of Results for Research Question Two

The results for the analysis for question two show that the overall model for this multiple regression equation significantly predicts academic staff awareness of trauma and its impact on learning when teaching traumatized students ($R^2 = .098$, adjusted $R^2 = .085$, $F(4,275) = 7.455$, $p < .001$.). The model showed a positive correlation between trauma training, education, experience, and self-efficacy and teaching students with a history of trauma exposure as measured by the Teaching Traumatized Students Scale. The model accounts for a 9.8% variance in predicting academic staff awareness of trauma and its impact on learning when teaching traumatized students ($R^2 = .098$, $p < .001$.). Therefore, the researcher rejected the null hypothesis and concluded the model significantly predicted academic staff awareness of trauma and its impact on learning when teaching traumatized students. One predictor variable, the teacher sense of efficacy, significantly predicted the dependent variable based on *t*-scores $t = 4.8$ and *p*-values $p = .000$. Teachers' sense of efficacy significantly predicted academic staff's general understanding of trauma and its impact on learning. This model found a positive correlation

between teachers' level of self-efficacy and academic staff's overall awareness of trauma and its impact on learning as measured by the Teaching Traumatized Students Scale.

Discussion of Results for Research Question Two

The model supports the construct that the more self-efficacy a teacher possesses, the more likely they will score high in teaching students with trauma symptoms. The literature supports the results of this model and the importance of trauma training for educators teaching students with a history of trauma to improve teacher self-efficacy. McIntyre et al.'s (2019) research study sampled educators with various levels of work experiences and demonstrated that teacher knowledge of trauma-informed approaches grew significantly from pre- to post-training. The percentage of teachers who answered at least 80% of the test items correctly increased from just 20% to 70% post-training (McIntyre et al., 2019). Combined literature and the results from this research support the notion that the relationship between teacher self-efficacy and trauma training for educators teaching students with a history of trauma is correlated to teacher self-efficacy.

The findings of this research study found a positive correlation between academic staff overall awareness of trauma and its impact on learning and teacher self-efficacy. The small effect size of RQ2 ($R^2 = .098$) quantifies the strength of the association between academic staff's overall awareness of trauma and its impact on learning and teacher self-efficacy. To increase the power of the study, the inclusion of other variables, such as specific research-based trauma teaching techniques may be helpful. Another option for increasing the power of the study is to replicate this study with larger sample size.

Regarding associations between self-efficacy and teaching traumatized children, self-efficacy theory (Bandura, 1977) suggested that higher self-efficacy leads to more remarkable

persistence and more positive outcomes when facing difficulties. Literature supports the results of this study: teachers with higher self-efficacy tended to respond more positively to children, communicated with them in ways that improved achievement, and encountered less stress (Putwain & von der Embse, 2019; Zee & Koomen, 2016).

This study shows a positive correlation between teachers' level of self-efficacy and academic staff overall awareness of trauma and its impact on learning as measured by the Teaching Traumatized Students Scale. Literature highlights that teachers with high levels of self-efficacy tend to execute effective teaching strategies and report higher job satisfaction (Zee & Koomen, 2016). Teachers' self-efficacy positively links with students' academic adjustment (Zee & Koomen, 2016) and relates to student learning outcomes (Klassen & Tze, 2014). Research shows that traumatic and stressful experiences place urban children at a heightened risk of academic difficulty, mental health disorders, illnesses, behavioral difficulties, and substance use (Larson et al., 2017; McLaughlin, 2016). Furthermore, the literature supports the need for responsive training and interventions for student behavior for urban youths with ACEs (Bell et al., 2013). Teacher training typically focuses on instruction, content knowledge, and behavior modification, with limited exposure to emotional and mental health needs (Wajiid et al., 2013). Therefore, teachers grapple with recognizing and understanding students' social/emotional needs leading to disciplinary approaches toward student behaviors (Hamre & Pianta, 2005). Outcomes from the research found a positive correlation between teachers' levels of self-efficacy and academic staff's overall awareness of trauma and its impact on learning. Teachers' sense of efficacy significantly predicted academic staff's overall awareness of trauma and its impact on learning. Previous literature and results from the current research study support a need for

professional development to help teachers learn about current environmental and societal issues with pre- and post-testing for self-efficacy to gain a deep understanding of the relationship.

Summary of Results for Research Question Three

The results for this analysis show that the overall model for this multiple regression equation significantly predicts instructional and teaching responses of academic staff usage of trauma-sensitive instructional practices with students' behavior (R^2 = .089, adjusted R^2 = .076, $F(4,275) = 6.732$, $p < .001$). The model predicted a positive correlation between training, education, experience, self-efficacy, and teacher responses to student behavior as measured by the Teacher Responses to Student Behavior Scale. The model accounts for 8.9% variance in predicting teacher responses to student behavior ($R^2 = .089$, $p < .001$.). Teacher responses to student behavior defined as teachers' usage of trauma-sensitive instructional practices with students. Therefore, the researcher rejected the null hypothesis and concluded the model significantly predicted teacher responses to student behavior. One predictor variable, the teacher sense of efficacy, significantly predicted the dependent variable based on *t*-scores $t = 4.04$ and *p*-values $p = .000$

Discussion of Results for Research Question Three

This study highlights educators' experiences, training, and policy needs regarding students with a history of trauma. In previous literature, teachers reported varying results and responses to levels of training and policy regarding students with a history of trauma (Berger et al., 2020). Outcomes from this research found a positive correlation between teachers' levels of self-efficacy and the usage of trauma-sensitive instructional practices with students. The small effect size of RQ3 ($R^2 = .089$) quantifies the strength of the association between predicting teacher responses to student behavior and training, education, experience, self-efficacy. To

improve the power of the study, future research should examine variables that would include more detailed responses to certain types of students' behaviors. A different option for increasing the power of the study is to replicate this study with a larger sample size. Another possibility to increase the study's effect size is to use highly valid outcome measures on teacher responses to student trauma. The study did find that Teachers' sense of efficacy significantly predicted the use of trauma-sensitive instructional practices with students. Results also resemble Alisic et al.'s (2012) study, showing that teachers with more significant experience and training regarding trauma are more confident and knowledgeable to respond. Recommendations from the literature included more training and trauma policies (Berger et al., 2018). The reported impacts of trauma on teachers' efficiency and emotional exhaustion are consistent with earlier research (Berger et al., 2018). Diverse levels of training and satisfaction with training are also consistent with earlier work (Howard, 2018). Results support the need for school policy regarding the impact of student trauma on other students and a need for staff-wide acceptance of trauma-specific protocols.

Recent research and educational literature on trauma informed protocols (TIPs) emphasize the importance of trauma-informed schools, as there is a varied response in the definition and implementation (Thomas et al., 2019). Preparing and training teachers to work with students with traumatic history may help address new educators' stress, burnout, and teacher turnover and increase teacher self-efficacy. Educators are critical stakeholders in trauma-informed schools as the frontline educators with the most direct contact with students. Literature on trauma-informed schools recommended addressing students' and educators' needs (Thomas et al., 2019). These barriers include lack of training, time, and teachers' buy-in regarding this mindset and approach (Baweja et al., 2016). Administrators may help support implementation by

offering professional development for a deeper understanding between trauma and school climate, culture, and teacher connections (Blitz et al., 2020).

Limitations

These study results must be considered in the context of limitations that may impact their generalizability. It is possible that teachers already held positive perceptions of trauma-informed approaches and training. Future work should include more diverse samples of educators and school locations. Exploring how schools shape individual teachers' perceptions of trauma-informed approaches will advance our understanding of teaching traumatized students.

The use of teacher self-report assessment instruments was another limitation of this study. The assessments used in this research utilized teachers' self-report and may have evaluated teachers' perceptions instead of actual changes in skill levels and student behavioral problems.

Coronavirus disease 2019 (COVID-19) has created a challenging yet adaptable environment to conduct quantitative correlational research and assess research methodology. Researching during a pandemic has provided unprecedented insights into quantitative correlational research approaches and methods. However, the impact on research is limited because the pandemic curtailed most academic, industry, and government normal daily functions. The COVID-19 pandemic has intensified research challenges by transforming school environments and outcomes.

One methodological limitation was that the survey developed for this study was considered preliminary and did not employ a control group. This study relied entirely on questionnaire responses. The questionnaire is not only a self-report measure but is primarily a measure of attitudes, history of behaviors, and perceptions. However, with the vast literature on

ACEs and detailed reports from similar research, this researcher's findings support the continued evaluation of trauma-informed schools as a promising framework for improving the adverse impact of childhood trauma. Findings also suggest the potential value of educator-based questionnaires as a perceptive measure of trauma-informed knowledge.

Strengths

Despite several limitations, this study presented some strengths as well. The study's primary strength is its external validity based on diversity and the number of participants. The number of participants surpassed the a priori calculations for the minimum number of participants to show a medium-size effect. The large number and diversity of participants can make the results more generalizable because it is more likely that these results would be replicated if the study was conducted with another sample of this population. Additionally, the large number of participants also contributed to the external validity of this study. Furthermore, resulting scores are a representation of the real-world activities of educators and the educational environments they construct in their classrooms.

A correlational research design can be regarded as a limitation; however, it can also exhibit strengths. Researchers can utilize a correlational research design to determine the direction and strength of each variable relationship. The variables that are analyzed with correlational research help researchers find each relationship's direction and strength. This advantage makes it achievable to narrow the findings in future studies to determine causation empirically as needed. The benefit of a correlational research study is that it can uncover relationships that may not have been previously known.

Implications for Trauma-Informed Educators

This study has implications for trauma-specific training and policy in schools as well as trauma-informed educators. Implications include ongoing professional development explicit about identifying trauma, impacts of trauma, responding to students with a history of trauma, and self-care. Results indicated that training is an essential factor for teaching and responding to students with a history of trauma. More experienced and trained staff who expressly rely on their experience in response to trauma-exposed students could provide coaching and consultation for teachers with less experience and training. More prominent recognition of the role of teacher burnout and the emotional toll of a student's trauma is also implicit in trauma-sensitive protocols and responses. The literature has supported training all school staff in response to trauma (Berger et al., 2018).

Implications for school-wide changes included more comprehensive training focused on managing student behavior and learning needs and administrative support for staff. Such issues could potentially be addressed by integrating TIPs and protocols within existing evidence-based, school-wide support that provides student support, teacher training, and individualized peer coaching based on teachers' level of student trauma training. Integrated responses and staff preparedness to respond to the many challenges of traumatized students could also be facilitated through the inclusion of trauma emotional regulation instruction in curricula. Support for school staff could also examine models of self-care and school-wide supports provided to educators, such as training school staff about self-care strategies. Based on self-assessment, teachers may seek additional training and support for new ways of responding to students with a history of trauma.

Teachers can be the first line of defense for students with a history of trauma. Childhood trauma and its effects have been captured in research, commonly referred to as ACEs. Trauma shows up in the classroom in many ways, from students having trouble concentrating to expressing themselves through angry outbursts (Jacob et al., 2018). Insecurities caused by the COVID-19 pandemic also are affecting children (Minkos & Gelbar, 2021).

At the time of this writing, the COVID-19 pandemic is proceeding into the third academic school year; the short- and long-term effects will be complicated. In addition to schools, states across the country and the globe have mandated the closure of businesses to slow the spread of the virus (Minkos & Gelbar, 2021). According to the U.S. Bureau of Labor Statistics (2020), this increased the country's unemployment rate from 10.3% to 14.7% in April 2020. Individuals' and family's employment and financial conditions may have produced significant stressors in attaining necessities and medical care during the pandemic (Minkos & Gelbar, 2021).

Exposure to trauma can result in significant long-term negative consequences (Chafouleas et al., 2019). The result may be insignificant for some children, whereas COVID-19 will represent an adverse childhood experience for others. Nonetheless, impacts are influenced by the duration and intensity of traumatic experiences (Chafouleas & Marcy, 2020), all of which are challenging to assess within a continually evolving pandemic. Institutions and administrators should anticipate students will react to the pandemic in various ways depending on the student's personal experiences and developmental level (Baloran, 2020). Hence, it is essential for schools and districts to provide all school staff with trauma-informed training to understand the indicators and symptoms of trauma and respond appropriately.

Administrators can focus on increasing trauma training that equips teachers to recognize trauma's effects on the body and brain, regulate stress in the classroom, and develop resilience in themselves and their students. Administrators must examine the various benefits of professional development in this field of TIC. For current teachers, continuing education that furthers trauma-informed learning environments can be beneficial. There are many ways to integrate trauma-informed approaches into schools, including strategic planning by administrators, staff training, and teacher peer support.

Recommendations for Further Research

Additional research is needed to determine the optimal way to introduce trauma training in teacher education programs. Training format approaches should be evaluated to ascertain the best way to facilitate trauma-informed teaching skill competence among educators to improve teacher self-efficacy. Additional research is needed to address the limitations of this study, including surveying a more extensive and more diverse sample of participants across time. Future research may examine teachers' self-efficacy scores for trauma-informed professional development training. For example, analyzing pre- and post-training teachers' self-efficacy scores to evaluate the effectiveness of trauma-informed professional development training could further explore the nature of the relationship between teacher self-efficacy and teaching students with a history of trauma.

Relatively few investigations have attempted to demonstrate the benefits of relevant training for educators. Additional research is needed to understand the impact of trauma-informed training on educators' self-efficacy. Since educators provide the primary relationship with students, teacher-focused trauma-informed training is ideal for helping build schools that are safe and supportive places for students who have experienced trauma.

Implications for future research would be to replicate this study using a larger sample size, collect data from students and families on how the school trauma-informed approaches have impacted them, and expand the data pool to educators at other schools already using a trauma-informed framework for comparison. Future research should examine compassion fatigue and burnout among school faculty and how schools take a trauma-informed approach to address burnout and self-care. As the number of trauma-impacted students in the United States continues to grow, educators' understanding and professional development on student needs and the best practices in trauma education also need to grow.

Additional research is needed to ascertain the optimal way to introduce trauma training in teacher development programs to improve teacher self-efficacy. Such research would enable school systems to integrate TIC with professional development. Educational research literature has consistently identified that teachers do not feel prepared or equipped to support the mental health of their students (Alisic et al., 2012). Furthermore, teacher self-efficacy has been recognized as a variable against burnout and supports teacher effectiveness even when faced with students with a history of trauma (McCallum & Price, 2010). Given the high occupational stress of the teaching profession (McCallum & Price, 2010), self-efficacy is a critical construct to explore its impact on teacher effectiveness further. Now more than ever, educator professional development programs need to prepare the school staff to be trauma-informed and implement trauma-sensitive practices.

Conclusion

This study provided information on the relationship between trauma training, education, experience, teacher self-efficacy, and teachers' self-reported perception of student behavior, teaching, and managing behaviors of students with trauma history. This information was limited

in the current literature. Specifically, this research studied the role teachers play in educating children with a history of trauma. Teacher self-efficacy correlated significantly with teacher responses to student behavior and teaching students with a history of trauma. However, teacher self-efficacy, total years teaching, amount of trauma training, and highest degree held did not significantly predict teacher perceptions of student behavior. Overall, the study validated the importance of teacher self-efficacy and trauma training and its significance on educators' experiences. Further research is needed on the relationship between teachers' perceptions of student behavior. The results emphasize the importance of school administrators, trauma educators, and researchers in including frontline educators when developing trauma-informed educational approaches.

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APPENDIX A

Demographic Survey

Type of Teacher
Regular Education
Special Education
Speech Teacher
English Language Learner (ELL/ESOL) Teacher

Teaching Grade
K
1st
2nd
3rd
4th
5th
6th
7th
8th
9th
10th
11th
12th

Total Years Teaching Experience
0-5
6-11
12-18
19-24
25+

Teaching Level
Elementary
Middle
High

What is your age?
A. 20-25 years old
B. 26-35 years old
C. 36-45 years old
D. 45+
E. Prefer not to answer

What is your gender?
Female
Male
Other
Prefer not to answer.

What is your ethnicity?
White
Black or African American
Hispanic, Latino, or Spanish origin
American Indian or Alaska Native
Asian
Native Hawaiian or Other Pacific Islander
Other
Prefer not to answer

What is the highest degree or level of education you have completed?
Bachelor's Degree
Master's Degree
Ph.D. or higher

Amount of Trauma Training Received During Career
4-8 hours
9-15 hours
16-20 hours
21+ hours or more

APPENDIX B

Teacher Perceptions of Student Behavior Scale

Rate how often you believe that each of the following is happening. Students who ACT OUT in class are…	Never	Sometimes/ Less than half of the time	Often/ About half of the time	Most of the time/ More than half of the time	Always
1. responding to change or transition	1	2	3	4	5
2. seeking attention	1	2	3	4	5
3. not feeling well physically (e.g., stomach ache, headache)	1	2	3	4	5
4. reacting to something from their past	1	2	3	4	5
5. feeling like the work is too difficult for them	1	2	3	4	5
6. reacting to a court decision	1	2	3	4	5
7. fearing failure	1	2	3	4	5
8. reacting from a parental or other family visit	1	2	3	4	5
9. reacting to something that happened in their current living environment	1	2	3	4	5
Students who SHUT DOWN in class are…	Never	Sometimes/ Less than half of the time	Often/ About half of the time	Most of the time/ More than half of the time	Always
1. responding to change or transition	1	2	3	4	5
2. reacting to something from their past	1	2	3	4	5
3. feeling like the work is too difficult for them	1	2	3	4	5
4. reacting to a court decision	1	2	3	4	5
5. fearing failure	1	2	3	4	5
6. reacting from a parental or other family visit	1	2	3	4	5
7. reacting to something that happened in their current living environment	1	2	3	4	5

APPENDIX C

Teaching Traumatized Students Scale

Please circle the most appropriate number.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Rewarding students helps change problematic behavior	1	2	3	4	5
2. I am aware of the effects of trauma on the behavior of students in my classroom	1	2	3	4	5
3. I consider my students' experiences with trauma as I design strategies to engage students in learning	1	2	3	4	5
4. I can identify traumatic responses in students	1	2	3	4	5
5. I am aware of aspects of the school environment that may trigger trauma reactions in students	1	2	3	4	5
6. I know how to handle difficult behavior related to traumatic reactions in students	1	2	3	4	5
7. I understand how the brain is affected by trauma	1	2	3	4	5
8. I am mindful of how my verbal expressions (tone, language, sarcasm) impact a traumatized child	1	2	3	4	5
9. I am mindful of the way my body language and non-verbal expression impact a traumatized child	1	2	3	4	5

APPENDIX D INSTITUTIONAL REVIEW BOARD APPROVAL

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

April 27, 2021
Jonathan Tomlin
Vasti Holstun
Re: IRB Exemption - IRB-FY20-21-755 SCHOOL TEACHER'S PERCEPTION AND UNDERSTANDING OF DISRUPTIVE BEHAVIORS AND CHILDHOOD TRAUMA
Dear Jonathan Tomlin, Vasti Holstun:

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 46:101(b): 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.

APPENDIX E RECRUITMENT LETTER

Dear K-12 school Teachers:

As a doctoral student in the School of Behavioral Sciences at Liberty University, I am conducting research as part of the requirements for an EdD in Community Care and Counseling –Traumatology cognate The purpose of this study is to explore the relationship between trauma training, education, experience, and teacher self-efficacy. Variables will include teachers' self-reported perception of student behavior, teaching, and managing behaviors of students with trauma history. I am writing to invite eligible participants to join my study.

Participants must be 18 years of age or older, and self-report that they are currently teaching with a US teaching license. Participants, if willing, will be asked to fill out a survey using the online survey software Qualtrics to gather responses. It should take approximately 15 minutes to complete the online survey. Participation will be completely anonymous, and no personal, identifying information will be collected.

A consent document is provided as the first page of the survey. The consent document contains additional information about my research. You do not need to sign and return the consent document. After you have read the consent form, please click the button to proceed to the survey. Doing so will indicate that you have read the consent information and would like to take part in the survey.

Participants can voluntarily be entered in a raffle to receive one of ten $25 Amazon gift cards after completing the survey.

Sincerely,

Jonathan J. Tomlin M.S.Ed., LPC, NCC
Doctoral Candidate

APPENDIX F

Teacher Responses to Student Behavior Scale

How much do you use the following teaching strategies with students who ACT OUT?	Never	Sometimes/ Less than half of the time	Often/ About half the time	Most of the time/ More than half the time	Always
1. I use frequent breaks	1	2	3	4	5
2. I deliberately use wait time (i.e., pauses) after giving a direction	1	2	3	4	5
3. I have sensory outlets available in the classroom (e.g., stress balls, play dough)	1	2	3	4	5
4. I use repetition and compromises in my interactions with students	1	2	3	4	5
5. I use structured, interactive, and interpersonal games in the classroom setting (e.g., music, ball toss, string game)	1	2	3	4	5
6. I provide students access to a safety zone when needed	1	2	3	4	5
7. I adjust lessons in ways to accommodate	1	2	3	4	5
8. I have physically rearranged the classroom as a method to address student behaviors	1	2	3	4	5

How much do you use the following teaching strategies with students who SHUT DOWN?	Never	Sometimes/ Less than half of the time	Often/ About half the time	Most of the time/ More than half the time	Always
1. I use frequent breaks	1	2	3	4	5
2. I deliberately use wait time (i.e., pauses) after giving a direction	1	2	3	4	5
3. I have sensory outlets available in the classroom (e.g., stress balls, play dough)	1	2	3	4	5
4. I use repetition and compromises in my interactions with students	1	2	3	4	5
5. I use structured, interactive, and interpersonal games in the classroom setting (e.g., music, ball toss, string game)	1	2	3	4	5
6. I provide students access to a safety zone when needed	1	2	3	4	5
7. I adjust lessons in ways to accommodate	1	2	3	4	5
8. I have physically rearranged the classroom as a method to address student behaviors	1	2	3	4	5

How much do you use the following teaching strategies with students who ACT OUT?	Never	Sometimes/ Less than half the time	Often/ About half the time	Most of the time/ More than half the time	Always
1. I use frequent breaks	1	2	3	4	5
2. I deliberately use wait time (i.e., pauses) after giving a direction	1	2	3	4	5
3. I have sensory outlets available in the classroom (e.g., stress balls, play dough)	1	2	3	4	5
4. I use repetition and compromises in my interactions with students	1	2	3	4	5
5. I use structured, interactive, and interpersonal games in the classroom setting (e.g., music, ball toss, string game)	1	2	3	4	5
6. I provide students access to a safety zone when needed	1	2	3	4	5
7. I adjust lessons in ways to accommodate	1	2	3	4	5
8. I have physically rearranged the classroom as a method to address student behaviors	1	2	3	4	5

Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing		Very Little		Some		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
2. How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9
3. How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
4. How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
5. To what extent can you make your expectations clear about student behavior?	1	2	3	4	5	6	7	8	9
6. How much can you do to get students to believe they can do well in schoolwork?	1	2	3	4	5	6	7	8	9
7. How well can you respond to difficult questions from your students?	1	2	3	4	5	6	7	8	9
8. How well can you establish routines to keep activities running smoothly?	1	2	3	4	5	6	7	8	9
9. How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
10. How much can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
11. To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
12. How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
13. How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
14. How much can you do to improve the understanding of a student who is failing?	1	2	3	4	5	6	7	8	9
15. How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
16. How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
17. How much can you do to adjust your lessons to the proper level for individual students?	1	2	3	4	5	6	7	8	9
18. How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
19. How well can you keep a few problem students from ruining an entire lesson?	1	2	3	4	5	6	7	8	9
20. To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
21. How well can you respond to defiant students?	1	2	3	4	5	6	7	8	9
22. How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
23. How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
24. How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9

APPENDIX G

Teacher Self Efficacy Scale

TSES1 (long form)
Teacher beliefs How much can you do?

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing		Very Little		Some		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
2. How much can you do to help your students think critically?	1	2	3	4	5	6	7	8	9
3. How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
4. How much can you do to motivate students who show low interest in school work?	1	2	3	4	5	6	7	8	9
5. To what extent can you make your expectations clear about student behavior?	1	2	3	4	5	6	7	8	9
6. How much can you do to get students to believe they can do well in schoolwork?	1	2	3	4	5	6	7	8	9
7. How well can you respond to difficult questions from your students?	1	2	3	4	5	6	7	8	9
8. How well can you establish routines to keep activities running smoothly?	1	2	3	4	5	6	7	8	9
9. How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
10. How much can you gauge student comprehension of what you have taught?	1	2	3	4	5	6	7	8	9
11. To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	9
12. How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
13. How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	7	8	9
14. How much can you do to improve the understanding of a student who is failing?	1	2	3	4	5	6	7	8	9
15. How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
16. How well can you establish a classroom management system with each group of students?	1	2	3	4	5	6	7	8	9
17. How much can you do to adjust your lessons to the proper level for individual students?	1	2	3	4	5	6	7	8	9
18. How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
19. How well can you keep a few problem students from ruining an entire lesson?	1	2	3	4	5	6	7	8	9

Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing		Very Little		Some		Quite A Bit		A Great Deal
20. To what extent can you provide an alternative explanation or example when students are confused?	1	2	3	4	5	6	7	8	9
21. How well can you respond to defiant students?	1	2	3	4	5	6	7	8	9
22. How much can you assist families in helping their children do well in school?	1	2	3	4	5	6	7	8	9
23. How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9
24. How well can you provide appropriate challenges for very capable students?	1	2	3	4	5	6	7	8	9