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Trauma in the Classroom: Teachers' Perspectives on Supporting Students Experiencing Child Traumatic Stress

Kassandra Reker
Loyola University Chicago, kassandrareker@gmail.com

LOYOLA UNIVERSITY CHICAGO

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To Ms. Reker's Kindergartners
Classes of 2007-2008 and 2008-2009

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ABSTRACT

Each day, students across the nation carry personal trauma histories into the classroom. According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014a, p. 7), trauma "results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being." With nearly half of all children experiencing at least one adverse childhood event (Child and Adolescent Health Measurement Initiative, 2013b), teachers' approach to addressing trauma in the classroom is critical. Yet our understanding of teachers' knowledge and confidence in supporting students exposed to traumatic events is limited. The current study aimed to examine the impact of teachers' experiences (e.g., length of time in the classroom, teaching setting, and trauma training) on their perceptions of (1) the need for trauma intervention in the classroom, (2) their role in providing support to students experiencing child traumatic stress, and (3) their level of self-efficacy in supporting this group of students. Perceptions were gathered from Nebraska classroom teachers (n = 327) via a mixed-methodology online survey. Survey results illustrate a need for developmentally-appropriate trauma-specific training across career stages (e.g., early-, mid-, and late-career) and school type (e.g., elementary, middle, and high school). Implications for the implementation of this type of training are discussed.

CHAPTER I

INTRODUCTION

Overview

Each day, students across the nation carry personal trauma histories into the classroom. According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014a, p. 7), trauma "results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being." Traumatic events – often referred to as adverse experiences – are prevalent among children and adolescents of all ages and include circumstances such as socioeconomic hardship, abuse and neglect, and exposure to community violence (Child and Adolescent Health Measurement Initiative, 2013b).

In a seminal study of childhood exposure to adverse experiences, Kaiser Permanente surveyed more than 17,000 adult participants (Centers for Disease Control and Prevention (CDC), 2014c). Nearly two-thirds of participants reported at least one adverse experience in childhood; more than twenty percent endorsed three or more adverse childhood experiences (CDC, 2014c). Similarly, a 2011 survey of children between the ages of infancy and 17 years revealed 48% of participants experienced at least one adverse childhood event (Child and Adolescent Health Measurement Initiative, 2013b). Furthermore, in a study specific to abuse and neglect, the United States

Department of Health & Human Services (HHS, 2015) reported child protective services received 3.5 million referrals in 2013. Child protective services determined 679,000 of these children were victims of abuse or neglect. Of the child victims, 79.5% were neglected; 18.0% were physically abused, 9.0% were sexually abused, and 10% experienced "other" forms of maltreatment or abuse such as "threatened abuse" or "parent's drug/alcohol use" (HHS, 2015).

The effects of these adverse childhood experiences are widespread and have the potential to result in child traumatic stress. According to the National Child Traumatic Stress Network (NCTSN, 2003, p. 1), children experiencing child traumatic stress "have been exposed to one or more traumas over the course of their lives and develop reactions that persist and affect their daily lives after the traumatic events have ended." Numerous studies indicate toxic stress and trauma lead to a decrease in the volume of the brain's hippocampus, corpus callosum, cerebellum, and prefrontal cortex (McCrory, De Brito, & Viding, 2010; Wilson, Hansen, & Li, 2011; Hanson et al., 2010). Decreased volume in these areas of the brain impact learning, memory, and executive functioning (Child Welfare Information Gateway, 2015). Additionally, research reveals abuse and neglect lead to overactivity of the amygdala and a subsequent inhibition in the child's ability to accurately determine whether a stimulus is threatening (National Scientific Council on the Developing Child, 2010; Shonkoff & Garner, 2012). Trauma is also associated with major psychological disorders such as reactive attachment disorder, disinhibited social engagement disorder, posttraumatic stress disorder, acute stress disorder, adjustment

disorders, and intermittent explosive disorder (American Psychiatric Association (APA), 2013; Nickerson, Aderka, Bryant, & Hoffman, 2012).

In the classroom setting, the cognitive and psychological effects of trauma exposure are paired with difficulties in academic and social functioning. Goodman, Miller, and West-Olatunji (2011) determined students with histories of traumatic stress, when compared to those without these histories, scored lower on standardized tests and were three times more likely to have an Individualized Education Program (IEP). Shonk and Cicchetti (2001) found deficits in academic achievement were also prevalent for students with histories of maltreatment. In addition to academic underachievement, children with trauma histories display a wide range of externalizing and internalizing behaviors including irritability, aggression, withdrawal, difficulty with authority, and hyperarousal (National Child Traumatic Stress Network, 2008). These behaviors present themselves as early as preschool and have the potential to continue into adulthood (Graham-Bermann, Castor, Miller, & Howell, 2012; Shonkoff & Garner, 2012)

Problem Statement

For students displaying the cognitive, psychological, academic, or social effects of exposure to traumatic events, the school presents itself as a critical setting for mental health intervention (Weist, Evans, & Lever, 2003). Though school social workers, counselors, and psychologists are often viewed as the primary providers of mental health services, research suggests classroom teachers are increasingly responsible for implementing mental health interventions. In a systematic review of school mental health intervention studies, Franklin and colleagues (Franklin, Kim, Ryan, Kelly, &

Montgomery, 2012) determined teachers were actively involved in the delivery of nearly 41% of mental health interventions. Furthermore, teachers were the sole provider of approximately 18% of the interventions included in the systematic review (e.g., interventions specific to drug and alcohol use prevention; anger management; depression; and suicidal behaviors; Franklin et al., 2012). This data accounts only for the formalized delivery of mental health intervention. Little research exists on the informal mental health support teachers provide on a daily basis.

To better understand the degree to which teachers provide this informal support, Reinke, Stormont, Herman, Puri, and Goel (2011) studied teachers' perceptions of the needs, roles, and barriers to supporting children's mental health in schools. Only 28% of teacher participants agreed they possess the knowledge necessary to meet the mental health needs of their students, while approximately one third of teachers reported they have the required skills. When asked to provide the top three areas in which teachers believed they need additional training, "recognizing and understanding mental health issues in children" fell second on teachers' lists, preceded by "strategies for working with children with externalizing behavior problems."

Results of the Reinke et al. (2011) study speak to teachers' overall perceptions of mental health in the classroom; however, little research specifically addresses teachers' experiences supporting students with trauma histories. A search of the literature reveals only two studies addressing teachers' approach to trauma in the classroom. A 2012 quantitative study led by Alisic and colleagues (Alisic, Bus, Dulack, Pennings & Splinter, 2012) found that though 89% of Dutch teachers directly worked with one or more

students with trauma histories, only 9% reported receiving trauma-specific training. Furthermore, in a 2012 qualitative study, Alisic discovered Dutch teachers (1) were unclear of their role in addressing the needs of students with trauma histories, (2) believed they lack the knowledge necessary to support this group of students, and (3) struggled to manage the emotional burden of supporting students with exposure to trauma.

Significance of the Study

With nearly half of all children experiencing at least one adverse childhood event (Child and Adolescent Health Measurement Initiative, 2013b), teachers' approach to trauma in the classroom is critical. Yet our understanding of teachers' knowledge and confidence in supporting students exposed to traumatic events is limited. Previous research suggests teachers feel unprepared to address the needs of this group of students (Alisic, 2012); however, the small body of extant research is limited to a European population of teachers. The views of United States teachers have yet to be identified. Indeed, to date, no research explores United States teachers' perceptions of supporting students experiencing child traumatic stress.

Increased awareness of teachers' perceptions of trauma in the classroom influences a range of educational and mental health stakeholders, and the impact of such research spans educational policy and practice. At the classroom level, educators' awareness of self-efficacy in supporting students impacted by trauma leads to increased opportunity for self-advocacy. Teachers aware of a gap between student need and teacher ability are in a position to seek opportunities to improve their understanding of trauma

and its influence on children's emotional, behavioral, and academic functioning. Similarly, an understanding of teachers' knowledge and confidence levels in addressing trauma in the classroom informs the support school psychologists offer educators. Specific information on the trauma-related areas in which teachers feel more or less confident provides school psychologists with a platform for training and classroom support.

At the systems level, administrators interested in fostering a trauma-informed school setting rely on classroom teachers to embody the principles of trauma-informed care (described in detail in Chapter 2). An understanding of teachers' perceptions of their roles in providing such care offers administrators insight into potential barriers to implementing a systems-level approach to trauma within the school building. Furthermore, an awareness of teachers' knowledge and confidence levels in addressing trauma in the classroom informs the priorities and curricular direction of educational training programs. Current teachers – those who have graduated from teacher-training programs and who have experience teaching students with trauma histories – offer insight into gaps in the education provided by college-level training programs. Teachers' perceptions of discrepancies between the training they received and the training required to adequately support their students highlight areas of needed emphasis in teacher-training programs.

Purpose Statement

The proposed study aims to inform the aforementioned areas of educational policy and practice through the use of quantitative survey research. This study will examine

teachers' perceptions of (1) the need for trauma intervention in the classroom, (2) their role in providing support to students experiencing child traumatic stress, and (3) their level of self-efficacy in supporting this group of students. Second, this study will examine the influence of teachers' experiences (e.g., number of years in the classroom, amount of trauma training) on their perceptions of supporting students with trauma histories in the classroom.

Research Questions

Table 1 lists the variables assessed in this study as well as the correlating research questions. This study will address the following research questions:

1. What are teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress?
2. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching experience*?
3. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching setting*?

4. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *trauma training*?

Table 1. Variables, Research Questions, and Survey Items

Research Question	Variable	Survey Items
What are teachers' perceptions of (1) the needs of students experiencing child traumatic stress, (2) their role in supporting students experiencing child traumatic stress, and (3) their self-efficacy in supporting students experiencing child traumatic stress?	Dependent Variable 1: Teachers' perceptions of the needs of students experiencing child traumatic stress	Questions 12-14
	Dependent Variable 2: Teachers' perceptions of their role in supporting students experiencing child traumatic stress	Questions 16-18, 20-22, and 24-26
	Dependent Variable 3: Teachers' perceptions of their level of self-efficacy in supporting students experiencing child traumatic stress	Questions 28-35
Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching experience*?	Independent Variable 1: Years of teaching experience	Question 37

Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching setting*?	Independent Variable 2: Teaching setting	Questions 40-44
Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *trauma training*?	Independent Variable 3: Trauma training	Questions 1-5 and 7-10

CHAPTER II

REVIEW OF LITERATURE

Prior to the development of this study, an extensive review of the literature took place. A summary of the literature begins with the theoretical underpinnings of the proposed study. A historical timeline of psychological trauma is then provided, followed by an explanation of past and current trauma-related diagnoses. Diagnoses are described within the context of adult trauma symptoms, as well as symptoms experienced by children. The review continues with an explanation of risk factors for child traumatic stress and a description of the impact of trauma exposure on areas relevant to school functioning. Finally, the school is explored as a critical setting for trauma intervention, and teachers' roles in mental health intervention delivery are explained.

Theoretical Framework

The proposed study is grounded in the social-ecological framework of trauma and trauma-informed care. The social-ecological framework is influenced by Bronfenbrenner's ecological systems theory. Ecological systems theory posits an individual's development is influenced by five environmental systems: (1) *microsystems*, activities, social roles, and interpersonal relationships experienced directly and bi-directionally by the individual (e.g., daughter, friend, student); (2) *mesosystems*, interactions among settings in which the individual is situated (e.g., home-school interactions, home-community interactions, school-community interactions); (3) *exosystems*, interactions among settings that do not contain the individual and indirectly

influence him or her (e.g., school boards, neighborhood, parent's workplace); (4) *macrosystems*, the cultural environment of the settings that directly and indirectly influence the individual (e.g., laws, norms, values); and (5) *chronosystems*, environmental events and life transitions that occur throughout the course of the individual's life (e.g., divorce, World War II, natural disasters) (Bronfenbrenner, 1993).

Grounded in ecological theory, the social-ecological model emphasizes the interpersonal interactions embedded within the environmental systems proposed by Bronfenbrenner. Adopted by the public health and health promotion fields, social-ecology emphasizes the compatibility or "fit" between an individual and his or her environment (McLaren & Hawe, 2005). When applied to trauma and its effects, the social-ecological model "provides a systemic framework for looking at individuals, families, and communities affected by trauma in general; it highlights the bidirectional influence that multiple contexts can have on the provision of behavioral health services to people who have experienced trauma" (SAMHSA, 2014b). Table 2 describes the multiple contexts and potential factors that influence an individual's response to a traumatic event.

Guided by the social-ecological model of trauma, SAMHSA promotes the provision of trauma-informed care (TIC) across contexts. SAMHSA defines trauma-informed care as "an intervention and organizational approach that focuses on how trauma may affect an individual's life and his or her response to behavioral health services from prevention through treatment" (SAMHSA, 2014b, p. 11). The implementation of trauma-informed care varies by setting. However, across settings, trauma-informed care includes four key elements. According to SAMHSA (2014a, p. 9),

a trauma-informed program, organization, or system "*realizes* the widespread impact of trauma and understands potential paths for recovery; *recognizes* the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and *responds* by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist *re-traumatization*."

Consistent with the social-ecological model, Ko et al. (2008) call for the inclusion of trauma-informed care within the school setting. The authors describe schools as critical entry points for the provision of mental health services and acknowledge the impact of trauma on a child's ability to successfully manage the academic, social, and behavioral demands of school. The proposed study, grounded in social-ecology and informed by the elements of TIC, identifies schools as integral components of a child's microsystems and mesosystems; highlights the bidirectional interactions and influences of teachers and children experiencing traumatic stress; and conceptualizes the classroom as context for trauma-informed care.

Table 2. Understanding the Levels Within the Social-Ecological Model of Trauma and Its Effects

Individual Factors	***Interpersonal Factors***	***Community and Organizational Factors***
Age; biophysical state; mental health status; temperament and other personality traits; education; gender; coping styles; socioeconomic status	Family, peer, and significant other interaction patterns; parent/family mental health; parents' history of trauma; social network	Neighborhood quality; school system and/or work environment; behavioral health system quality and accessibility; faith-based settings; transportation availability; community socioeconomic status; community employment rates

Societal Factors	*Cultural and Developmental Factors*	*Period of Time in History*
Laws; state and federal economic and social policies; media; societal norms; judicial system	Collective or individualistic cultural norms; ethnicity; cultural subsystem norms; cognitive and maturational development	Societal attitudes related to military service members' homecomings; changes in diagnostic understanding between DSMIII-R* and DSM-5**

* Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised
** Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

Adapted from: Substance Abuse and Mental Health Services Administration. (2014b). *Trauma-Informed Care in Behavioral Health Sciences.* Retrieved from: http://store.samhsa.gov/shin/content//SMA14-4816/SMA14-4816.pdf

History of Psychological Trauma

The journey toward our current understanding of psychological trauma began more than a century ago, and the path is marred by repeated missteps and long periods of little progress. French neurologist Jean-Martin Charcot initiated this journey and is credited as the first to establish a connection between trauma and the psyche (Ringel & Brandell, 2011). In the late nineteenth century, Charcot studied women suffering from hysteria at the Salpêtrière Psychiatric Hospital in Paris (van der Kolk, Weisaeth, & van der Hart, 1996). Charcot's hysteria patients presented with symptoms of paralysis, amnesia, sensory loss, and seizures (Herman, 1992; Webster, 2003). These symptoms were presumed to originate in the uterus, and hysterectomy was the singular mode of treatment (Ringel & Brandell, 2011).

Through the use of hypnosis, Charcot determined the women's symptoms, though physical in manifestation, were psychological in origin (Ringel & Brandell, 2011). He was the first to recognize the dissociative state experienced by these patients (van der Kolk et al., 1996) and, in live presentations of his theory, used hypnosis to

simultaneously produce and allay the women's symptoms (Herman, 1992). Hypnosis prompted Charcot's patients to share vivid and disturbing details of physical, emotional, and sexual abuse (Ringel & Brandell, 2011). However, Charcot was uninterested in analyzing the women's thoughts or emotions surrounding these events, as his primary goal was to classify his patients through meticulous observation and documentation of physical symptoms (Herman, 1992; Weisaeth, 2002).

Charcot's symptom classifications and novel theories regarding hysteria patients drew the attention of students from around the world (Ringel & Brandell, 2011). Two of Charcot's students, Pierre Janet – working in France – and Sigmund Freud – working in Vienna, sought to independently determine the underlying cause of hysteria (Herman, 1992). By the mid-1890s, Janet and Freud, along with Freud's colleague Josef Breuer, conceptualized hysteria not only as a psychological disorder, but as a disorder caused by traumatic experiences (Ringel & Brandell, 2011; Scull, 2009). Each believed the dissociative state previously catalogued and described by Charcot was an extreme emotional response to a recalled traumatic event (Herman, 1992). Rather than eliciting this dissociative state through hypnosis, Janet and Freud discovered patients' hysteria symptoms diminished when traumatic memories and feelings were discussed (Scull, 2009). Through this "talking cure" (i.e., the foundation of modern psychotherapy), Freud discovered many of the women diagnosed with hysteria suffered from childhood sexual abuse (Herman, 1992), and as a result, societal attention was drawn to the critical long-term effects of traumatic events experienced in childhood.

Unfortunately, newfound interest in childhood trauma was short-lived. Freud's study of hysteria ended when the social implications of his findings proved overwhelming. If women with hysteria were truthful in their retellings, childhood abuse was a rampant societal problem. Freud dismissed his patients' stories as falsified and, consequently, retracted his conceptualization of hysteria as a disorder caused by exposure to traumatic events (Herman, 1992; Leys, 2000; Masson, 1984). He instead attributed the women's stories to subconscious fantasy; thus, halting further exploration of the prevalence and outcomes of childhood abuse.

In the wake of Freud's retraction, the study of psychological trauma diminished dramatically. However, renewed interest in both physical and psychological trauma intensified at the turn of the twentieth century. As World War I progressed, military medical personnel faced a mysterious set of symptoms never before seen in soldiers of previous wars (Herman, 1992). The symptoms were similar to those of hysteria and included confusion, nervous collapse, exhaustion, memory loss, uncontrollable weeping, and emotional numbness (Herman, 1992; Weisaeth, 2002). Only decades prior, Charcot, Janet, and Freud extensively documented the psychological nature of such symptoms. Nonetheless, military medical personnel surmised the soldiers were experiencing physical reactions to contemporary methods of warfare (Herman, 1992). British psychologist Charles Myers attributed the symptoms specifically to the firing of artillery shells and, in 1915, termed the constellation of symptoms "shell shock" (Crocq, 2000; Weisaeth, 2002).

As the number of shell shock sufferers increased, it became clear the disorder was also present in those without exposure to the physical trauma caused by artillery shells (Herman, 1992). French psychiatrist Emmanuel Régis reported: "20% only presented with a physical wound, but in all cases fright, emotional shock, and seeing maimed comrades had been a major factor" (Crocq, 2000, p. 49) With eighty percent of shell shock sufferers reporting no physical wounds, military psychiatrists were compelled to recognize the soldiers' symptoms as the result of psychological trauma rather than exposure to shell explosions (Herman, 1992).

Military leaders struggled to accept the psychological etiology of shell shock (Weisaeth, 2002). As a result, soldiers experiencing the disorder were viewed as malingers and moral failures (Crocq, 2000). They were subjected to electric shock treatment until agreeing to behave as "heroes," and many were sent home to prevent the spread of the disorder (Herman, 1992). Over time, however, shell shock developed into the largest medical diagnosis facing the armed forces (Crocq, 2000). To preserve monetary resources and ensure adequate manpower, medical personnel were forced to seek more effective, cost-efficient forms of treatment.

New methods of treatment were primarily developed by American and European psychiatrists and were based on three concepts: immediacy, proximity, and social connection. Previous attempts to treat soldiers in their home countries resulted in prolonged, chronic disability and decreased the number of soldiers available for battle (Crocq, 2000). To ensure soldiers' quick return to combat, American psychiatrist Thomas W. Salmon advocated for immediate treatment administered near the frontlines of war

(Crocq, 2000). In addition to quickening soldiers' return to combat, treatment near the frontlines also ensured physical proximity to other soldiers. American psychiatrists Abram Kardiner and Herbert Spiegel believed this physical proximity encouraged comradery among soldiers and that the most critical factor in recovery was "the degree of relatedness between the soldier, his immediate fighting unit, and their leader" (Herman, 1992, p. 25; Ringel & Brandell, 2011). Kardiner and Spiegel supplemented physical proximity with hypnosis, while English psychiatrist W.H.R. Rivers – following the lead of Janet and Freud – utilized psychotherapy as a means of actively addressing the soldiers' trauma exposure (Herman, 1992; Ringel & Brandell, 2011). Through the use of psychotherapy, Rivers provided soldiers an opportunity to share thoughts and feelings regarding the war, while simultaneously exploring the men's sense of responsibility toward their fellow soldiers (Herman, 1992).

The treatment approaches introduced by Salmon, Kardiner, Spiegel, and Rivers were successful in swiftly returning soldiers to combat; however, the importance of psychiatric services to the mental health of WWI soldiers was soon forgotten. At the start of World War II, policy makers questioned the importance of mental health services for soldiers and the utility of military psychiatrists and psychologists. According to Winston Churchill:

> I am sure it would be sensible to restrict as much as possible the work of these gentlemen [psychologists and psychiatrists] …it is very wrong to disturb large numbers of healthy, normal men and women by asking the kind of odd questions in which psychiatrists specialize. (Crocq, 2000, p. 51)

As a result of the restricted access for which Churchill advocated, many of the mistakes made in WWI were repeated in WWII (Weisaeth, 2002). Electric shock was reintroduced

as a method of treatment, and at the first sign of psychological trauma, soldiers were again removed from the frontlines (Crocq, 2000).

In time, however, the concepts learned in WWI were relearned during WWII. Treatment for psychological trauma, now referred to as "war neurosis," returned to the frontlines and emphasis was placed on avoiding a soldier's separation from his unit (Ringel & Brandell, 2011). Much of the treatment soldiers received emphasized "group cohesion, leadership, motivation, and high moral" (Weisaeth, 2002, p. 449), concepts that would later inform the widespread use of group psychotherapy and milieu therapy in British civilian populations (Weisaeth, 2002).

Though group cohesion concepts proved critical in World Wars I and II, these concepts were largely abandoned during the Vietnam War. For example, after completing military training, soldiers of previous wars traveled to the combat zone in groups via shared military transportation. During the Vietnam War, however, soldiers traveled independently to Vietnam on commercial air jets. Furthermore, once stationed in Vietnam, soldiers were individually transferred from one unit to the next, resulting in minimal social support and limited allegiance to a particular unit (Walker, 1983).

Following the Vietnam War, veterans returned home with debilitating, long-term mental health issues that impacted their ability to maintain relationships, employment, and housing (Ringel & Brandell, 2011). After receiving little support from veteran medical centers, veterans of the Vietnam War gathered in groups to informally share their war experiences and post-war struggles. These groups – referred to as "rap groups" – were not intended to explore individual psychopathology but were instead designed to

provide veterans an opportunity to discuss the social and political implications of the war (Herman, 1992) and to "refashion value and meaning in the veterans' lives" (Walker, 1983; p. 50).

Veterans enlisted the help of American psychiatrist Robert Jay Lifton and Canadian psychiatrist Chaim F. Shatan to assist in leading the rap groups. Based on their experiences in these groups, Lifton and Shatan documented 27 symptoms common to the veterans' experiences of "traumatic neurosis" (Lifton, 1973; Ringel & Brandell, 2011). These symptoms were presented at panel discussions for the development of the Diagnostic Statistical Manual of Mental Disorders (3rd ed.; DSM–III; APA, 1980) and were eventually used as criteria for a new DSM-III diagnosis: posttraumatic stress disorder (PTSD) (Crocq, 2000; Ringel & Brandell, 2011).

While the experiences of Vietnam veterans are often viewed as the primary catalyst for the inclusion of PTSD in the DSM-III, the development of the disorder was also heavily influenced by advocates for the mental health of women and children (Ringel & Brandell, 2011). Though acknowledged briefly by Freud in the late-nineteenth century, the sexual and domestic abuse experienced by women during childhood and into adulthood was largely overlooked for centuries (Herman, 1992). During the women's liberation movement of the 1970s, however, women brought their private and unnamed experiences to light through the organization of "consciousness-raising groups." These groups, similar to the rap groups led by Vietnam veterans, mirrored psychotherapy groups in their structure and rules of confidentiality. In addition to focusing on individual change, the groups were intended to transform society's understanding and acceptance of

sexual and domestic assault (Home, 2010; Ringel & Brandell, 2011). The resulting social change was evident in the form of protests and groundbreaking research. Women led demonstrations against rape and other forms of sexual assault, which resulted in the development of rape reform legislation. At the same time, the National Institute of Mental Health introduced a center for research on rape, and for the first time, women were provided the opportunity to conduct – rather than simply participate in – research that explored the private domestic experiences of women (Herman, 1992).

Two of these studies offer a seminal understanding of both the pervasiveness and deleterious outcomes of sexual assault. In the early 1980s, Diana Russell, a sociologist and human rights activist, interviewed over 900 women about their sexual and domestic abuse experiences. Russell discovered one in four women had been raped and one in three women had been sexually abused as children (Ringel & Brandell, 2011; Russell, 1984). Prior to Russell's study, Ann Burgess, a psychiatric nurse, and Lynda Holmstrom, a sociologist, conducted a study on the psychological effects of rape. Over the course of one year, Burgess and Holmstrom interviewed nearly 130 women and child sexual assault victims. The researchers discovered a constellation of symptoms they referred to as "rape trauma syndrome" (Burgess & Holmstrom, 1974). Symptoms included insomnia, nausea, startle responses, nightmares, dissociation, and numbing, symptoms Burgess and Holmstrom equated to the symptoms experienced by veterans of the Vietnam War (Herman, 1992).

Lenore Terr discovered similar symptoms in children with traumatic experiences outside the realm of sexual abuse. In a 1979 study, Terr examined the short- and long-

term reactions exhibited by child victims of the Chowchilla school bus kidnapping. In 1976, 26 children from the rural town of Chowchilla, California were kidnapped while riding a school bus home from summer camp. The children were held for a total of 27 hours and were buried underground in a truck trailer. After 16 hours underground, the bus driver and children successfully freed themselves (Terr, 1979).

In interviews with 23 of the Chowchilla children and their families, Terr gathered information regarding the children's emotional and behavioral responses during the kidnapping, as well as the more enduring reactions children experienced in the years following the kidnapping (Terr, 1979). Terr discovered the trauma responses described by the study participants, though similar to those displayed by adult victims of war and sexual assault, were unique to children and adolescents. Terr reported the kidnapping victims experienced avoidance, panic attacks, distorted perceptions, overgeneralizations, nightmares, and hallucinations – symptoms similar to those experienced by war veterans and sexual abuse victims. She also noted the children reenacted scenes of the kidnapping in their play and demonstrated lowered academic performance (Terr, 1979) – symptoms never before studied and undoubtedly specific to children and adolescents.

Trauma Diagnoses

Posttraumatic Stress Disorder

Though much of their work was conducted independently, advocates for war veterans, sexual abuse victims, and victims of childhood abuse jointly discovered the key underpinnings of what is known today as posttraumatic stress disorder (PTSD) (Herman, 1992; Ringel & Brandell, 2011). Differing from the internal etiology of other DSM-III

diagnoses, PTSD was initially recognized as a disorder prompted by external events. When included in the 1980 publication of the DSM, events qualifying for PTSD were defined as "outside the range of usual human experience." Symptoms were classified under three categories: re-experiencing, avoidance, and hyperarousal, and a caveat was included stating symptoms of PTSD may present differently in children (APA, 1980).

Since 1980, the American Psychiatric Association has published four updated editions of the DSM. The PTSD criteria included in the current version of the DSM (5th ed.; DSM-5; APA, 2013) illustrate the evolution of mental health professionals' understanding of the disorder. (See Table 3 for a comparison of DSM-III, DSM-IV, and DSM-5 PTSD criteria.) For example, research on the prevalence of traumatic event exposure suggests the majority of people experience at least one traumatic event throughout the course of their lives (Centers for Disease Control and Prevention (CDC), 2014c). As a result, events qualifying for the PTSD diagnosis are no longer considered "outside the range of usual human experience." Per the DSM-5, triggers for diagnosis of PTSD now include exposure to actual or threatened death, serious injury, or sexual violence. Additionally, the individual must: (1) directly experience the traumatic event, (2) witness the traumatic event, (3) learn the traumatic event happened to a close family member or close friend, or (4) experience repeated or extreme exposure to aversive details of the traumatic event (not through media, pictures, television, or movies unless work-related) (APA, 2013a). Furthermore, while the third edition of the DSM included three diagnostic clusters (re-experiencing, avoidance, and hyperarousal), the DSM-5 now includes four diagnostic clusters: re-experiencing, avoidance, negative cognitions and

mood, and arousal. Finally, though PTSD was previously recognized as an anxiety disorder, the disorder is now included in a new chapter titled Trauma- and Stressor-Related Disorders (APA, 2013a).

While the DSM-III briefly acknowledged the unique impact of PTSD on children, the DSM-5 includes a subtype devoted entirely to the presentation of PTSD symptoms in children six years and younger. In recognition of preschool children's limited ability to comprehend and verbalize internalized symptoms (e.g., self-blame or negative beliefs and expectations about the world), the preschool subtype emphasizes the behavioral symptoms commonly experienced by children within this age group (Friedman, 2013). As a result, diagnostic criteria for the preschool subtype consist of three clusters: re-experiencing, avoidance/negative cognitions and mood, and arousal. Furthermore, internalizing symptoms such as "feelings of detachment or estrangement from others" are reworded to reflect observable characteristics such as "socially withdrawn behavior" (APA, 2013a, p. 272-273).

Complex Posttraumatic Stress Disorder

Inclusion of PTSD in the DSM-III signaled widespread acceptance of the psychological impact of a single traumatic event. However, in the late 1980s, researchers uncovered a constellation of symptoms experienced by those exposed to prolonged, repeated traumatic events (e.g., interpersonal violence, child abuse, incarceration in concentration camps) (Herman, 1992; Pelcovitz, van der Kolk, Roth, Mandel, Kaplan, & Resick, 1997). These symptoms suggested chronic exposure to trauma resulted in disruptions in the development of emotion regulation, self-identity, and attachment (Herman, 1992).

Through independent reviews of the literature on the emotional and behavioral sequelae of victims of chronic trauma, researchers developed a set of symptoms the DSM-III PTSD diagnosis failed to capture (Herman, 1992; Roth, Newman, Pelcovitz, van der Kolk, and Mandel, 1997). The set included 27 symptoms organized into seven domains: regulation of affect and impulses; attention or consciousness; self-perception; perception of the perpetrator; relations with others; somatization; and systems of meaning (Roth et al., 1997). Researchers viewed these symptoms as separate from PTSD and advocated for the inclusion of a new diagnosis in the DSM-IV (Herman, 1992; Roth et al., 1997).

In response, the DSM-IV committee conducted a field trial to determine whether adult victims of prolonged trauma exposure met criteria for PTSD or instead presented with a unique set of symptoms more aptly defined by a separate diagnosis – referred to in the literature as complex PTSD (CPTSD; CP) or disorders of extreme stress (DES) (Herman, 1992; Roth et al., 1997; van der Kolk, Roth, Pelcovitz, Sunday, & Spinazolla, 2005). The results of the field trial indicated nearly all of those with prolonged exposure to traumatic events met criteria for PTSD, suggesting complex trauma is a more extreme form of PTSD rather than its own disorder. Consequently, CPTSD/DES was not included in the DSM-IV as a standalone diagnosis. The constellation of symptoms was instead termed disorders of extreme stress not otherwise specified (DESNOS) and was added to the DSM-IV under associated features of PTSD (Friedman, 2013). (See Table 4 for a list of DESNOS criteria.)

Though the addition of DESNOS to the DSM-IV illuminated the field's recognition of the impact of prolonged trauma exposure, researchers viewed the diagnosis

Table 3. Diagnostic and Statistical Manual of Mental Disorders (DSM) Posttraumatic Stress Disorder Diagnostic Criteria

DSM-III (1980) PTSD	DSM-IV (1994) PTSD	DSM-5 (2013) PTSD
A. The person has experienced an event that is outside the range of usual human experience and that would be markedly distressing to almost anyone.	A. The person has been exposed to a traumatic event in which both of the following have been present: (1) The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. (2) The person's response involved intense fear, helplessness, or horror. **Note:** In children, this may be expressed instead by disorganized or agitated behavior.	A. Exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: (1) Directly experiencing the traumatic event(s). (2) Witnessing, in person, the event(s) as it occurred to others. (3) Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental. (4) Experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).
B. The traumatic event is persistently re-experienced in at least one of the following ways: (1) Recurrent and intrusive, distressing recollections of the event (in young children, repetitive play in which themes or aspects of the trauma are expressed).	B. The traumatic event is persistently re-experienced in one (or more) of the following ways: (1) Recurrent and intrusive distressing recollections of the event, including images, thoughts, or perceptions. **Note:** In young children, repetitive play may occur	B. Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred: (1) Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

	in which themes or aspects of the trauma are expressed.	
(2) Recurrent distressing dreams of the event.	(2) Recurrent distressing dreams of the event. **Note:** In children, there may be frightening dreams without recognizable content.	(2) Recurrent distressing dreams in which the content and/or affect of the dream are related to the traumatic event(s).
(3) Sudden acting or feeling as if the traumatic event were recurring (including "flashback" or dissociative episodes, whether or not intoxicated).	(3) Acting or feeling as if the traumatic event were recurring (includes a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes, including those that occur upon awakening or when intoxicated). **Note:** In young children, trauma-specific reenactment may occur.	(3) Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)
(4) Intense psychological distress at exposure to events that symbolize or resemble an aspect of the traumatic event, including anniversaries.	(4) Intense psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.	(4) Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
	(5) Physiological reactivity on exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event.	(5) Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).
C. Persistent avoidance of stimuli associated with the trauma or numbing of general responsiveness, as indicated by at least three of the following:	C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma), as indicated by three (or more) of the following:	C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

(1) Efforts to avoid thoughts or feeling associated with the trauma.	(1) Efforts to avoid thoughts, feelings, or conversations associated with the trauma.	(1) Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
(2) Efforts to avoid activities or situations that arouse recollections of the trauma.	(2) Efforts to avoid activities, places, or people that arouse recollections of the trauma.	(2) Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
		D. Negative alterations in cognitions and mood that are associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two or more of the following:
(3) inability to recall an important aspect of the trauma (psychogenic amnesia)	(3) Inability to recall an important aspect of the trauma.	(1) Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).
		(2) Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined").
		(3) Persistent distorted cognitions about the cause or consequence of the traumatic event(s) that lead the

		individual to blame himself/herself or others. (4) Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
(4) Markedly diminished interest in significant activities (in young children, loss of recently acquired developmental skills such as toilet training or language skills).	(4) Markedly diminished interest or participation in significant activities.	(5) Markedly diminished interest or participation in significant activities.
(5) Feeling of detachment or estrangement from others.	(5) Feeling of detachment or estrangement from others.	(6) Feeling of detachment or estrangement from others.
(6) Restricted range of affect.	(6) Restricted range of affect (e.g., unable to have loving feelings).	(7) Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
(7) Sense of foreshortened future (e.g., the patient does not expect to live very long or to have a successful career).	(7) Sense of a foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).	
D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by at least two of the following:	D. Persistent symptoms of increased arousal (not present before the trauma), as indicated by two (or more) of the following:	E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
(1) Difficulty falling or staying asleep.	(1) Difficulty falling or staying asleep.	(6) Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).
(2) Irritability or outbursts of anger.	(2) Irritability or outbursts of anger.	(1) Irritable behavior and angry outbursts (with little or no provocation) typically expressed as

		verbal or physical aggression toward people or objects. (2) Reckless or self-destructive behavior.
(3) Difficulty concentrating. (4) Hyper vigilance. (5) Exaggerated startle response. (6) Physiological activity upon exposure to events that symbolize or resemble an aspect of the traumatic event.	(3) Difficulty concentrating. (4) Hypervigilance. (5) Exaggerated startle response.	(5) Problems with concentration. (3) Hypervigilance. (4) Exaggerated startle response.
E. Duration of disturbance (symptoms in "B," "C," and "D") of at least one month.	E. Duration of the disturbance (symptoms in Criteria B, C, and D) is more than one month.	F. Duration of the disturbance (criteria B, C, D, and E) is more than 1 month.
	F. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.	G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
		H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.
American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.
American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

as lacking utility for an important group of individuals. As Wasmer-Nanney and Vandenberg (2013) highlight, DESNOS criteria failed to capture the childhood experience of complex trauma. DESNOS was field tested on an adult population (Pelcovitz, van der Kolk, Roth, Mandel, Kaplan, & Resick, 1997), and its symptoms were not developmentally suitable for children and adolescents (Wasmer-Nanney & Vandenberg, 2013). For example, a DESNOS diagnosis required "alterations in self-perception" including "guilt and responsibility," "shame," and "permanent damage." (APA, 2000). These criteria do not apply to a child or adolescent whose self-perception is in development or who is not yet able to verbalize or conceptualize abstract concepts such as guilt or shame (Wasmer-Nanney & Vandenberg, 2013).

Table 4. DSM-5 Disorders of Extreme Stress Not Otherwise Specified (DESNOS)

I. Alteration in Regulation of Affect and Impulses *(A and one of B to F required)* A. Affect regulation B. Modulation of anger C. Self-destructive behavior D. Suicidal preoccupation E. Difficulty modulating sexual involvement F. Excessive risk-taking	II. Alterations in Attention or Consciousness *(A or B required)* A. Amnesia B. Transient dissociative episodes and depersonalization
III. Alterations in Self-Perception *(Two of A to F required)* A. Ineffectiveness B. Permanent damage C. Guilt and responsibility D. Shame E. Nobody can understand F. Minimizing	IV. Alterations in Relations with Others *(One of A to C required)* A. Inability to trust B. Revictimization C. Victimizing others

V. Somatization *(Two of A to E required)* A. Problems with the digestive system B. Chronic pain C. Cardiopulmonary symptoms D. Conversion symptoms E. Sexual symptoms	VI. Alterations in Systems of Meaning *(A or B required)* A. Despair and hopelessness B. Loss of previously sustaining beliefs

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Developmental Trauma Disorder

In 2005, Bessel A. van der Kolk further challenged the DSM-IV DESNOS diagnosis and its applicability to children and adolescents with exposure to multiple, repeated forms of trauma. In his rebuttal, van der Kolk (2005) criticized the field's tendency to attribute non-PTSD symptoms to comorbid disorders ("as if they occurred independently from PTSD" p. 406) and highlighted the numerous symptoms a PTSD diagnosis fails to address in children with complex trauma histories:

> …the complex disruptions of affect regulation; the disturbed attachment patterns; the rapid behavioral regressions and shifts in emotional states; the loss of autonomous strivings; the aggressive behavior against self and others; the failure to achieve developmental competencies; the loss of bodily regulation in the areas of sleep, food, and self-care; the altered schemas of the world; the anticipatory behavior and traumatic expectations; the multiple somatic problems, from gastrointestinal distress to headaches; the apparent lack of awareness of danger and resulting self-endangering behaviors; the self-hatred and self-blame; and the chronic feelings of ineffectiveness. (p. 406)

In an effort to advance a more accurate diagnosis and, subsequently, a more effective approach to treatment, van der Kolk (2005), along with the Complex Trauma Task Force of the National Child Traumatic Stress Network, proposed a child-specific trauma diagnosis termed developmental trauma disorder (DTD). The DTD diagnosis addresses

the multidimensional impact of complex trauma on a child's functioning and targets emotional, physical, behavioral, cognitive, and relational symptoms. (See Table 5 for a list of the proposed DTD criteria.)

The DTD proposal submitted by van der Kolk and colleagues (2009) was not accepted by the DSM-5 committee. Additionally, DESNOS was not included in the publication's most recent version (APA, 2013). While complex trauma is not addressed in the DSM-5, Matthew Friedman, chair of the DSM Trauma, PTSD, and Dissociative Disorders Sub-Work Group, argues many of the symptoms previously included in the DESNOS diagnosis are now subsumed in the DSM-5 PTSD criteria (Friedman, 2013). For example, whereas the DESNOS criteria included Alterations in Regulation of Affect and Impulses, the DSM-5 PTSD diagnosis now includes Negative Alterations in

Table 5. Developmental Trauma Disorder (Proposed Criteria)

(A) Exposure
• Multiple or chronic exposure to one or more forms of developmentally adverse interpersonal trauma (e.g., abandonment, betrayal, physical assaults, sexual assaults, threats to bodily integrity, coercive practices, emotional abuse, witnessing violence and death). • Subjective experience (e.g., rage, betrayal, fear, resignation, defeat, shame).
(B) Triggered pattern of repeated dysregulation in response to trauma cues
Dysregulation (high or low) in presence of cues. Changes persist and do not return to baseline; not reduced in intensity by conscious awareness. • Affective. • Somatic (e.g., physiological, motoric, medical). • Behavioral (e.g., re-enactment, cutting). • Cognitive (e.g., thinking that it is happening again, confusion, dissociation, depersonalization). • Relational (e.g., clinging, oppositional, distrustful, compliant). • Self-attribution (e.g., self-hate, blame).

(C) Persistently altered attributions and expectancies

- Negative self-attribution.
- Distrust of protective caretaker.
- Loss of expectancy of protection by others.
- Loss of trust in social agencies to protect.
- Lack of recourse to social justice/retribution.
- Inevitability of future victimization.

(D) Functional impairment

- Educational.
- Familial.
- Peer.
- Legal.
- Vocational

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van der Kolk, B. A. (2005). Developmental trauma disorder. *Psychiatric Annals*, *35*(5), 401-408.

Cognitions and Mood. Additionally, the DSM-5 PTSD diagnosis includes a dissociative subtype, which slightly mirrors the Alterations in Attention or Consciousness criteria included in the DESNOS diagnosis (APA, 2000, 2013).

Prevalence of Childhood Trauma

Though neither complex nor developmental trauma is included in the latest publication of the DSM, researchers continue to examine the impact of chronic trauma experienced during childhood and adolescence (Kisiel, Fehrenbach, Torgersen, Stolbach, McClelland, Griffin, & Burkman, 2014; Rahim, 2014; Stolbach, Minshew, Rompala, Dominguez, Gazibara, & Finke, 2013; Wamser-Nanney & Vandenberg, 2013; Zilberstein, 2014). In a seminal study of childhood exposure to adverse experiences (Adverse Childhood Experiences (ACE) study), Kaiser Permanente and the Centers for Disease Control and

Prevention (CDC) assessed the prevalence and long-term impact of childhood trauma (CDC, 2014a).

Participants were recruited from Kaiser Permanente's San Diego Health Appraisal Clinic. In the late 1990s, the clinic conducted approximately 45,000 standardized medical examinations per year for adults enrolled in the Kaiser Health Plan. Eligible study participants included those who completed standardized medical examinations at the Health Appraisal Clinic between 1995 and 1997. Following this examination, members received an ACE study questionnaire via mail. More than 17,000 (n = 17,337) participants returned the completed questionnaire. Fifty-four percent of participants were female and approximately 75% were White. Nearly 85% of the sample was over the age of 40 years, and the majority (75.2%) had at least some college experience (CDC, 2014b).

The questionnaire asked participants to share information regarding health-related behaviors and problems, as well as ten adverse childhood experiences: emotional, physical, or sexual abuse; emotional or physical neglect; witnessing violence toward mother; parental divorce or separation; and living with household members with substance abuse, mental illness, or a history of incarceration. Nearly two thirds (63.9%) of participants reported experiencing at least one ACE prior to the age of 18 years; more than one in 10 (12.5%) endorsed four or more ACEs (CDC, 2014c).

Dose-response relationships were present between participants' ACE scores and prevalence of leading causes of death in the United States (e.g., heart disease, cancer, emphysema), as well as between ACE scores and risk factors for those disease conditions

(e.g., smoking, obesity, drug abuse). For example, those who experienced four or more ACEs were more than twice (OR = 2.2; 95% CI = 1.3-3.7) as likely to develop heart disease when compared to those who experienced no ACEs and nearly four times (OR = 3.9; 95% CI = 2.6-5.8) as likely to develop chronic bronchitis or emphysema. Similarly, those who reported four or more ACEs were approximately 12 (OR = 12.2; 95% CI = 8.5-17.5) times more likely to attempt suicide than those with no ACEs and more than 10 (OR = 10.3; 95% CI = 4.9-21.4) times more likely to have used injectable drugs (Felitti et al., 1998). Results of the ACE study are groundbreaking and highlight the widespread occurrence of childhood trauma exposure, as well as the deleterious health outcomes for those who experience compounding traumatic events.

The ACE study provides important information on the long-term effects of childhood exposure to trauma. Yet, the ACE study asks adults to consider their childhood experiences retrospectively. In a study of over 95,000 children from across the nation, the CDC's National Center for Health Statistics (NCHS) gathered data on the adverse childhood experiences of children between the ages of infancy and 17 years (Child and Adolescent Health Measurement Initiative, 2013a), thus avoiding the need for retrospective recall of events. Participants were selected using a random-digit dialing method and data were collected via phone interview with the child's parent or guardian (CDC, 2013). Phone interviews included questions regarding nine adverse childhood experiences: socioeconomic hardship; parental divorce/separation; death of parent; witness to domestic violence; racial/ethnic discrimination; or living with someone with substance abuse, mental illness, suicidal ideation, or history of incarceration. Results

indicated nearly half (47.9%) of children had a history of at least one ACE; more than one fifth (22.6%) of children had a history of two or more ACEs. Furthermore, a negative relationship existed between household income and number of adverse childhood experiences. Of those children living with a household income from 0-99% of the federal poverty level, 34.8% had a history of two or more ACEs. In comparison, of those living with a household income of 400% or more of the federal poverty level, only 9.6% of children experienced two or more ACEs (Child and Adolescent Health Measurement Initiative, 2013b).

While the ACE study and the NCHS survey offer general insight into the adverse experiences of children in the United States, additional studies provide more detailed information on the prevalence of individual traumatic events. For example, a 2013 report on childhood maltreatment illuminates the extent to which children in the United States experience neglect, physical abuse, and other forms of maltreatment (e.g., threatened abuse or parent's drug/alcohol use). The report summarizes child maltreatment data collected by the United States Department of Health and Human Services from all 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. The data set consists of reports on each child maltreatment referral accepted for review by child protective service (CPS) agencies during federal fiscal year (FFY) 2013. Each referral includes information on the child involved, the types of maltreatment suffered, the perpetrators, and the services provided (U.S. Department of Health and Human Services (HHS), 2015).

During FFY 2013, CPS agencies received nearly 3.5 million referrals for approximately 6.4 million children. Of these referrals, 2.1 million were accepted for review. CPS agencies determined 678,932 of those referred were victims of abuse or maltreatment. Of the child victims, 79.5% were neglected, 18% were physically abused, 9% were sexually abused, and 10% experienced "other" forms of maltreatment such as abandonment or exploitation (HHS, 2015).

A national survey on children's exposure to violence suggests these HHS figures greatly underestimate the extent to which children experience abuse and maltreatment. The 2008 National Survey of Children's Exposure to Violence (NatSCEV) includes interviews with 4,549 children and adolescents 17 years old and younger. Participants were selected via random-digit dialing and included two groups: a nationally representative sample within the contiguous United States (n = 3,058) and an oversample with 70% or greater African American, Hispanic, or low-income households (n = 1,496). Youth between the ages of 10 years and older were interviewed via telephone; caregivers were interviewed via phone for children nine years and younger. Participants were asked a series of demographic questions, as well as questions regarding the child's lifetime and past year exposure to 48 forms of victimization. Victimization types were divided into seven categories: conventional crime (e.g., robbery, theft); child maltreatment (e.g., physical abuse, emotional abuse, or neglect by parent); peer and sibling victimization (e.g., physical or emotional abuse by peer or sibling); sexual victimization (e.g., sexual harassment, molestation); witnessing and indirect victimization (i.e., community and family violence); school violence and threat (e.g., bomb threat, property damage); and

internet violence and victimization (e.g., online threats, harassment, or sexual solicitation) (Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009b).

Results of the NatSCEV reveal more than one in 10 (10.2%) of the children surveyed experienced some form of maltreatment – including physical or emotional abuse and neglect – in the past year; nearly one in five reported a history of maltreatment over the course of their lifetime. Approximately 6% (6.1%) of child participants were sexually victimized within the previous year, and nearly 10% reported sexual victimization during their lifetimes. The results of the NatSCEV study also bring to light the extent to which children and adolescents in the United States witness violence in their homes and communities. More than 60% (60.6%) of the child participants were exposed to violence in the previous year (i.e., "as a witness to a violent act; by learning of a violent act against a family member, neighbor, or close friend; or from a threat against their home or school"), and 1 in 10 (10.9%) children were exposed to five or more instances of violence (Finkelhor et al., 2009b).

Additionally, the NatSCEV results speak to the prevalence of cumulative childhood victimizations. More than one third (38.7%) of those surveyed reported multiple direct victimizations within the previous twelve months, and of those who reported one direct victimization, 64.5% had exposure to two or more direct victimizations. More than one in ten (10.9%) reported five or more exposures to direct victimizations. Furthermore, children who reported experiencing one type of violence were at increased risk for exposure to other forms of violence. For example, a child with a history of physical assault in the previous year was five times as likely to experience

sexual victimization (OR = 5.0; 95% CI = 3.78-6.61) and four times (OR = 4.1; 95% CI = 3.35-4.92) as likely to be maltreated (Finkelhor, Turner, Ormrod, & Hamby, 2009). These results suggest that, for children and adolescents in the United States who experience direct victimization, compound or cumulative victimization, or polyvictimization (Finkelhor et al., 2009a) is the norm rather than the exception.

The NatSCEV offers insight into the trauma exposure experienced by a representative sample of children and adolescents across the United States, and while these figures are shocking, specific populations of our children and adolescents are at an even greater risk of trauma exposure. For example, research suggests children in the child welfare system are significantly more likely to experience trauma exposure than children in the general population (Pecora, Williams, Kessler, Downs, O'Brien, Hiripi, & Morello, 2003; McMillen, Zima, Scott, Auslander, Munson, Ollie, & Spitznagel, 2005). In a 2012 study, Salazar and colleagues utilized data from a longitudinal panel study of 732 adolescents exiting the child welfare system. Participants were 17 and 18 years old; 51.5% of the sample was female, and the majority of the sample was African American (57.3%). In-person administration of the Composite International Diagnostic Interview (CIDI) gathered data on participants' exposure to trauma, as well as the presence of PTSD symptoms (based on DSM-IV criteria). Results indicate the majority of participants (80.3%) were exposed to at least one traumatic event during childhood or adolescence. Nearly two thirds (61.7%) experienced more than one traumatic event. More than half of the adolescents experienced indirect trauma (e.g., witness to someone injured

or killed) (54.5%) or interpersonal violence (e.g., physical attack or threat of violence) (50.1%) (Salazar, Keller, Gowen, & Courtney, 2013).

Trauma Risk Factors

The aforementioned studies indicate the majority of children and adolescents in the United States are exposed to at least one potentially traumatizing experience throughout childhood. However, not all youth exposed to these events experience symptoms of trauma disorders. In fact, the majority of children and adolescents recover from exposure to traumatic events without long-term mental health diagnoses. Estimates of the prevalence of trauma disorders in children and adolescents vary. However, a 2014 meta-analysis led by Alisic and colleagues offers insight into the estimated prevalence of DSM-IV PTSD diagnoses among youth, as well as potential moderators influencing the occurrence of PTSD for this group (Alisic, Zalta, van Wesel, Larsen, Hafstad, Hassanpour & Smid, 2014). Articles selected for the meta-analysis included study participants who were 18 years old or younger and who were exposed to a traumatic event (as defined by the A1 criteria for a DSM-IV PTSD diagnosis). The authors collected data on the age and gender of participants; the type of trauma exposure; the PTSD measurement utilized; and the number of participants who met criteria for a DSM-IV PTSD diagnosis. Trauma types were divided into two categories: interpersonal (e.g., war, terrorism, violence) and non-interpersonal (e.g., accident, life-threatening disease, sudden death of loved one) (Alisic et al., 2014).

Seventy-two articles met criteria for the meta-analysis. The 43 independent samples addressed in these studies included 3,563 children and adolescents with exposure

to a traumatic event. More than half (57%) of participants were male, and the majority (47%) of studies were conducted in the United States. Slightly more than half of the youth participants were exposed to non-interpersonal traumatic events; the remaining half (49%) reported exposure to interpersonal trauma or a mix of both. Children were informants in the majority (72%) of studies, and PTSD rates ranged from 0% to 89% (Alisic et al., 2014).

The results of the meta-analysis indicated 15.9% (95% CI = 11.5-21.5) of children and adolescents exposed to a traumatic event developed PTSD. A significant difference existed between the rate of PTSD diagnosis following interpersonal trauma (25.2%; 95% CI = 16.8-35.8) and non-interpersonal trauma (9.7%; CI = 6.1-15.2; $P = 0.002$). Furthermore, girls (20.8%; 95% CI=13.6–30.5) were significantly more likely to develop PTSD than boys (11.1%, 95% CI=7.0–17.1; $P = 0.04$). With these moderating effects in mind, boys with non-interpersonal trauma exposure experienced the lowest rates of PTSD (8.4%; 95% CI=4.7–14.5) and girls with interpersonal trauma exposure experienced the highest rates of PTSD (32.9%; 95% CI=19.8–49.3) (Alisic et al., 2014).

The Alisic et al. (2014) meta-analysis offers insight into two critical risk factors for the development of PTSD in children and adolescents: gender and trauma type. In 2012, Trickey and colleagues conducted a meta-analysis focused solely on these and other risk factors. Articles included in the meta-analysis were published between 1980 and 2009 and utilized samples of children and adolescents between the ages of six and 18 years. Inclusion in the meta-analysis required the use of child PTSD measures that addressed the three DSM-IV PTSD symptom clusters: intrusion, avoidance/numbing, and

hyperarousal. A total of 62 studies met criteria for the meta-analysis resulting in a sample size of 32,238 participants and analysis of 25 risk factors (Trickey, Siddaway, Meiser-Stedman, Serpell, & Field, 2012).

Results of the Trickey et al. meta-analysis address the impact of risk factors experienced by a child or adolescent before, during, and after the traumatic event. Small effect sizes (i.e., absolute value of $\hat{p}$ less than 0.1) were observed for demographic and pre-trauma factors such as younger age ($\hat{p}$ = 0.030, 95% CI = -0.041 – 0.101) and race ($\hat{p}$ = 0.081, 95% CI = 0.041 – 0.121; $p < .001$). Similarly, small to medium effect sizes (i.e., absolute value of $\hat{p}$ between 0.1 and 0.3) were found for low intelligence ($\hat{p}$ = 0.198, 95% CI = 0.079 – 0.317; $p < .01$), low socio-economic status ($\hat{p}$ = 0.165, 95% CI = 0.047 – 0.282; $p < .01$), pre-trauma psychological problems ($\hat{p}$ = 0.121, 95% CI = 0.024 – 0.218; $p < .05$), and female gender ($\hat{p}$ = 0.154, 95% CI = 0.126 – 0.182; $p < .001$). Though female gender was observed as a small, yet significant, risk factor in the development of PTSD, it is important to note this risk increased for older children and adolescents, as well as for those who experienced an intentional traumatic event. As a result, though race and age are unlikely to predict the development of PTSD, special attention is warranted when considering the posttraumatic stress symptoms of older female youth with exposure to intentional forms of trauma such as interpersonal violence, child abuse, or community violence (Trickey et al., 2012).

Demographic and pre-trauma risk factors explain a small percentage of variance in PTSD diagnosis for children and adolescents. However, risk factors experienced both during and after exposure to a traumatic event appear to have more impact on the

development of PTSD. For example, the child's level of peri-trauma fear ($\hat{p}$ = 0.361, 95% CI = 0.132 – 0.590; $p < .01$) and his or her perception of threat to life at the time of the event ($\hat{p}$ = 0.362, 95% CI = 0.309 – 0.416; $p < .001$) yielded large effect sizes (i.e., absolute value of $\hat{p}$ greater than 0.3). Large effect sizes were also observed for individual post-trauma risk factors such as comorbid psychological problems ($\hat{p}$ = 0.404, 95% CI = 0.336 – 0.472; $p < .001$), thought suppression ($\hat{p}$ = 0.696, 95% CI = 0.508 – 0.883; $p < .001$), and distraction ($\hat{p}$ = 0.473, 95% CI = 0.115 – 0.832; $p < .05$). Additionally, environmental post-trauma risk factors including social withdrawal ($\hat{p}$ = 0.385, 95% CI = 0.310 – 0.461; $p < .001$), poor family functioning ($\hat{p}$ = 0.460, 95% CI = 0.149 – 0.770; $p < .01$), and low social support ($\hat{p}$ = 0.327, 95% CI = 0.127 – 0.526; $p < .01$) yielded large effect sizes (Trickey et al., 2012).

The results of the Trickey et al. meta-analysis illuminate the importance of post-trauma intervention for children and adolescents exposed to traumatic events. Large effect sizes were associated with coping mechanisms such as thought suppression and distraction. As Trickey and colleagues emphasize, cognitive therapy is likely beneficial in replacing these maladaptive strategies with more positive coping skills. Additionally, the meta-analysis suggests low social support, poor family functioning, and social withdrawal contribute to youths' development of posttraumatic stress symptoms. These results highlight the critical role mental health professionals and educational staff members play in improving the social connectedness and family functioning of children with histories of traumatic events (Trickey et al., 2012).

Impact of Childhood Trauma

The effects of adverse childhood experiences are widespread and impact numerous areas of a child's functioning including his or her cognitive functioning, academic performance, and classroom behaviors.

Cognitive Functioning

In a 2012 longitudinal study, Bosquet Enlow and colleagues examined the relationship between childhood exposure to interpersonal trauma and cognitive development. Study participants were mother and child pairs recruited for the Minnesota Longitudinal Study of Parents and Children. Mothers were recruited between 1975 and 1977 during the third trimester of their first pregnancy. Eligible participants were English-speaking and qualified for public assistance for prenatal care and delivery. A total of 206 women participated in the study, and the mean age of participants was 20.67 years. The majority of the women were single, separated, divorced or widowed (65%), and most gave birth to male children (56%). Child participants were primarily White, non-Hispanic (65.5%) followed by multiracial (17%) and Black (12%).

Bosquet Enlow et al. (2012) defined interpersonal trauma exposure as (1) experiencing childhood maltreatment (i.e., physical abuse, psychological maltreatment, neglect, or sexual abuse) or (2) witnessing partner violence against the mother. Childhood maltreatment was assessed using home observations, laboratory observations, maternal interviews, and reviews of medical and child protection records. Exposure to interpersonal violence was measured via maternal interviews and questionnaires, as well as home observation. Cognitive functioning was assessed using the Bayley Mental

Development Scale (BMD; at 24 months), the Wechsler Preschool and Primary Scale of Intelligence (WPPSI; at 64 months), and the Wechsler Intelligence Scale for Children – Revised (WISC-R; at 96 months).

Results of the Bosquet Enlow et al. (2012) study highlight the critical influence of exposure to trauma during the earliest stages of life. Children exposed to interpersonal trauma differed significantly on BMD ($p = 0.0003$), WPPSI ($p < 0.0001$), and WISC-R ($p = 0.0006$) scores when compared to children with no exposure to interpersonal trauma. Follow-up pairwise t-tests explored the impact of trauma exposure at various stages of the child's life: infancy only; preschool only; and infancy and preschool. Children exposed to interpersonal trauma during infancy only or during infancy and preschool scored lower on the BMD and the WPPSI when compared to children not exposed to trauma or exposed only during preschool. Similarly, children exposed to trauma in infancy and preschool had significantly lower WISC-R scores than children unexposed to trauma. These results reveal the cognitive sensitivity of the infancy stage and the long-term impact of interpersonal trauma on a child's cognitive functioning.

Research indicates the impact of trauma on cognitive functioning also extends into adolescence. In a second longitudinal study, Mills and colleagues (2011) examined the relationship between childhood maltreatment and adolescent cognitive functioning. Participants were recruited from the Mater University Study of Pregnancy. This study consisted of 7,223 mothers who were in their second trimester of pregnancy between 1981 and 1983. The majority of mothers were between the ages of 20 and 34 years (*n* =

5,718) and were married (*n* = 5,380). Maternal participants were primarily White (*n* = 6,250) and held a high school degree (*n* = 4,601) (Mills et al., 2011).

Information on trauma exposure was gathered from the local child protection agency (CPA), and data were available for 7,214 of the mother-child dyads. The authors' review of CPA data revealed more than one in ten of the children experienced a suspected maltreatment report (e.g., abuse, neglect, or both abuse and neglect) to the CPA. Seven percent of child participants experienced at least one substantiated report of maltreatment. At the age of 14 years, 3,796 of the child participants agreed to the take part in the administration of the Wide Range Achievement Test (WRAT; *n* = 3,788) – a literacy measure – or the Raven's Standard Progressive Matrices (RSPM; *n* = 3794) – a cognitive measure of abstract reasoning. Of these participants, nearly eight percent were the subject of an abuse or neglect report (Mills et al., 2011).

After adjusting for demographic variables (e.g., maternal age, family income, and race), WRAT and RSPM scores were significantly lower for children exposed to any form of maltreatment (abuse, neglect, or both). For example, when compared to children with no substantiated reports, children with a history of at least one report of substantiated neglect scored significantly lower on the WRAT (mean difference: -4.4; SD = 15; 95% CI = -8.5 – -0.4) and the RSPM (mean difference = -5.7; SD = 15; 95% CI = -9.7 – -1.7). Similarly, scores on the WRAT (mean difference = -4.3; SD = 15; 95% CI = -7.0 – -1.5) and the RSPM (mean difference = -3.1; SD = 15; 95% CI = -5.8 – -0.4) were lower for children with at least one report of substantiated physical, emotional, or sexual abuse (Mills et al., 2011).

Academic Achievement

In addition to Mills and colleagues, numerous researchers have established a link between adverse childhood experiences and academic underachievement (Eckenrode, Laird, & Doris, 1992; Kendall-Tackett & Eckenrode, 1996; Kurtz, Gaudin, Wodarski, & Howing, 1993; Leither & Johnson, 1994). In 2007, Slade and Wissow studied the relationship between childhood maltreatment and academic performance in adolescence. Data were collected from the National Longitudinal Study of Adolescent Health (Add Health). As the largest and most comprehensive longitudinal study of adolescents to date, Add Health includes four sets of data: Wave I (collected in 1994 and 1995), Wave II (collected in 1996), Wave III (collected in 2001 and 2002), and Wave IV (collected in 2008 and 2009). Wave I data were collected from 80 high schools and 52 middle schools. Schools were selected from within the United States using systematic sampling methods and implicit stratification to ensure representation of region, urbanicity, size, type, and ethnicity. Data collection methods included In-School Questionnaires (n = 90,118), School Administrator Questionnaires (n = 164), In-Home Interviews (n = 20,745), and Parent Questionnaires (n = 17,669).

The Slade and Wissow (2007) study utilized sibling data from Waves I, II, and III of the Add Health study (n = 1,778). More than half (51.9%) of the sibling participants were female. The majority of participants identified as White (71.7%), followed by Black (13.4%) and Hispanic (8.0%). Approximately 60% of sibling pairs lived with both their mother and father, and more than half (53.5%) of participants' parents were married at the time of data collection.

Binary indicators were used to assign quality of school performance to each participant. Poor school performance was defined as low GPA (C average or below), not getting along with teachers and peers ("every day" or "almost every day"), lack of homework completion ("every day" or "almost every day"), and poor attendance (8 or more days absent). A child was considered maltreated if he or she experienced any of the following at the hands of his or her caregivers: neglect of basic needs, sexual contact, or physical aggression. A child maltreatment index score (0-3) was developed for each participant wherein one point was added for each of the following: maltreatment of any type, sexual contact, or more than one type of abuse (Harris, Halpern, Whitsel, Hussey, Tabor, Entzel, & Udry, 2009).

Though the majority of participants (n = 1146) in the Slade and Wissow (2007) study reported no history of childhood maltreatment, more than one third of adolescents (35.5%) experienced neglect, physical aggression, and/or sexual abuse. Few adolescents with childhood maltreatment scores of 0 demonstrated academic difficulties (low GPA = 20.5%; problems completing homework = 29.8%; frequent school absences = 26.3%). However, nearly half of those with index scores of 3 displayed academic difficulties (low GPA = 53.0%; problems completing homework = 50.5%; frequent school absences = 45.8%). Regression analyses revealed significant relationships between adolescents' maltreatment index and low GPA (P = 0.0001); problems with teachers and peers (P = 0.0026); and problems with completing homework (P = 0.0440).

In a more recent study, Goodman and colleagues (2012) further illuminate our understanding of trauma and its effect on academic performance. The authors utilized the

National Center for Education Statistics (NCES) Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K). The ECLS consists of three longitudinal studies designed to examine child development, school readiness, and school experiences. The ECLS-K is a cohort sample of children beginning in kindergarten and followed through eighth grade. Information regarding the children in the ECLS-K cohort was collected in the fall and spring of kindergarten (1998-1999), the fall and spring of first grade (1999-2000), the spring of third grade (2002), the spring of fifth grade (2004), and the spring of eighth grade (2007).

The Goodman et al. (2012) study utilized the fifth grade ECLS-K data set (n = 11,820). The majority of the sample was White (58.9%), followed by Latino American (10.3%), African American (14.4%), and Asian (2.9%). Socioeconomic status was measured via a composite variable of parents' occupation, parents' educational level, and household income. Traumatic stress was identified by the presence of the following symptoms: (1) re-experiencing, (2) avoidance, (3) arousal, and (4) externalizing or internalizing behaviors. Academic achievement was measured using three variables: (1) reading cognitive achievement, (2) mathematics cognitive achievement, and (3) science cognitive achievement. The three academic variables were scaled using item response theory (IRT) (Goodman et al., 2012).

In all three academic areas, significant differences were present when comparing the mean IRT scores of students exposed to trauma and those without exposure. The average reading IRT score for students without exposure to traumatic stress was 142.4; this is significantly higher than the mean reading IRT score for students exposed to

trauma (127.6; $p < 0.001$). The mean mathematics IRT score for children exposed to trauma (103.0) was significantly lower than the mean mathematics IRT score for those without exposure (116.3; $p < 0.001$). Similarly, in the area of science, the mean IRT score for trauma-exposed students (51.5) was significantly lower than the average IRT score for non-exposed students (59.0; $p < 0.001$) (Goodman et al. 2012).

Classroom Behavior and Emotion Regulation

The impact of adverse childhood experiences extends beyond cognitive and academic functioning. Indeed, decades of research highlight the relationship between these experiences and internalizing and externalizing symptoms (Cerezo-Jimenez & Frias, 1994; Hildyard, &Wolfe, 2002; Kim & Cicchetti, 2003; Manly, Kim, Rogosch, & Cicchetti, 2001; Shonk & Cicchetti, 2001; Toth, Manly, & Cicchetti, 1992; Toth, Cicchetti, Macfie, Rogosch, & Maughan, 2000).

For example, a 2010 study conducted by Milot, Ehtier, St-Laurent, and Provost explored the relationship between trauma symptomology and behavioral problems in maltreated preschool and kindergarten students. Participants were 64 non-maltreated children (55% male; mean age: 59 months) and 34 maltreated children (44% male; mean age: 60 months). All participants were Caucasian and living with their mothers in urban and rural Quebec, Canada. Maltreated participants were recruited from child protective services. Due to the low socioeconomic status of the maltreated participants, non-maltreated children of similar socioeconomic status were recruited from lists of social welfare recipients, preschool centers and schools, and Community Health and Social Services.

Milot and colleagues (2010) evaluated trauma symptoms and behavioral problems using two measures: the Trauma Symptom Checklist for Young Children (TSCYC) and the Child Behavior Checklist 1½ - 5 years Teacher Report Form (CBCL-TRF). The TSCYC is a 90-item questionnaire designed to assess for the presence of trauma symptoms related to maltreatment and other forms of trauma. Participants' preschool teachers were asked to complete 27 questionnaire items specific to three clusters of PTSD (re-experiencing, avoidance, and hyperarousal). The sum of the three scales resulted in a global score of trauma symptoms. The CBCL-TRF consists of 100 questions designed to measure behaviors relevant to various psychosocial areas (e.g., withdrawal, somatization, and anxiety). Participants' preschool teachers completed the entirety of the CBCL-TRF; this resulted in two global scales of internalizing (emotionally reactive, anxious/depressed, withdrawn, and somatic complains) and externalizing (attention problems and aggression) behaviors.

Milot et al. (2010) tested the mediating effect of trauma symptoms on the relationship between maltreatment and internalizing and externalizing behaviors using Baron and Kenny's mediation conditions. Using structural equation modeling, Milot et al. found a direct and significant relationship between maltreatment and both internalizing ($\beta = .24$; $p < .05$) and externalizing problems ($\beta = .21$; $p < .05$). When trauma symptoms were added to the model, these relationships were no longer significant. Furthermore, the addition of trauma symptoms to the model resulted in significant relationships between childhood maltreatment and trauma symptoms ($\beta = .35$; $p < .05$), between trauma symptoms and internalizing behaviors ($\beta = .63$; $p < .01$), and between trauma symptoms

and externalizing behaviors ($\beta = .46$; $p < .01$). These results support the conceptualization of maltreatment as a traumatic childhood experience while confirming the impact of traumatic experiences on the classroom behaviors (both internalizing and externalizing) of preschool children.

Schools and Child Traumatic Stress

For students displaying the cognitive, psychological, or academic effects of exposure to traumatic events, the school presents itself as a natural setting for mental health intervention. Results of the National Comorbidity Study-Adolescent Supplement (NCS-A) indicate more than one in five adolescents between the ages of 13 and 18 years currently or at some point in their lives have met criteria for a severe mental health disorder (Merikangas et al., 2010). Similarly, 13 percent of children between the ages of 8 and 15 years met criteria for a mental health diagnosis within the previous year (National Institutes of Health, n.d.). Despite these rates, nearly half of children with mental health diagnoses receive no treatment (National Institutes of Health, n.d.).

In an effort to increase child and adolescent access to treatment, organizations such as the American Academy of Pediatrics (AAP; 2004), the National Alliance on Mental Illness (NAMI; 2013), and the National Association of School Psychologists (NASP; 2015) support the provision of mental health services within the school setting. The AAP (2004) describes schools as key to the removal of common barriers to mental health treatment (e.g., lack of insurance coverage, lack of transportation, and stigma surrounding mental illness) and critical to the provision of counseling services, assessments, interventions, and referrals. These school-based mental health services

range from broad, school-wide programs to specific, individualized interventions, and services are delivered by a wide range of educational and clinical professionals.

Teachers and School-Based Mental Health

Though school social workers, counselors, and psychologists are often viewed as the primary providers of mental health services, research suggests classroom teachers are increasingly responsible for implementing mental health interventions. A recent review of the literature explores teacher involvement in the delivery of school-based mental health services, as well as the delivery method (e.g., school-wide, small group, or individualized) and effectiveness of the interventions (Franklin et al., 2012). The review included 49 studies published between January 1999 and September 2010. Seventy-five percent of articles were published between 1999 and 2004, and more than 65% used an experimental design. Student participants attended elementary (38.8%), middle (24.5%), and high (28.6%) schools, and the majority of articles (93.9%) studied general education classrooms.

Franklin and colleagues (2012) determined teachers participated in the delivery of 40.8% of interventions and were the sole interventionists in more than 18% of studies. The majority (55%) of teacher-delivered services were universal interventions (i.e., implemented school-wide or across grade levels), and effect sizes were comparable across providers. Interventions co-implemented by teachers and mental health professionals yielded primarily small effect sizes (75%), while interventions delivered solely by teachers yielded small (37.5%) or medium (37.5%) effect sizes. Similarly, the

majority of interventions delivered by mental health professionals yielded small effect sizes (71.4%).

The Franklin et al. (2012) review highlights the role teachers currently play in delivering mental health services to children and adolescents in the schools. Though teachers typically co-deliver these services, nearly 1 in 5 school-based mental health interventions are led solely by teachers. These data account only for the formalized delivery of interventions in the schools and do not address the informal mental health supports teachers provide on a daily basis.

To better understand the degree to which teachers provide informal support, Reinke and colleagues (2011) examined teachers' perceptions of the needs, roles, and barriers to supporting children's mental health in schools. Participants included 292 elementary and early childhood teachers from five school districts. Participants were primarily female (97%) and identified as European American (97.3%). Teachers' years of experience ranged from 1 to 37 years (M = 13 years). Forty percent of participants taught in rural school districts, while 31.8% were employed by urban school districts.

Participants completed a survey that addressed three main categories: (1) demographic information, (2) perceptions and attitudes of the provision of mental health services in schools, and (3) perceptions, knowledge, and attitudes regarding evidence-based practices in schools. When asked whether "schools should be involved in addressing the mental health issues of students," the majority of teachers supported the school's involvement (strongly agreed = 31%; agreed = 51%). Furthermore, when asked to share perceptions of their roles in addressing these issues, teachers indicated they view

themselves as integral to the provision of mental health services. On a Likert scale of 1 (strongly disagree) to 5 (strongly agree), teachers indicated they agree to performing roles such as implementing behavioral interventions (M = 4.50; SD = .64), referring children and families to school-based services (M = 3.92; SD = .89), and teaching social-emotional lessons (M = 3.87, SD = .97) (Reinke et al., 2011).

Yet, when asked whether they have the knowledge necessary to address the mental health needs of their students, only 28% of teachers agreed (strongly agreed = 4%; agreed = 24%). Similarly, only one third of teachers endorsed possessing the skills necessary to address these mental health needs (strongly agreed = 4%; agreed = 30%). Furthermore, when asked to provide the top three areas in which teachers believed they need additional training, "recognizing and understanding mental health issues in children" fell second on teachers' lists, preceded by "strategies for working with children with externalizing behavior problems." (Reinke et al., 2011).

Teachers and Trauma Intervention

Results of the Reinke et al. (2011) study speak to teachers' overall perceptions of mental health in the classroom; however, little research specifically addresses teachers' experiences supporting students with trauma histories. A search of the literature reveals only two studies addressing teachers' approach to trauma in the classroom. The first study (Alisic, 2012) qualitatively explored teachers' perspectives on the support they provide to children with trauma histories. Teacher participants were purposively sampled to ensure diversity in gender, level of teaching experience, school background, and school neighborhood. Principals from 27 schools were asked to invite teachers to

participate. Sixteen of the 27 principals agreed to invite teachers, and 21 teachers from 13 schools agreed to participate. The majority of participants were female (76%), and participants' mean age was 35.5 years (range: 22-55 years; SD = 11.69). Forty-three percent of teachers had more than 10 years of teaching experience, and all teachers reported interacting with one or more children exposed to a potentially traumatic event (as defined by DSM-IV-TR criteria).

Teachers participated in semi-structured interviews that explored experiences and strategies for working with children exposed to potentially traumatic events; school protocols for working with this group of children; level of support received from colleagues; and supports needed to better support children with trauma histories. Interviews were coded and analyzed using a summative analysis process. The coding process revealed teachers (1) were unclear of their role in addressing the needs of students with trauma histories, (2) believed they lack the knowledge necessary to support this group of students, and (3) struggled to manage the emotional burden of supporting students with trauma histories (Alisic, 2012).

In a follow-up study, Alisic and colleagues (2012) quantitatively explored teachers' perceptions of their work with students exposed to potentially traumatic events. Questionnaires were administered to teachers from two thousand randomly-selected Dutch schools. The majority of respondents (n = 765) were female (73%), and the mean participant age was 43 years (range = 18-64 years; SD = 12.07). The teachers had an average of 18.4 years of experience (range = 1-43 years; SD = 12.2), and 89% reported they previously worked directly with at least one child exposed to a potentially traumatic

event. Less than 10% of teachers reported participating in trauma-related training within the previous three years.

Questionnaire results indicated teachers experienced difficulty determining when to refer a child for mental health services (M = 3.9; SD = 1.28); where their role as teacher ends and the role of psychologist begins (M = 3.8; SD = 1.32); and how to best support children with exposure to potentially traumatic events (M = 3.6; SD = 1.25). Significant negative relationships were found between teachers' total questionnaire scores and amount of teaching experience; whether they had attended trauma-related training in the previous three years; and the number of trauma-exposed children with whom they previously worked (Alisic et al., 2012)

The research conducted by Alisic and colleagues (2012) suggests Dutch teachers lack confidence in addressing trauma in the classroom. Similarly, it appears Dutch teachers have limited training in how to support students exposed to potentially traumatic events. To date, no research explores United States teachers' perceptions of the needs, roles, and barriers to supporting children with trauma histories. With nearly half of all children experiencing at least one adverse childhood event (Child and Adolescent Health Measurement Initiative, 2013a), teachers' approach to trauma in the classroom is critical.

Exploration of Teachers' Approach to Trauma

This exploratory study aimed to advance the field's understanding of teachers' approach to trauma in the classroom. More specifically, this research gathered information regarding teachers' perceptions of supporting students experiencing child traumatic stress. Furthermore, the study sought to explore the relationships between teachers' past

experiences (i.e., years in the classroom, teaching setting, and training opportunities) and their perceptions of child traumatic stress in the school setting.

Teaching Experience

Decades of literature document the impact of teacher experience on student achievement. In a review of 30 years of research, Kini & Podolsky (2016) determined teachers' effectiveness in the classroom, as evidenced by students' academic achievement, increases with years of teaching experience. Research reveals teachers demonstrate the greatest amount of professional growth in the first three to five years of teaching (Clotfelter, Ladd, & Vigdor, 2007a; Clotfelter, Ladd, & Vigdor, 2007b; Harris & Sass, 2007). Furthermore, though previous studies documented a plateau in teachers' effectiveness in the classroom, more recent research suggests teachers continue to improve (as evidenced by student outcomes such as test scores, attendance, and homework completion) well beyond the five-year mark (Ladd & Sorensen, 2015; Papay & Kraft, 2015).

Though these studies offer insight into the relationship between years of teaching experience and students' academic achievement, research on the relationships between teaching experience and students' emotional or behavioral outcomes is limited. Elliott and Stemler (2008), however, contribute to the discussion with their research on teachers' tacit knowledge of classroom context and the impact of this knowledge on teachers' approach to students' emotional and behavioral needs. Citing the seminal work of Kounin (1970), Elliott and Stemler (2008) argue experienced teachers, as compared to their novice counterparts, possess the ability to anticipate and prevent students' behavioral

issues, which leads to increased competence in managing the classroom. This heightened awareness appears to develop over time and suggests increased experience in the classroom leads to expanded schemas regarding expected and unexpected student behaviors (Berliner, 1986).

Research strongly supports a positive relationship between teachers' length of employment and student achievement. The literature touches upon a similar relationship between years of experience and teachers' approach to students' emotional and behavioral needs; however, this concept requires further study. Consequently, this study explores the relationship between years of teaching experience and teachers' perceptions of students displaying symptoms of child traumatic stress.

Teaching Setting

For the purposes of this study, teaching setting is characterized by school region (rural, suburban, and urban) and school type (early childhood, elementary, middle, and high school). As previously mentioned, the work of Reinke and colleagues (2011) indicates teachers believe they play a role in supporting the emotional and behavioral needs of students. However, a search of the literature suggests researchers have not yet explored the impact of school type on teachers' perceptions of the role they play in providing this type of support. Similarly, research on the relationship between school type and teachers' perceptions of the needs of students experiencing child traumatic stress appears to be nonexistent.

Additionally, research regarding potential relationships between trauma and teaching region is sparse and outcomes vary among studies. For example, while some

studies indicate urban youth experience higher rates of trauma exposure (Abram, et al., 2004; Foster, Kuperminc, & Price, 2004), others conclude children in rural areas report higher Adverse Childhood Experience scores than their urban peers (US DHHS, 2015). At the same time, recent nationwide studies purport trauma exposure is consistent across urban and rural areas (Finkelhor, et al., 2011; Talbot, Szlosek, & Ziller, E., 2016).

To provide effective and meaningful trauma training opportunities, stakeholders must first understand whether teaching setting impacts teachers' understanding of the needs of students experiencing traumatic stress. Information on the impact of teaching setting is also required to further understand teachers' opinions regarding their role in supporting these students. As a result, this study aims to explore the relationship between teachers' school context (i.e., region and grade level) and teachers' perceptions of students who display symptoms of child traumatic stress.

Trauma Training

As previously noted, research on teachers' trauma-training experiences is nearly nonexistent. Similarly, the literature base specific to teacher professional development is also weak. A comprehensive review of teacher in-service training indicates few studies meet rigorous evidence standards (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Nonetheless, the Yoon et al. review concluded that professional development consisting of fewer than 15 hours of training had no statistically significant effects on student achievement. This finding is limited to students' academic performance, and little research exists specific to mental health professional development for teachers. However, the Yoon et al. (2007) review suggests teachers likely require multiple hours of training

to acquire the knowledge and skills required to support students experiencing child traumatic stress. As a result, it can be expected that an increase in trauma training equates to an increase in teachers' awareness of the needs of students experiencing child traumatic stress. However, additional research in this area is necessary.

A review of the literature indicates very little is known about teachers' perceptions of students displaying symptoms of child traumatic stress. This study aims to further stakeholders' understanding of teachers' approach to supporting this group of students. In doing so, this study will answer the following questions:

1. What are teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress?
2. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching experience*?
3. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *teaching setting*?

4. Do differences in teachers' perceptions of (a) the needs of students experiencing child traumatic stress, (b) their role in supporting students experiencing child traumatic stress, and (c) their self-efficacy in supporting students experiencing child traumatic stress exist based on *trauma training*?

CHAPTER III

METHODOLOGY

Participants

Study participants were early childhood, elementary, middle, and high school teachers employed by Douglas County, Nebraska public schools. The 2014 estimated population of Douglas County is 543,244. The majority of those living in Douglas County are White (70.9%), followed by Hispanic or Latino (12.0%), Black or African American (11.6%), Asian (3.3%), two or more races (2.5%), American Indian and Alaska Native (1.2%), and Native Hawaiian and Other Pacific Islander (0.1%). The median household income of those living in Douglas County is $53,325, and 15.2% of the county's population live in poverty. Approximately one quarter (25.8%) of residents is under the age of 18 years, and 50.7% of residents are female. According to United States Census estimates, Douglas County statistics closely mirror those of the United States as a whole (United States Census Bureau, 2015). See Table 6 for a comparison of statistics.

Prior to widespread dissemination of the survey, the researcher conducted a survey field test (described below). A total of 28 teachers initiated the field test survey. Four people provided consent to participate in the field test and confirmed their role as Douglas County teacher but withdrew from the survey before answering any additional survey questions. One person dropped out of the field test after completing the *Training Experiences* portion of the survey.

Table 6. United States Census Statistics (2010)

	Douglas County (excluding Omaha City)	Omaha City	Douglas County	United States
Population	108,152	423,327	517,110	308,758,105
Persons under 18 years	29.9%	25.1%	26.1%	23.1%
Female persons	50.8%	50.8%	50.8%	50.8%
White	88.9%	73.1%	76.4%	72.4%
Black or African American	3.7%	13.7%	11.6%	12.6%
American Indian and Alaska Native	0.3%	0.8%	0.7%	0.9%
Asian	3.8%	2.4%	2.7%	4.8%
Native Hawaiian and Other Pacific Islander	0.1%	0.1%	0.1%	0.2%
Two or more races	2.0%	3.0%	2.8%	2.9%
Hispanic or Latino	4.0%	13.1%	11.2%	16.3%
Median household income (2009-2013)	---	48,052	53,325	53,046
Persons in poverty	9.9%	16.6%	15.2%	14.8%

United States Census Bureau (2015)

Twenty-three participants completed the field test survey. The majority of participants (87%) identified as female; 13% identified as male. Approximately 95% (n = 21) of teachers identified as White, and 4.5% (n = 1) as Hispanic, Latino, or Spanish Origin. Participants' ages ranged from 23 years to 67 years (M = 41.36, SD = 12.61). Detailed demographic data for pilot study participants are included in Table 7.

Table 7. Field Test Respondents Demographic Data

	M	*SD*	*n*	%
Total Field Test Respondents	--	--	23	--
Age	41.36	12.61	22	--
Gender	--	--		
Female	--	--	20	87.0
Male	--	--	3	13.0
Ethnicity	--	--		
American Indian or Alaska Native	--	--	0	0.0
Asian	--	--	0	0.0
Black or African American	--	--	0	0.0
Hispanic, Latino, or Spanish Origin	--	--	1	4.5
White	--	--	21	95.5
Other	--	--	0	0.0

A total of 389 individuals initiated the final survey. Five of these individuals indicated they did not consent to participate in the study and, therefore, were disqualified from the survey. Two people indicated they were not currently employed as a teacher in Douglas County. These individuals were also disqualified from completing the survey. Nineteen individuals provided consent to participate and confirmed their role as Douglas County teacher but withdrew from the survey without answering any additional questions.

Of the remaining 363 participants, nine withdrew from the survey after answering pre-service training questions and six withdrew after completing the in-service training questions. Four individuals left the survey during the *Staff Roles* section, and three people dropped out of survey completion in the *Student Needs* portion. Thirteen participants exited the survey prior to answering the demographic survey questions. Review of the data indicated one survey respondent endorsed employment as a speech pathologist rather

than teacher. The scope of this study is limited to classroom teachers; consequently, this participant's data was removed from the final analysis.

A total of 327 teachers completed the final survey. The majority of participants (84.4%) identified as female, and 15.6% identified as male. Approximately 97% of teachers (n = 314) described themselves as White. The remaining ten teachers identified as Black or African American (n = 1, 0.3%); Hispanic, Latino, or Spanish origin (n = 2, 0.6%); American Indian or Alaskan (n = 4, 1.2%); and Asian (n = 2, 0.6%). Participant ages ranged from 23 years to 70 years (M = 41.23, SD = 11.02). Detailed demographic data is provided in Table 8.

Table 8. Survey Respondents Demographic Data

	M	*SD*	*n*	%
Total Survey Respondents	--	--	327	100.0
Age	41.23	11.02	321	98.2
Gender	--	--	327	100.0
Female	--	--	276	84.4
Male	--	--	51	15.6
Ethnicity	--	--	324	99.0
American Indian or Alaska Native	--	--	4	1.2
Asian	--	--	2	0.6
Black or African American	--	--	1	0.3
Hispanic, Latino, or Spanish Origin	--	--	2	0.6
White	--	--	314	96.9
Other	--	--	1	0.3

Teacher participants reported a range of teaching experiences. Participants' total years of teaching employment ranged from less than one year to 43 years (M = 14.24; SD = 9.78). The majority of teachers indicated they teach in suburban areas (79.1%), followed by urban (18.7%) and rural settings (2.1%). Approximately 44% of participants

reported they currently teach elementary school students. Slightly more than 31% indicated they teach in a high school setting, 21% endorsed teaching in a middle school, and approximately 3.4% indicated they teach in an early childhood setting. Nearly 74% of the sample teach general education students, while approximately 17% teach special education classes. Teachers reported close to one quarter of their students qualify for Free and Reduced Price lunch (M = 24.10, SD = 20.72). Furthermore, when reflecting on each of the students taught throughout their careers, teachers estimated approximately 17% (M = 17.17, SD = 17.99) of students experienced child traumatic stress. Table 9 provides descriptive statistics for participants' students and work settings.

Table 9. Survey Respondents Teaching Demographics

	M	*SD*	*n*	%
Total Survey Respondents	--	--	327	100.0
Years Employed as Teacher	14.24	9.78	327	100.0
School Location	--	--	326	99.7
Rural	--	--	7	2.1
Suburban	--	--	258	79.1
Urban	--	--	61	18.7
School Setting	--	--	324	99.1
Early Childhood	--	--	11	3.4
Elementary School	--	--	143	44.1
Middle School	--	--	68	21.0
High School	--	--	101	31.2
Other	--	--	1	0.3
Student Population	--	--	326	99.7
General Education	--	--	241	73.7
Special Education	--	--	56	17.1
Both General and Special Education	--	--	29	8.9

Instrumentation

This study utilized survey research design. Survey design "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2009). Surveys typically serve three general purposes: (1) *description*, to gather information regarding specific traits or attributes of a given population; (2) *explanation*, to examine causal relationships among variables; and (3) *exploration*, to glean a clearer understanding of a nebulous topic. Survey research typically encompasses more than one of the aforementioned purposes. This study utilized survey research for descriptive and explanatory purposes (Babbie, 1990).

With these purposes in mind, this study utilized a cross-sectional, self-administered survey. Ideally, the data collected for this study will be used to inform school administrators of the perceptions and training needs of their teachers. Such data are most helpful if collected and disseminated quickly to key stakeholders. Accordingly, the cross-sectional survey design is an effective method for establishing a snapshot of the population at a selected point in time. Furthermore, self-administration allows for the efficient and economical collection of large amounts of data in a short amount of time.

Survey Structure

Extant research on teachers' experiences supporting students exposed to potentially traumatic events is limited. To date, a normed or established measurement of teachers' perceptions of trauma-specific training and the levels of support required by this group of students does not exist. Therefore, this study utilized a survey designed by the researcher to address the aforementioned research questions. The final survey (Appendix E)

consisted of 34 close-ended questions and 12 open-ended questions. The survey was web-based and was hosted by Survey Monkey. Participants accessed the survey via a hyperlink included in the recruitment emails.

Informed Consent

The survey hyperlink directed potential participants to a statement of informed consent. The statement included a description of the purpose of the study, as well as the risks and benefits of participation. Limits to confidentiality were discussed, and the voluntary nature of participation was described. Potential participants were also informed of the opportunity to receive an incentive for completing the survey in its entirety. Potential participants were asked to confirm their voluntary participation in the study and their status as a Douglas County, Nebraska (early childhood, elementary, middle, or high school) teacher. Those who disagreed to voluntarily participate or who indicated they were not currently teaching in Douglas County were directed to a disqualification page. The disqualification page thanked participants for their time and prevented them from accessing the survey. This disqualification process ensured the study results were limited to the perceptions of only those currently teaching in Douglas County public schools. Participants who confirmed their desire to voluntarily participate and their role as a Douglas County teacher were directed to the survey questions. This confirmation served as teachers' informed consent to participate in the research study.

Survey Definitions

Those eligible to participate were directed to the *Survey Definitions* section of the survey. The terms *trauma* and *child traumatic stress* are referenced numerous times

throughout the instrument. Universal definitions of these terms do not exist. To encourage a shared understanding of these terms, the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014a, p. 7) definition of *trauma* and the National Child Traumatic Stress Network (NCTSN, 2003, p. 1) definition of *child traumatic stress* were included in this section of the survey.

Training Experiences

Definitions of *trauma* and *child traumatic stress* were followed by the *Training Experiences* section of the survey. This section began with a definition of *pre-service training* and *in-service training*. Definitions of pre- and in-service training were provided to establish participants' shared understanding of the timeline during which these training experiences occurred. Pre-service training was defined as the training teachers received while earning their teaching license or certification. In-service training was defined as the training teachers received while employed as a teacher. The *Training Experiences* section of the survey consisted of eleven questions. One multiple-choice question asked teachers to indicate how they first obtained teacher certification (e.g., undergraduate teacher training program, master's level certification, or Teach for America). An open-ended "Other" response was included to provide teachers an opportunity to describe teacher certification methods not encompassed by the multiple choice responses.

Participants were then asked to describe the pre-service training they received specific to trauma and child traumatic stress. Specifically, using a five-point Likert-type scale, participants endorsed the amount of pre-service training in childhood trauma and in supporting students experiencing child traumatic stress they received (e.g., *none* to *a*

great deal). Using a Likert scale, teachers then indicated their perceptions of (1) the degree to which their pre-service training prepared them to support students experiencing child traumatic stress (e.g., *very adequately* to *very inadequately*) and (2) their level of satisfaction with the pre-service training they received specific to child traumatic stress (e.g., *very satisfied* to *very dissatisfied*). The pre-service training section concluded with an open-ended question that prompted teachers to share any opinions regarding their pre-service training that were not addressed by the aforementioned questions.

Following pre-service training questions, participants answered an identical set of questions specific to in-service training experiences. Specifically, teachers indicated the amount of in-service training in childhood trauma and in supporting students experiencing child traumatic stress they received. Participants also shared their perceptions of (1) the degree to which their in-service training prepared them to support students experiencing child traumatic stress and (2) their level of satisfaction with the in-service training they received specific to child traumatic stress. In-service training questions were followed by an open-ended question that prompted teachers to share any opinions regarding their in-service training that were not addressed by the preceding questions.

Student Needs

The next section consisted of three questions that measured teachers' perceptions of the needs of students experiencing child traumatic stress. Using a five-point Likert scale, teachers were asked to endorse the degree to which they believe students experiencing child traumatic stress require more academic, emotional, and behavioral

support than their peers (e.g., *strongly disagree* to *strongly agree*). This section concluded with an open-ended question that prompted teachers to share their opinions specific to the needs of students experiencing child traumatic stress that were not addressed in the aforementioned questions.

Staff Roles

The *Staff Roles* section opened with three questions regarding teachers' perceptions of their role in supporting students experiencing child traumatic stress. Specifically, a five-point Likert scale was used to assess the degree to which teachers view themselves as responsible for providing additional academic, emotional, and behavioral support to this group of students. The Likert scale questions were followed by an open-ended question intended to gather any information not assessed by close-ended questions regarding teachers' perceptions of their role in supporting students experiencing child traumatic stress. The remaining four questions of the *Staff Roles* section were identical to those previously described; however, these questions referenced the role of school psychologists. Three of the questions used a Likert-scale format to assess teachers' perceptions of the role of school psychologists in supporting the academic, emotional, and behavioral needs of students experiencing child traumatic stress. The final question in this section prompted teachers to share additional open-ended opinions regarding school psychologists' role in supporting these students.

Self-Efficacy

To ascertain teachers' self-efficacy in supporting students experiencing child traumatic stress, participants used a five-point Likert scale to indicate their level of

confidence (e.g., *not at all confident* to *very confident*) in their ability to: (1) recognize the symptoms of child traumatic stress, (2) determine when a child experiencing child traumatic stress requires a referral for mental health services, and (3) balance the individual needs of students experiencing traumatic stress with the needs of the class as a whole. Two additional questions used Likert scales to determine the degree to which teachers agree (e.g., *strongly disagree* to *strongly agree*) they have the (1) knowledge and (2) skills to support students experiencing traumatic stress. Next, teachers used a five-point Likert scale to indicate their level of confidence (*e.g., not at all confident* to *very confident*) in their ability to meet the (1) academic, (2) emotional, and (3) behavioral needs of children experiencing traumatic stress. Finally, participants were provided an open-ended opportunity to share any additional opinions regarding their self-efficacy in supporting these students.

Demographic Information

The last section of the survey included eight demographic questions. Interval scale questions collected the participants' age, years of teaching experience, and approximate percentage of students with child traumatic stress. Nominal scale questions in the *Demographic Information* section of the survey gathered participants' gender, ethnicity, school type, school location, and school socioecomonic status.

Closing

After completing the *Demographic Information* section, participants were directed to a page with closing remarks. This page included a statement thanking the participants for the time invested in completing the survey. Participants were also

informed of the email address used to submit an entry into the gift card drawing. The description of the drawing explained participants' names and email addresses would not be linked to their survey responses should they choose to enter their name into the drawing.

Procedure

Prior to widespread dissemination of the survey, the researcher conducted a survey field test. Rea and Parker (2005) describe this process as a "small-scale implementation of the draft questionnaire" designed to gather respondents' perceptions of survey clarity, comprehension, and acceptability (p. 31-32). Results of the field test are used to inform revisions to the survey. Approval for the procedures described below was received through the university's Institutional Review Board, and all participants were treated ethically according to the APA (2010) Ethical Principles of Psychologists and Code of Conduct.

A list of all 2015-2016 teachers in Nebraska is available on the Nebraska Department of Education website. A search function allows for the selection of subsets of teachers based on the following school criteria: *public school districts; public and non-public school districts/systems; non-public school systems; interim program schools; and education service units*. Selection can be further narrowed by *district/system* and *county*. For the purposes of this study, the search function was utilized to develop a list of all public school teachers in Douglas County. This search yielded a list of 9,764 teachers. Due to internal review board restrictions, Omaha Public School teachers (n =5,338) were

removed from this list. The resulting list consisted of 4,426 Douglas County public school teachers.

Email addresses for the remaining 4,426 school teachers were obtained through searches of public staff directories located on the teachers' school websites. This search revealed 1,515 of those listed were employed in non-teaching roles (e.g., administration or support services). These names were removed from the list of potential participants (n = 2,911). Email addresses were not publicly available for 96 of the remaining teachers (n = 2,815).

Field test participants were recruited from the aforementioned list of Douglas County teachers (n = 2,815). At the start of the first round of recruitment, the researcher emailed recruitment letters (Appendix B) to 40 randomly-selected teachers. Recruitment letters included descriptions of the study and the field test, an explanation of the significance of the study, a request for participation, and a hyperlink to the survey. The letter also described the gift card incentive drawing open to participants who completed the field test in its entirety. Three follow-up letters (Appendices C and D) were emailed to each of the 40 teachers over the course of approximately one month. The researcher repeated this recruitment process with six additional groups of 40 randomly-selected teachers (n = 280) until a total of 23 teacher participants (Rea & Parker, 2005) completed the survey and corresponding field test questions (Appendix A). This process yielded an 8.2% response rate.

Three questions were added to the survey based on feedback provided by field test participants. The first question was added to the *Staff Roles* section and asked

participants to indicate the degree to which they perceive school counselors as responsible for providing academic, emotional, and behavioral support to students experiencing child traumatic stress. The second question was added to the *Demographic Information* section of the survey and asked participants to indicate the type of students they primarily teach (i.e., general education, special education, or equal numbers of both general and special education students). The third question was also added to the *Demographic Information* section of the survey and gathered information regarding the year in which teachers earned their teaching license.

Following field test survey revisions, study participants were recruited via email using the aforementioned list of teacher email addresses. Two-hundred eighty participants were recruited for the survey field test; these names were removed from the list of potential study participants. This resulted in 2,535 potential study participants. The researcher emailed recruitment letters (Appendix F) to each available email address (n = 2,535). Recruitment letters included a description of the study, an explanation of the significance of the study, a request for participation, and a hyperlink to the survey. The letter also described the gift card incentive drawing open to participants who completed the survey in its entirety. The initial recruitment letter yielded 128 survey participants. In an effort to elicit a sufficient response rate for the required data analysis procedures, follow-up emails (Appendix G) were sent to potential participants. The first follow-up email was sent five days after the initial recruitment letter. This email included a request to disregard the email if he or she already participated in the study, a reminder of the study details, and the survey hyperlink. The first follow-up email yielded 136 survey

participants. A second follow-up email was sent one week later, contained the same information included in the previous follow-up email, and resulted in 64 additional participants. A final recruitment request (Appendix H) informed potential participants the survey would close within 24 hours. Sixty-one recipients responded to this final request. This process yielded a 12.9% response rate.

Data Analysis

Quantitative Analysis

Descriptive analyses. Survey results were exported from Survey Monkey to Microsoft Excel and IBM Statistical Package for the Social Sciences (SPSS) Version 24 statistical software program. Descriptive statistics were used to calculate measures of central tendency (e.g., mean, median, and mode) and measures of variability (e.g., standard deviation, kurtosis, and skewness). Results of the variability measures – specifically kurtosis and skewness tests – indicated the scores for all dependent variables were non-normally distributed. (See Table 10 for skewness, kurtosis, and Shapiro-Wilk results for each dependent variable.)

Table 10. Results of Normality Tests

	Skewness (*z*-score)	Kurtosis (*z*-score)	Shapiro-Wilk
Student Need – Academic	-7.244	7.379	
Student Need – Emotional	-14.103	24.798	$p < .0005$
Student Need – Behavioral	-8.625	9.125	
Teacher Role – Academic	-7.390	5.570	
Teacher Role – Emotional	-5.007	0.018	$p < .0005$
Teacher Role – Behavioral	-5.007	0.945	
Self-Efficacy – Academic	-5.904	0.092	$p < .0005$

Self-Efficacy – Emotional	-1.250	-3.331
Self-Efficacy – Behavioral	-1.867	-3.515

Independent variables. The following independent variables were used to assess for statistically significant differences among groups: Teaching Experience, Teaching Setting (Location and School Type), Pre-Service Training (Amount, Adequacy, and Satisfaction), and In-Service Training (Amount, Adequacy, and Satisfaction).

To address the non-normality of the Teaching Experience variable and to allow for Kruskal-Wallis testing, years of experience were organized into three categories to allow ensure normal distribution (0-9 years, 10-19 years, and 20+ years). This organization The Teaching Setting – Location variable included three locations: rural, urban, and suburban. Due to low response rate (n = 7), rural respondents were not included in the inferential analyses. The Teaching Setting – School Type variable included five options: early childhood (n = 11), elementary (n = 143), middle school (n = 68), high school (n = 101), and other (n = 1). The one *Other* respondent indicated they teach in the K-8 setting. Data from this respondent was included in the *elementary school* category. Due to low sample sizes, data from the *early childhood* and *elementary school* categories were combined into one category.

Pre-Service and In-Service Amount, Adequacy, and Satisfaction scale items were coded from one to five, where one represented the lowest end of the continuum (e.g., none, very inadequately, or very dissatisfied) and five represented the highest end of the continuum (e.g., a great deal, very adequately, or very satisfied). Scale scores were divided into categories (e.g., scores of 1 and 2 termed “Small Amount/Low

Satisfaction/Low Adequacy", scores of 3 termed "Moderate Amount/Neutral Satisfaction/Neutral Adequacy", scores of 4 and 5 termed "Large Amount/High Satisfaction/High Adequacy").

Dependent variables. All dependent variables – Student Need (Academic, Emotional, Behavioral), Teacher Role (Academic, Emotional, Behavioral), and Self-Efficacy (Academic, Emotional, Behavioral) – were measured using five-point Likert scales. Scale items were coded from one to five, where one represented the lowest end of the continuum (e.g., strongly disagree) and five represented the highest end of the continuum (e.g., strongly agree). These codes were retained for inferential analyses, and dependent variables were analyzed as continuous variables.

Inferential analyses. Due to the non-normal distribution of dependent variables, non-parametric tests were chosen for inferential analyses. Kruskal-Wallis H tests were conducted to determine if significant differences exist among groups when comparing participants' (1) teaching experience, (2) teaching setting, and (3) trauma training to their perceptions of (1) student need, (2) teacher role, and (3) self-efficacy. *Post-hoc* pairwise multiple comparison procedures – specifically Dunn's test with Bonferroni correction at the pairwise level – were conducted following rejection of the null hypothesis.

Qualitative Analysis

As previously noted, little research exists on teachers' experiences in the area of supporting students with symptoms of child traumatic stress. Given this gap in the research, the decision to constrict respondents to close-ended questions has the potential to limit stakeholders' understanding of teachers' perspectives. As a result, open-ended

questions (i.e., “Is there anything important to you about _____ that has not been asked?”) were included at the end of the following survey sections: Training Experiences – Pre-Service; Training Experiences – In-Service; Student Needs; Staff Roles – Teachers; Staff Roles – School Psychologists; Staff Roles – School Counselors; and Self-Efficacy.

Qualitative survey responses were analyzed using conventional content analysis. Conventional content analysis is typically used when existing theory on the topic of study is limited (Hsieh & Shannon, 2005). Certain approaches to qualitative data analysis rely on predetermined coding categories (e.g., directed content analysis); however, researchers using the conventional content analysis method allow coding categories to emerge from the data during the analysis process (Kondracki & Wellman, 2002). Though similar to the grounded theory method of qualitative analysis, conventional content analysis is not intended to develop theory. The intent is exploration and description, resulting in model building that informs future research specific to the topic of study (Hsieh & Shannon, 2005).

With these intentions in mind, the researcher began conventional content analysis by reading all qualitative responses for each open-ended question included in the survey. This broad review of the data allowed the researcher to develop a general understanding of the tone and underlying message provided by survey respondents. The researcher then re-read individual responses and took note of words or phrases that appeared to summarize the respondents’ message. These words or phrases were organized into categories and took the form of codes which were then defined by the researcher. Next, the researcher re-read each response and assigned codes to words or phrases that aligned

with the definition of each code. Responses were organized by code and are summarized in Chapter IV.

CHAPTER IV

RESULTS

General Findings

Results of the survey illustrate teachers' experiences with and perceptions of students who display symptoms of child traumatic stress. Survey items were designed to address the research questions posed at the start of this study. The following sections include descriptive analyses of the survey results as well as qualitative responses. Descriptive and qualitative analyses are organized by research questions.

Research Question 1a: What are Teachers' Perceptions of the Needs of Students Experiencing Child Traumatic Stress?

Teachers were prompted to rate the degree to which they believe students experiencing child traumatic stress require additional academic, emotional, and behavioral support in the classroom. Participants endorsed their level of agreement on a five-point Likert scale with *one* representing strong disagreement, *three* representing a neutral opinion, and *five* indicating strong agreement. Results indicate teachers believe students experiencing child traumatic stress require additional academic (M = 4.01, SD = .76), emotional (M = 4.47, SD = .68), and behavioral (M = 4.20, SD = .77) support in the classroom.

When provided the opportunity to share additional information regarding the academic, emotional, and behavioral needs of students experiencing child traumatic

stress, several of those who responded highlighted the importance of viewing each student as an individual with unique needs. This concept is illustrated in the following examples:

> Students with traumatic stress are in need of different types of support in different types of situations. Each situation needs to be evaluated according to what the student needs are for the individual.
>
> It completely depends on the student themselves. Many react differently in my experience and would need different support than another.

These responses suggest teachers believe students experiencing child traumatic stress require individualized intervention tailored to their specific areas of need.

In acknowledgement of the unique academic, emotional, and behavioral requirements of this subset of students, a small number of respondents drew attention to the amount of resources required to provide such support. This sentiment is expressed in the following examples:

> The amount of support it takes needs to be of concern and how that can take away from the rest of the class.
>
> Why isn't there more support for staff and classrooms with high needs in this area?
>
> Students experiencing child traumatic stress require support and resources outside of the school system.

Teachers' responses indicate a team-based approach is required to meet the needs of students experiencing child traumatic stress.

Finally, a small number of teachers discussed a lack of background information as a barrier to providing adequate support to students experiencing child traumatic stress. These sentiments are described here:

> At times, administration is aware of some background information regarding students experiencing childhood trauma, however, this information is not necessarily shared with the classroom teacher.
>
> A lot of times teachers are not told of children who have experienced child traumatic stress. This information is kept confidential from the teachers and paras who help these kids on a daily basis. It is very frustrating to learn that something has happened to a student late in the year, which would have helped a teacher understand a student's situation and differentiate lessons to help kids during the year.

Responses included in this theme indicate teachers' believe their limited awareness of students' trauma histories is a barrier to effectively meeting their academic, emotional, and behavioral needs.

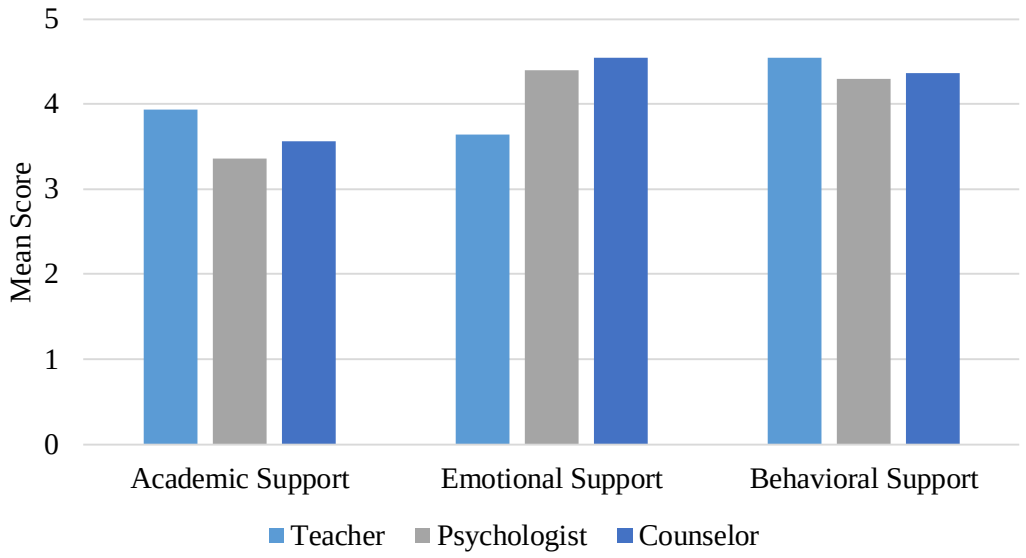
Research Question 1b: What are Teachers' Perceptions of their Role in Supporting Students Experiencing Child Traumatic Stress?

Using a five-point Likert scale (1 = strong disagreement; 3 = neutral; 5 = strong agreement), participants were asked to rate the degree to which they believe teachers, school psychologists, and school counselors are responsible for providing additional academic, emotional, and behavioral support to students experiencing traumatic stress. Results suggest teachers believe all three school personnel play a role in providing services beyond those provided to the general student population. However, results also indicate teachers perceive slight differences in the specific type of support for which each staff member is responsible.

Specifically, when compared to school psychologists and counselors, teachers rated themselves as more responsible for meeting the academic needs of students experiencing child traumatic stress ($M_{\text{teacher academic}} = 3.94$, $SD = .78$; $M_{\text{counselor academic}} = 3.56$, $SD = 1.09$; $M_{\text{psychologist academic}} = 3.36$, $SD = 1.08$). In contrast, teachers rated school

psychologists and counselors as more accountable for providing emotional ($M_{\text{teacher emotional}}$ = 3.64, *SD* = .91; $M_{\text{psychologist emotional}}$ = 4.40, *SD* = .69; $M_{\text{counselor emotional}}$ = 4.54, *SD* = .60) supports to this group of students. Figure 1 illustrates teachers' perceptions of these roles.

Figure 1. Teachers' Perceptions of Staff Roles



When teachers were asked to provide qualitative information regarding their role in supporting students experiencing child traumatic stress, a number of themes emerged. First, a few teachers indicated they view themselves as responsible for providing additional academic, emotional, and behavioral support regardless of whether the child is experiencing symptoms of traumatic stress. These perspectives are illustrated in the following examples:

> Teachers should go above and beyond for any student that needs it.
>
> I feel this simply falls into the teacher's realm of responsibility. Whether or not they have suffered a traumatic event, any child that needs additional support, should receive it.

Many teachers endorsed this sentiment while also advocating for a team-based approach to providing increased levels of support. In this regard, teachers described the importance of administrators, mental health professionals, paraprofessionals, and fellow teachers in the delivery of additional services. Teachers' call for a multidisciplinary approach is conveyed in the below statements:

> I think that when a student has experienced significant trauma, a team of school staff (school psychologist, guidance counselor, etc.) should be supporting the student, not just the classroom teacher.
>
> Teachers should be responsible for providing additional academic, emotional, and behavioral support, but they should not be the only ones responsible for additional support. They are the ones seeing the student on a daily basis, but expertise is needed from other people in the building.
>
> I believe teachers are only a piece of the puzzle. Especially at the high school level, I see my students twice a week and would not be completely successful supporter with as little as I see them, but I should still provide it while they are with me. I believe counselors, administrators, etc. should also [provide support].
>
> I believe that the teacher is one of many people that should be held responsible in supporting students experiencing child traumatic stress. There needs to be a team of people surrounding these children.

Many respondents also noted concerns regarding the level of expertise teachers possess specific to the provision of additional academic, emotional, and behavioral support. These concerns are illustrated in the following statements:

> Although I agree that, as a teacher, it is my job to provide additional support for child traumatic stress, that support is often "doing the best I can" without any real knowledge, training, etc.
>
> I feel as if the teacher needs to be trained in behavioral and emotional support. That is not always an area of black and white, and some individuals do it better than others. We are all educators and would know how to help academically but not necessarily emotionally or behaviorally.

> Although I agree with these statements, it is frightening to think people who lack the training to help these students are usually called upon to help in additional ways.

In addition to these training concerns, participants also discussed the difficulty they face in balancing the time they devote to high-needs individual students and the time devoted to the class as a whole. For example:

> In my experience, students experiencing child traumatic stress require a disproportionate amount of time, and this leads to other students' needs not being met.
>
> It is important that we help provide support, but it has to be balanced with the rest of the class. All children deserve support academically, emotionally and behaviorally.
>
> There is a level of support that the classroom teachers and specialist should provide, but it does become an issue when that child is taking up more of the teacher's time and then they are unable to attend to the needs of other students. […] If something more is needed, it is up to the classroom teacher to recognize her students' needs and make the appropriate referrals. This is why specific training is so important.

A small number of responses suggested teachers equate the provision of emotional and behavioral support with special education services. For example:

> This may sound cold, but I can only do so much in the classroom to help struggling students. I work with students who have IEPs, and I do my best to follow the IEPs but cannot always assist with emotional support while teaching the class.
>
> In some cases, teachers do not have enough training or background to provide these supports in the classroom. Some students should be placed in settings more equipped to deal with the emotional and behavioral effects of trauma.
>
> Teachers in the special education department would typically strongly agree with these beliefs; however, I believe many general education teachers think they are responsible for ONLY the academic needs. It is a common misconception that it is special education teachers' jobs to reach the emotional and behavioral needs of a student.

Finally, a few teachers described a lack of background information as a barrier to teachers' provision of additional academic, emotional, and behavioral support. An example of these concerns is provided below (Note that these respondents are unique from those who made similar statements in the Student Needs section of the survey):

> Often teachers aren't given the information needed to help students in crisis because of privacy issues. School counselors cannot share information learned in conversations with student, parents, or the legal system. Often children appear in your room and the only way teachers discover there are larger issues is after observing the student in the classroom. By then, the student is already stressed from not being successful in the classroom.

Overall, responses to this question indicate teachers have a desire to provide additional support to students experiencing child traumatic stress. However, respondents reported they are limited by numerous barriers including lack of time, training, and relevant background information.

Teachers also shared qualitative perceptions of the role school psychologists play in supporting the academic, emotional, and behavioral needs of students experiencing child traumatic stress. Qualitative analysis of teacher responses revealed two major themes. First, a few teachers reiterated the importance of a team-based approach to supporting students and described school psychologists as a component of the multidisciplinary support team. These sentiments are illustrated by the following example:

> School psychologists can be a dynamic member [of] a child's team and should be easily accessible, knowledgeable and able to provide academic, emotional and behavior supports.

However, many teachers described barriers to the inclusion of school psychologists on the multidisciplinary team. First, while acknowledging the expertise of school

psychologists, some teachers expressed concern regarding the amount of time school psychologists have available for this type of support. Teachers' concerns are noted in these statements:

> Due to caseloads it is likely a school psychologist won't be able to help all of the time but of course their training and expertise would benefit any student dealing with traumatic stress.
>
> Our school psychologist is part-time and frankly is overwhelmed with the caseload that she is expected to serve. It would be great if the psychologist would be available to support the student by giving suggestions for behavioral and emotional support.

Teachers also indicated school psychologists' current responsibilities do not allow them to provide additional academic, emotional, or behavioral support. The specific responsibilities teachers referenced are included in the following examples:

> My school doesn't even have a full-time school psychologist. And when she is here, she does testing, not intervention or support.
>
> Our school psychologist is so busy with diagnosing and testing that her time to support individual students is limited.

Finally, teachers provided conflicting responses regarding school psychologists' knowledge and skill level in regard to the provision of direct services. These conflicting perceptions are illustrated using the following examples:

> They are more trained in these areas and can give one-on-one support because, unlike a classroom teacher or a resource teacher, they do not legally have to see kids daily.
> Some school psychologists are better diagnosticians than working directly with children, meaning they can verify and identify students with emotional needs but may not work directly with students effectively. School psychologists are trained in behavior supports but, in my experience, rarely work directly with the students.

Generally, teachers' responses suggest they view school psychologists as potentially valuable members of multidisciplinary teams designed to support students experiencing

child traumatic stress; however, respondents expressed concern regarding school psychologists' ability to provide services given time limitations and perceived lack of expertise in this area.

Finally, when compared to the response rates for the aforementioned open-ended survey questions, very few teachers responded to the open-ended question regarding school counselors. The sentiments teachers shared echoed those shared regarding school psychologists in that many teachers endorsed the inclusion of school counselors on a multidisciplinary team designed to support students experiencing child traumatic stress. A few teachers reported a desire for counselors to provide more direct service to students in need and others expressed concern regarding the amount of time school counselors have available to provide these services.

Research Question 1c: What are Teachers' Perceptions of their Self-Efficacy in Supporting Students Experiencing Child Traumatic Stress?

In the *Self-Efficacy* section of the survey, teachers were first asked to rate their level of confidence in meeting the needs of the individual students in their class who may be experiencing symptoms of traumatic stress while also meeting the needs of the class as a whole. Survey respondents used a five-point Likert scale to rate their level of confidence with *one* indicating the teacher is not at all confident, *three* representing neutral opinion, and *five* indicating the teacher is very confident. In all three areas assessed, teachers reported neutral levels of self-efficacy ($M_{recognize\ symptoms}$ = 3.03, *SD* = 1.09; $M_{balance\ needs}$ = 2.98, *SD* = 1.03; $M_{referral}$ = 2.82, *SD* = 1.21).

The aforementioned five-point Likert scale was also used to assess teachers' confidence in their ability to meet the academic, emotional, and behavioral needs of students experiencing traumatic stress. Teachers generally described themselves as neutral to mostly confident in their ability to support students in these areas. Survey respondents described themselves as most confident in their ability to provide additional academic support (M = 3.63, SD = .96) followed by behavioral support (M = 3.15, SD = 1.08). Teachers endorsed feeling least confident in their ability to emotionally support students displaying symptoms of child traumatic stress (M = 3.06, SD = 1.04).

Finally, survey respondents were also asked to share their perceptions of the knowledge and skills they possess specific to child traumatic stress. Using a five-point Likert scale (1 = strongly disagree, 3 = neutral, and 5 = strongly agree), teachers endorsed the degree to which they believe they have a foundational understanding of child traumatic stress and the skills to apply this knowledge in their work with students. Survey respondents expressed neutral opinions regarding their knowledge and skill level ($M_{\text{knowledge}}$ = 3.05, SD = .99; M_{skill} = 3.18, SD = .94).

When provided the opportunity to elaborate on their perceptions of self-efficacy, teachers shared numerous factors that influence their confidence in their ability to support children experiencing symptoms of traumatic stress. First, many teachers endorsed the need for multidisciplinary support systems, as evidenced in the following examples:

> I am confident in my ability to recognize when a student is going through traumatic stress. However, there is always a chance a student can fall through the cracks. That's where the entire school staff needs to work together to help target individuals needing help.

> Most of my confidence comes from knowing that we function as a team with the counselor and school psychologist. I wouldn't be the only person making decisions for the student in the event of a traumatic situation, so that helps me feel more comfortable about it.

Several teachers also shared the impact of outside training and personal experience on their levels of self-efficacy. A few teachers indicated they have independently sought trauma-specific training outside of the school setting, as described in the following examples:

> I have received a master's [degree] in behavior and emotional disorders to have more expertise in this area than many of my colleagues.

> I am licensed foster parent and have been trained with dealing with trauma. I think my school does poorly on the subject of working with kids with trauma. I am glad I got the training elsewhere.

Additionally, a few teachers referenced personal experiences with traumatic events as influential in their approach to addressing the needs of students. Examples of these sentiments are described here:

> My ability to handle students experiencing trauma comes from personal experience, not training.

> My confidence lies in my own experience with childhood traumatic stress vs. any additional training.

Finally, a small number of teachers described their length of employment as a factor that influences their level of self-efficacy. One teacher's sentiments are described here:

> The more experiences I have dealt with the better I feel I am able to help others in the future. However, I am now finishing 11 years in the field, and I know better training prior to my first year of teaching is what our students deserve to have in our schools.

Overall, responses to this question suggest teachers feel more confident in their abilities when they are a member of a decision-making team as opposed to independently

responsible for meeting students' needs. Furthermore, teachers appear to view non-formal training (i.e., personal and classroom experience) and outside formal training (e.g, advanced degree courses) as more impactful than the training received in their teaching training programs or provided by their employers.

Teachers' Perceptions of Trauma Training

Survey participants endorsed a range of pre- and in-service training experiences. Approximately 45% of participants (n = 147) indicated they received no training in childhood trauma while earning their teaching license or certification. Similarly, nearly half of participants (n = 160) reported their teacher education programs provided no training on how to support students experiencing child traumatic stress. In contrast, approximately 43% of survey respondents (n = 140) indicated they have received some trauma-specific training while employed as a teacher. Additionally, approximately 42% of teachers (n = 137) endorsed receiving some in-service training on supporting students who display symptoms of child traumatic stress.

Trauma-specific pre-service training. Participants were asked to rate the amount of trauma-specific training they received while earning their teaching license or certification. Participants endorsed the amount of training on a five-point Likert scale with *one* representing no training, *three* representing some training, and *five* indicating a large amount of pre-service training. When asked to reflect on the amount of pre-service training received specific to childhood trauma, survey respondents indicated they had access to little training in this area (M_{amount} = 1.82, SD = .86). Similarly, teachers reported

they participated in minimal amounts of pre-service training specific to supporting students experiencing symptoms of child traumatic stress (M_{amount} = 1.71, *SD* = .80).

Kruskal-Wallis tests were used to determine whether pre-service training amount varied based on years of teaching experience: early career (0-9 years, *n* = 118), mid-career (10-19 years, *n* = 117) and late career (20+ years, *n* = 91). Results of these tests revealed significant differences ($x^2(2) = 17.994$, $p < .0005$) among groups. *Post-hoc* pairwise comparison (with Bonferroni correction for multiple comparisons) indicated significant differences exist between the pre-service trauma training received by early career teachers (mean rank = 185.25) when compared to mid-career (mean rank = 149.88, $p < .0005$) and late-career (mean rank = 152.80, $p = .003$) teachers. Table 11 summarizes these findings.

Table 11. Years of Experience and Pre-Service Training Amount

	Mean Rank	x^2	*df*	*p*
Years of Experience (*n* = 326)		17.994	2	.000***
0 – 9 years (*118*)	185.25	--	--	--
10 – 19 years (*117*)	149.88	--	--	--
20 + years (*91*)	152.80	--	--	--

Note. *** $p < .0005$

Teachers were also asked to rate their perceptions of the adequacy of trauma-specific pre-service training and their overall satisfaction with the training received. Participants ranked their perceptions of adequacy on a five-point Likert scale with *one* representing inadequate training, *three* representing a neutral response, and *five* indicating adequate training. Teachers reported they viewed pre-service trauma training as inadequate ($M_{adequacy}$ = 2.09, *SD* = .88) in preparing them to support students

experiencing child traumatic stress and endorsed dissatisfaction with the pre-service training received in these areas ($M_{satisfaction}$ = 2.34, *SD* = .87).

Analysis of the qualitative responses regarding pre-service trauma training revealed two overarching themes. First, many teachers emphasized the number of years that have passed since they received pre-service training. More specifically, teachers described a presumed difference in the type of pre-service training they received and the pre-service training currently provided by teacher training programs, as noted in the following examples:

> My training took place over 40 years ago, and [childhood trauma] was not of prime interest.
>
> I completed my BA in 1988, so I hope things have changed since then.
>
> I was in undergraduate school 35 years ago. I am certain this kind of training is better now.
>
> I received my undergraduate degree in 1975. We discussed children who may have had traumatic experiences but never really discussed what I should do. Basically, we were taught to leave that up to counselors.

A second theme that emerged from the data centered on learning through experience. Several teachers stated they received little or no pre-service trauma training and were instead educated through their daily interactions with students or colleagues. As one teacher described:

> While we were introduced to a few aspects of child trauma, I don't recall in-depth analysis of methods of intervention. Most of my awareness of intervention came when I was hired as a teacher. It was in that setting that I learned the support my district offered to students.

Outside of these major themes, a few participants indicated they view pre-service trauma training as essential to the preparation of classroom teachers. For example, one survey respondent explained:

> Experiencing situations firsthand while student teaching provided me with opportunities to learn prior to graduating from my undergraduate program. However, it needed to be taught, discussed and practiced before going out in the schools.

Though several teachers expressed disappointment in the lack of trauma-specific pre-service training they received, a few respondents expressed doubt in the necessity of such training. For example, as these teachers explained:

> Overall, when attending college for teaching, I will say that my professors tried their best to bring awareness to so many different things we may encounter. It is difficult for me to believe that my schooling could have prepared me for every situation I've encountered with students and families.

> While the pre-service training was almost "none", I am not sure that the information would have done much good without some context. There are so many stories and personalities (determining needs) that a cookie-cutter response would not do me much good.

These themes – in conjunction with teachers' quantitative responses – highlight the limited amount of trauma-specific training teachers receive prior to entering the classroom. Furthermore, teachers' responses suggest participation in trauma-related training may be helpful to pre-service teachers.

Trauma-specific in-service training. To gather information regarding participants' perceptions of the trauma-specific training they received while employed as a teacher, participants were asked questions comparable to the pre-service training questions previously described. Using the five-point Likert scales detailed above, participants reported minimal amounts of in-service training regarding childhood trauma

(M_{amount} = 2.51, *SD* = 1.0) as well as minimal amounts of in-service training specific to supporting students experiencing symptoms of child traumatic stress (M_{amount} = 2.51, *SD* = .98).

Kruskal-Wallis tests were used to assess differences in the amount of in-service trauma training received based on varying degrees of teaching experience: early career (0-9 years, *n* = 118), mid-career (10-19 years, *n* = 117) and late career (20+ years, *n* = 91). Results of these tests revealed significant differences did not exist among groups, ($x^2(2) = 1.397$, $p = .497$). Table 12 summarizes these findings.

Table 12. Years of Experience and In-Service Training Amount

	Mean Rank	x^2	*df*	*p*
Years of Experience (*n* = 326)		1.397	2	.497
0 – 9 years (*118*)	157.47	--	--	--
10 – 19 years (*117*)	163.26	--	--	--
20 + years (*91*)	171.62	--	--	--

When prompted to rate the adequacy of their in-service training in these areas, teachers reported slightly higher levels of perceived adequacy as compared to the adequacy of pre-service trauma training ($M_{adequacy}$ = 2.81, *SD* = 1.0). Teachers also endorsed slightly higher levels of satisfaction with trauma training received while employed as a teacher ($M_{satisfaction}$ = 2.86, *SD* = .98) as compared to training received while earning their teaching licensure.

When provided the opportunity to share their perspectives on in-service trauma training experiences, teachers shared a wealth of information. Teachers described not only the types of training they have received but also the limitations of their in-service

training, the barriers they face in supporting students, and the areas in which they are seeking additional knowledge.

Teachers shared the types of in-service training their schools have provided and offered insight into the context of those trainings. For example, a few respondents described their training opportunities as taking place online or via interactive video. Topics referenced by survey respondents included suicide, depression, abuse, and accidents. Furthermore, multiple teachers noted trauma-specific in-service training opportunities were in response to potentially traumatic events such school shootings or student suicides.

With these training opportunities in mind, a small number of respondents expressed satisfaction with the training they received and confidence in their ability to support students demonstrating symptoms of child traumatic stress. A few teachers explained:

> I feel like even though my knowledge may be minimal, I know the resources to use within my district and am confident I would have the support I need.
>
> [I am] satisfied to the point that I have an idea as to how to handle some situations and what to do if there are more difficult situations that may need someone with more experience.

These responses speak to the team-based assistance teachers experience in the school setting and suggest teachers view themselves as one facet of a larger network of student support. As one teacher described:

> The formal in-service training has not been as effective as team meetings. Pulling a group together where we are given background information and we as a team can discuss, problem solve and create a plan has been most beneficial.

Though a few survey respondents shared confidence in their abilities, most teachers who responded to this open-ended question expressed a desire and need for more trauma-specific in-service training opportunities. As an example, one teacher explained:

> I have worked with multiple students in these situations and have often wished for support and answers that address their classroom needs. What are other schools doing to address these needs? How can teachers be expected to act as daily psychologists for them without training?

Teachers who endorsed a need for additional training opportunities described the rationale for this type of training. A few teachers indicated in-service trauma training is needed in response to the evolving life experiences of children and adolescents, as noted here:

> I think some teachers are in denial or have no idea what circumstances some children have endured outside of school and to what extent this impacts their work in the classroom.
>
> I would love to see more training for all teachers. Lives seem to be changing drastically and we are not prepared to handle or help these students in need.
>
> In the last five years I have seen more students in my classes that have experienced trauma. Although this is evident, for the most part the district has not addressed or has failed to support myself as a professional working with these students. It is either assumed that we have the expertise to help these students, or their needs are downplayed or ignored.

Several others reported receiving ample training on the symptoms of child traumatic stress and insufficient amounts of training on how to support these students in the classroom. The following teachers described this gap in their in-service trauma training:

> There has been plenty of addressing what childhood trauma is and how it affects a child. There is little information about what to do about it.
>
> We are always told to report anything to the administration or counselors. However, we are still not trained on how to identify trauma or help those kids learn in our classrooms.

> We are taught how to identify child abuse, but not really how to deal with the effects of it. Normally we are taught to let the counselor handle situations like that.

Though not directly related to in-service trauma training, several teachers used this open-ended question to describe the barriers they face in supporting students who have experienced potentially traumatic events. Several teachers expressed frustration with the lack of knowledge they are typically provided regarding students' life experiences. (As previously noted, these respondents are unique from those who made similar statements in the Student Needs and Staff Roles sections of the survey.) A few teachers explained:

> The trauma information comes very slowly and after the fact. The office or psychologist seem to know but the classroom teachers do not always know until we are in crisis in the classroom.

> For [the] privacy of families, student backgrounds are not always communicated from year-to-year, making it difficult to understand the needs of students.

Teachers' qualitative responses regarding in-service trauma training align with the aforementioned quantitative results and suggest teachers perceive a need for additional trauma-specific in-service training. For some, trauma psychoeducation is needed; for others, training specific to addressing student needs in the classroom is preferred.

Comparisons between Variables

Inferential statistics were used to determine whether significant differences existed among groups of teacher participants. The following section describes the results of inferential analyses and is organized by research question.

Research Question 2a: Do Differences in Teachers' Perceptions of the Needs of Students Experiencing Child Traumatic Stress Exist Based on Teaching Experience?

Kruskal-Wallis H tests were conducted to assess for differences in perception of student need (academic, emotional, and behavioral) between three groups of participants with varying degrees of teaching experience: early career (0-9 years, $n = 119$), mid-career (10-19 years, $n = 117$) and late career (20+ years, $n = 91$).

Results of the Kruskal-Wallis tests revealed perception of student academic need varied significantly based on teaching experience, ($x^2(2) = 7.005$, $p = .030$). To further explore differences in perceptions of academic need between groups of teachers, *post-hoc* pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for comparisons. (All p-values presented in this chapter are adjusted p-values.) *Post-hoc* analysis revealed statistically significant differences between early career (mean rank = 154.05) and late career (mean rank = 183.32) groups of teachers ($p = .035$). Significant differences were not found when comparing the mid-career (mean rank = 159.09) group to the early- or late-career groups. Figure 2 illustrates these differences.

Kruskal-Wallis tests were also used to assess for differences in teachers' perceptions of students' emotional and behavioral needs. Results indicated perceptions of emotional needs were not significantly different between groups of early-, mid-, and late-career participants ($x^2(2) = 1.119$, $p = .571$). Similarly, significant differences in perceptions of behavioral needs were not found among groups ($x^2(2) = .338$, $p = .844$). A

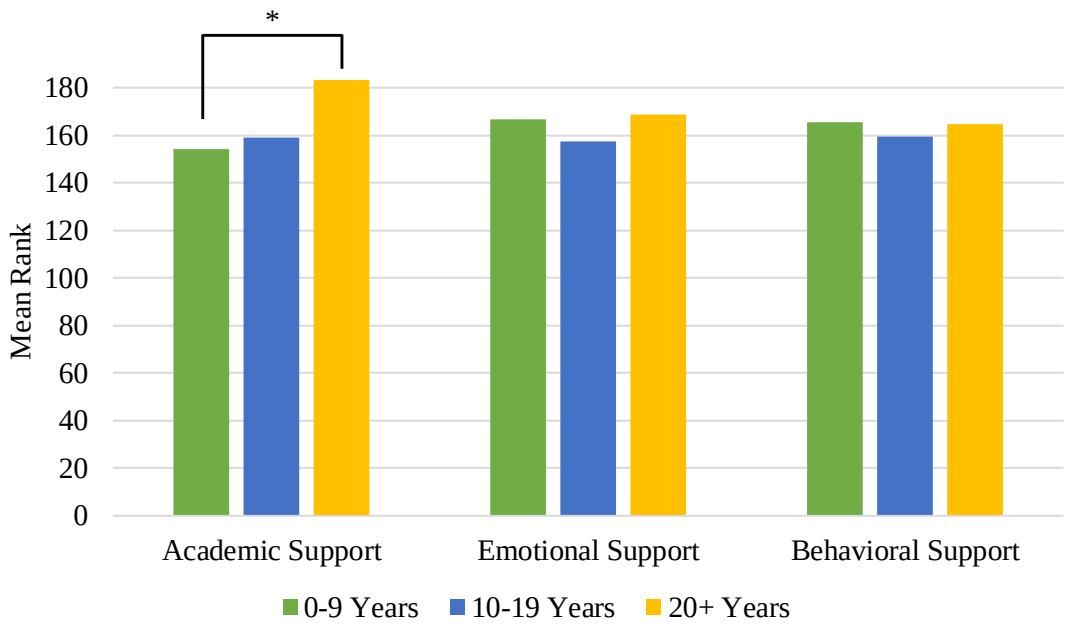
summary of Kruskal-Wallis results comparing years of experience and perception of student need is presented in Table 13.

Table 13. Years of Experience and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Academic (*n = 327*)		.7005	2	.030*
0 – 9 years (*119*)	154.05	--	--	--
10 – 19 years (*117*)	159.09	--	--	--
20 + years (*91*)	183.32	--	--	--
Emotional (*n = 326*)		1.119	2	.571
0 – 9 years (*118*)	166.81	--	--	--
10 – 19 years (*117*)	157.57	--	--	--
20 + years (*91*)	168.60	--	--	--
Behavioral (*n = 327*)		.338	2	.844
0 – 9 years (*119*)	165.43	--	--	--
10 – 19 years (*117*)	159.36	--	--	--
20 + years (*91*)	164.48	--	--	--

Note. * $p < .05$

Figure 2. Years of Experience and Perception of Student Need



Note. * $p < .05$

Research Question 2b: Do Differences in Teachers' Perceptions of their Role in Supporting Students Experiencing Child Traumatic Stress Exist Based on Teaching Experience?

Additional inferential tests were conducted to determine if participants' perceptions of their role in the classroom varied based on years of teaching experience. Kruskal-Wallis tests found no significant group differences in teachers' perceptions of their role in providing academic ($x^2(2) = 2.935$, $p = .230$) or behavioral ($x^2(2) = 4.167$, $p = .124$) support to students experiencing child traumatic stress. In contrast, the Kruskal-Wallis test revealed participants' perceptions of their role in providing emotional support to these students differed significantly based on years of teaching experience, $x^2(2) = 7.431$, $p = .024$. Table 14 summarizes these findings.

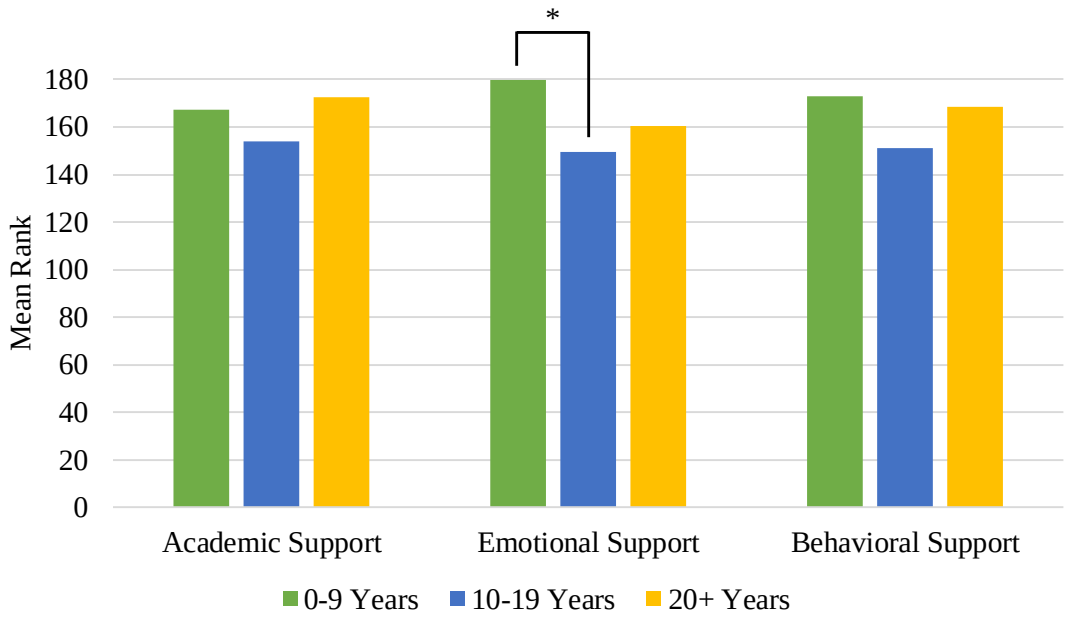
Table 14. Years of Experience and Perception of Teacher Role

	Mean Rank	x^2	*df*	*p*
Academic (*n = 327*)		2.935	2	.230
0 – 9 years (*119*)	167.20	--	--	--
10 – 19 years (*117*)	154.07	--	--	--
20 + years (91)	172.58	--	--	--
Emotional (*n = 326*)		7.431	2	.024*
0 – 9 years (*118*)	179.79	--	--	--
10 – 19 years (*117*)	149.59	--	--	--
20 + years (*91*)	160.26	--	--	--
Behavioral (*n = 327*)		4.167	2	.124
0 – 9 years (*119*)	172.99	--	--	--
10 – 19 years (*117*)	151.30	--	--	--
20 + years (*91*)	168.57	--	--	--

Note. * $p < .05$

Group differences specific to years of experience and teachers' role in providing emotional support were explored using Dunn's procedure. Significant differences were found between early-career (mean rank = 179.79) and mid-career (mean rank = 149.59) teachers, p = .021. These findings suggest participants in earlier stages of their career, when compared to mid-career participants, were more likely to view themselves as responsible for providing emotional support to students experiencing symptoms of child traumatic stress. Statistically significant differences were not found when comparing mid-career (mean rank = 149.59) and late-career (mean rank = 160.26) survey respondents (p = 1.0) or when comparing early-career (mean rank = 179.79) and late-career respondents (p = .310). Figure 3 depicts the results of these pairwise comparisons.

Figure 3. Years of Experience and Perception of Teacher Role



Note. * $p < .05$

Research Question 2c: Do Differences in Teachers' Perceptions of their Self-Efficacy in Supporting Students Experiencing Child Traumatic Stress Exist Based on Teaching Experience?

In the final analysis of teaching experience, inferential statistics were used to explore whether participants' levels of self-efficacy in the classroom differed based on the participants' status as an early-career, mid-career, or late-career professional. Kruskal-Wallis tests demonstrated no group differences in teachers' reported self-confidence in meeting the academic ($x^2(2) = 3.950$, $p = .139$) and emotional ($x^2(2) = 2.243$, $p = .326$) needs of students demonstrating symptoms of child traumatic stress. However, teachers' confidence in their ability to provide behavioral support to students demonstrating these symptoms did vary as a result of teaching experience, $x^2(2) = 6.658$, $p = .036$. Table 15 provides a detailed summary of these findings.

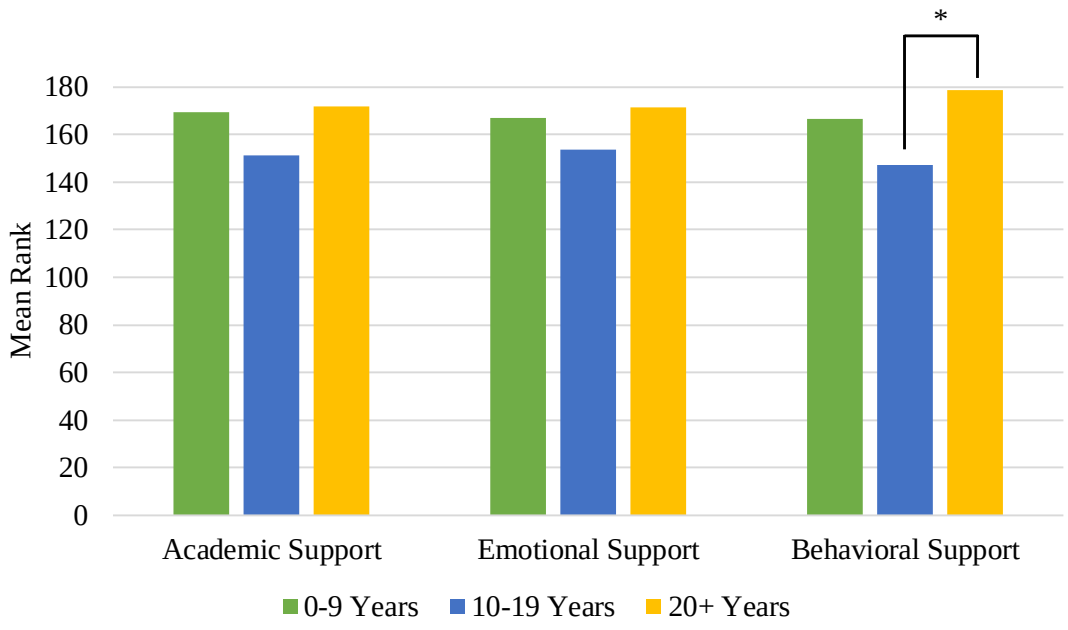
Table 15. Years of Experience and Perception of Self-Efficacy

	Mean Rank	x^2	*df*	*p*
Academic (*n = 326*)		3.950	2	.139
0 – 9 years (*118*)	169.28	--	--	--
10 – 19 years (*117*)	151.11	--	--	--
20 + years (*91*)	171.95	--	--	--
Emotional (*n = 326*)		2.243	2	.326
0 – 9 years (*119*)	167.10	--	--	--
10 – 19 years (*117*)	153.76	--	--	--
20 + years (*90*)	171.40	--	--	--
Behavioral (*n = 325*)		6.658	2	.036*
0 – 9 years (*117*)	166.42	--	--	--
10 – 19 years (*117*)	147.24	--	--	--
20 + years (*91*)	178.86	--	--	--

Note. * $p < .05$

Post-hoc pairwise comparisons of means illustrated significant differences (p = .034) between the confidence levels of mid-career teachers (mean rank = 147.24) and their late-career colleagues (mean rank = 178.86), p = .034. In contrast, differences between early- and mid-career participants (p = .303) and between early- and late-career survey respondents (p = .960) were not statistically significant. Figure 4 summarizes the results of these pairwise comparisons.

Figure 4. Years of Experience and Perception of Self-Efficacy



Note. * $p < .05$

Research Question 3a: Do Differences in Teachers' Perceptions of the Needs of Students Experiencing Child Traumatic Stress Exist Based on Teaching Setting?

Survey respondents' teaching settings were measured using two variables: school location (urban and suburban) and school type (elementary, middle, and high school). Inferential analyses, specifically Kruskal-Wallis tests, were used to assess for differences

in teachers' perceptions of student academic, emotional, and behavioral needs based on teaching setting.

School location. Results of the Kruskal-Wallis tests demonstrated no significant group differences when comparing school location and teachers' perceptions of the academic needs of students experiencing child traumatic stress, $x^2(1) = .004$, $p = .947$. Similarly, significant group differences were not found when comparing school location and respondents' perceptions of emotional ($x^2(1) = 1.020$, $p = .313$) and behavioral ($x^2(1) = .003$, $p = .955$) needs. These results are summarized in Table 16.

Table 16. School Location and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Perception of Student Need				
Academic (*n = 319*)		.004	1	.947
Urban (*61*)	159.38	--	--	--
Suburban (*258*)	160.15	--	--	--
Emotional (*n = 319*)		1.020	1	.313
Urban (*61*)	150.58	--	--	--
Suburban (*258*)	162.23	--	--	--
Behavioral (*n = 317*)		.003	1	.955
Urban (*61*)	158.46	--	--	--
Suburban (*256*)	159.13	--	--	--

School type. Kruskal-Wallis tests revealed teachers' perceptions of student need varied significantly based on school type (elementary, middle, and high school). Though, significant differences among elementary, middle, and high school teachers were not apparent when considering teachers' perceptions of students' academic needs ($x^2(1) = 5.972$, $p = .050$), significant differences in teachers' perceptions of students' emotional

and behavioral needs were found. Kruskal-Wallis test results specific to school type and perception of need are illustrated in Table 17.

Table 17. School Type and Perception of Student Need

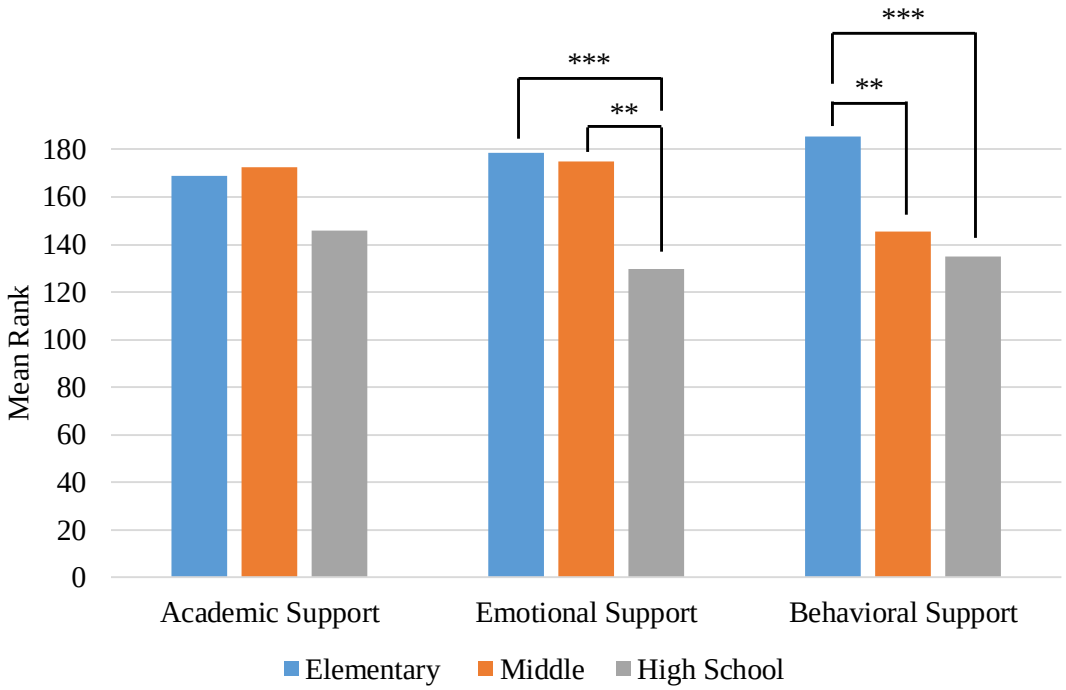
	Mean Rank	x^2	*df*	*p*
Academic (*n = 324*)		5.972	2	.051
Elementary (*155*)	168.79	--	--	--
Middle (*68*)	172.68	--	--	--
High (*101*)	146.00	--	--	--
Emotional (*n = 324*)		23.565	2	.000*
Elementary (*155*)	178.42	--	--	--
Middle (*68*)	175.08	--	--	--
High (*101*)	129.60	--	--	--
Behavioral (*n = 322*)		24.758	2	.000*
Elementary (*155*)	185.36	--	--	--
Middle (*68*)	145.68	--	--	--
High (*99*)	135.02	--	--	--

Note. * $p < .0005$

Kruskal-Wallis tests revealed participants' perceptions of the emotional needs of students experiencing child traumatic stress differed based on school type, $x^2(2) = 24.565$, $p < .0005$. To further explore differences in perceptions of emotional need between groups of teachers, *post-hoc* pairwise comparisons were performed using Dunn's procedure with a Bonferroni correction for multiple comparisons. Significant differences were noted between high school (mean rank = 129.60) and middle school teachers (mean rank = 175.08), $p = .001$. In addition, significant differences were found between high school and elementary school teachers (mean rank = 178.42), $p < .0005$. Differences between middle and elementary school teachers were not significant, $p = 1.00$.

Additionally, when exploring teachers' perceptions of the behavioral needs of children experiencing symptoms of child traumatic stress, Kruskal-Wallis tests demonstrated significant differences among groups of teachers based on school type, $x^2(2) = 24.758$, $p < .0005$. *Post-hoc* analysis of pairwise comparisons revealed significant differences when comparing the perceptions of elementary school teachers (mean rank = 185.36) to middle school teachers (mean rank = 145.68) and to high school teachers (mean rank = 135.02), $p = .003$ and $p < .0005$, respectively. Statistically significant differences were not observed between high school and middle school teachers, $p = 1.00$. Figure 5 illustrates the results of these comparisons.

Figure 5. School Type and Perception of Student Need



Note. ** $p < .005$; *** $p < .0005$

Research Question 3b: Do Differences in Teachers' Perceptions of their Role in Supporting Students Experiencing Child Traumatic Stress Exist Based on Teaching Setting?

As previously noted, survey respondents' teaching settings were measured using two variables: school location (urban and suburban) and school type (elementary, middle, and high school). Inferential analyses, specifically Kruskal-Wallis tests, were used to assess the relationships between teachers' settings and teachers' perceptions of their role in providing academic, emotional, and behavioral support to students experiencing child traumatic stress.

School location. Kruskal-Wallis tests were used to determine whether teachers' perceptions of their role in providing academic ($x^2(1) = .476$, $p = .490$), emotional (x^2 (1) = .127, $p = .722$), or behavioral (x^2 (1) = .783, $p = .376$) support differed based on school location. Significant differences based on school location were not found. A summary of tests results specific to school location and perception of role are provided in Table 18.

Table 18. School Location and Perception of Teacher Role

	Mean Rank	x^2	*df*	*p*
Academic (*n = 319*)		.476	1	.490
Urban (*61*)	153.68	--	--	--
Suburban (*258*)	161.49	--	--	--
Emotional (*n = 318*)		.127	1	.722
Urban (*61*)	156.06	--	--	--
Suburban (*257*)	160.32	--	--	--
Behavioral (*n = 319*)		.783	1	.376
Urban (*61*)	151.52	--	--	--
Suburban (*258*)	162.01	--	--	--

School type. Kruskal-Wallis tests were used to determine whether teachers' perception of student need differed based on school type (elementary, middle, or high school). Differences were not significant when analyzing teachers' perceptions of their role in providing academic support. However, perceptions of teachers' role in providing emotional and behavioral support varied significantly based on school type, $x^2(2) = 20.479$, $p < .0005$ and $x^2(2) = 8.429$, $p = .015$, respectively. Table 19 provides a summary of these findings.

Table 19. School Type and Perception of Teacher Role

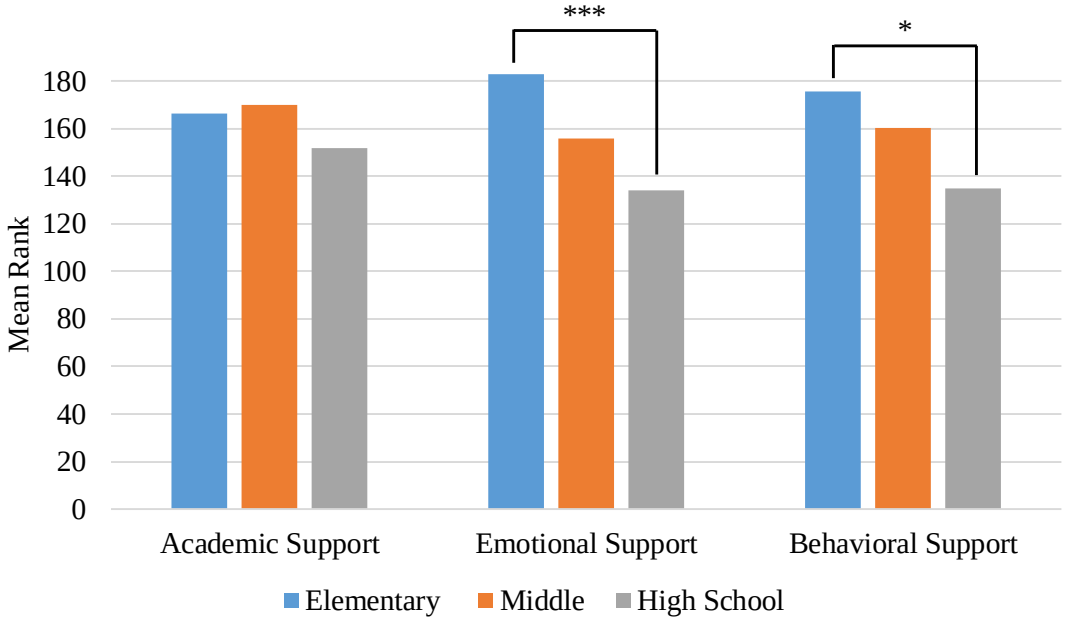
	Mean Rank	x^2	*df*	*p*
Academic (*n = 324*)		2.764	2	.251
Elementary (*155*)	166.35	--	--	--
Middle (*68*)	169.82	--	--	--
High (*101*)	151.66	--	--	--
Emotional (*n = 323*)		20.479	2	.000***
Elementary (*155*)	182.76	--	--	--
Middle (*68*)	156.02	--	--	--
High (*100*)	133.89	--	--	--
Behavioral (*n = 324*)		8.439	2	0.15*
Elementary (*155*)	175.45	--	--	--
Middle (*68*)	160.21	--	--	--
High (*101*)	144.16	--	--	--

Note. * $p < .05$; *** $p < .0005$

Post-hoc pairwise comparisons of teachers' views specific to the provision of emotional support revealed significant differences between high school (mean rank = 133.89) and elementary school (mean rank = 182.76) teachers, $p = < .0005$. Statistically significant differences were not found when comparing middle school teachers (mean rank = 156.02) to elementary or high school teachers, $p = 0.92$ and $p = .294$, respectively.

As previously noted, statistically significant differences were also revealed when a Kruskal-Wallis test was conducted to explore relationships between school type and respondents' perceptions of their role in providing behavioral support, $x^2(2) = 8.429$, $p = .015$. *Post-hoc* pairwise comparisons indicated significant differences between high school (mean rank = 144.16) and elementary school (mean rank = 175.45) teachers, $p = .011$. When comparing middle school teachers to high school and elementary school teachers, significant differences were not found. These results indicate elementary school teachers who responded to the survey, when compared to high school respondents, were more likely to view themselves as responsible for providing behavioral supports to children experiencing the effects of traumatic stress. Figure 6 illustrates differences in teachers' perceptions of their role based on school type.

Figure 6. School Type and Perception of Teacher Role



Note. * $p < .05$; *** $p < .0005$

Research Question 3c: Do Differences in Teachers' Perceptions of their Self-Efficacy in Supporting Students Experiencing Child Traumatic Stress Exist Based on Teaching Setting?

In the final analysis of teaching setting, Kruskal-Wallis tests, were used to assess the relationships between teaching setting and teachers' perceptions of their self-efficacy in providing academic, emotional, and behavioral support to students experiencing child traumatic stress.

School location. When comparing urban and suburban teachers, Kruskal-Wallis tests did not find significant differences in teachers' self-efficacy in providing academic ($x^2(1) = .671$, $p = .413$), emotional ($x^2(1) = .009$, $p = .923$), or behavioral ($x^2(1) = .315$, $p = .575$) support to this group of students. Table 20 details these results.

Table 20. School Location and Perception of Self-Efficacy

	Mean Rank	x^2	*df*	*p*
Perception of Self-Efficacy				
Academic (*n = 318*)		.671	1	.413
Urban (*61*)	167.28	--	--	--
Suburban (*257*)	157.65	--	--	--
Emotional (*n = 318*)		.009	1	.923
Urban (*60*)	158.51	--	--	--
Suburban (*258*)	159.73	--	--	--
Behavioral (*n = 317*)		.315	1	.575
Urban (*61*)	164.63	--	--	--
Suburban (*256*)	157.66	--	--	--

School type. Kruskal-Wallis tests were used to determine whether teachers' self-efficacy specific to the provision of academic, emotional, and behavioral support varied by school type. Though differences related to academic ($x^2(2) = 2.133$, $p = .344$) and

behavioral ($x^2(2) = 4.227$, $p = .121$) self-efficacy were insignificant, notable differences were found in regard to teachers' confidence in providing emotional ($x^2(2) = 6.491$, $p = .039$) support to students with symptoms of traumatic stress. Table 21 describes the results of these Kruskal-Wallis tests.

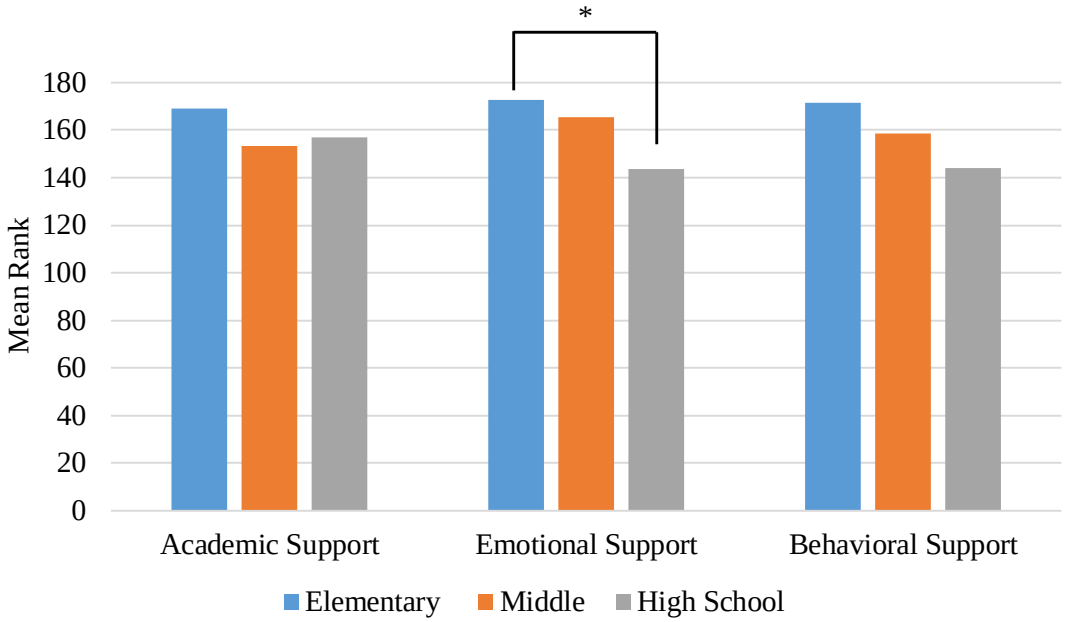
Table 21. School Type and Perception of Self-Efficacy

	Mean Rank	x^2	*df*	*p*
Academic (*n = 323*)		2.133	2	.344
Elementary (*155*)	168.96	--	--	--
Middle (*67*)	153.34	--	--	--
High (*101*)	157.06	--	--	--
Emotional (*n = 323*)		6.491	2	.039*
Elementary (*155*)	172.50	--	--	--
Middle (*67*)	165.37	--	--	--
High (*101*)	143.66	--	--	--
Behavioral (*n = 322*)		4.227	2	.121
Elementary (*154*)	171.41	--	--	--
Middle (*68*)	158.51	--	--	--
High (*100*)	148.28	--	--	--

Note. * $p < .05$

Post-hoc pairwise comparison of school type revealed significant differences between the reported self-efficacy of high school (mean rank = 143.66) and elementary school (mean rank = 172.50) teachers, $p = .035$. Similar differences were not noted when comparing middle school teachers to their elementary ($p = 1.00$) or high school ($p = .369$) counterparts. Figure 7 illustrates significant pairwise comparisons.

Figure 7. School Type and Perception of Self-Efficacy



Note. * $p < .05$

Research Question 4a: Do Differences in Teachers' Perceptions of the Needs of Students Experiencing Child Traumatic Stress Exist Based on Trauma Training?

Survey respondents provided information regarding the amount of pre-service and in-service trauma training they received as well as their perceptions of the adequacy of this training. Participants also shared their level of satisfaction with the pre-service and in-service trauma training they received. Kruskal-Wallis tests were used to determine whether perceptions of student need differed based on teachers' perceptions of their training.

Training amount. Kruskal-Wallis tests were used to determine whether differences in teachers' perceptions of student academic ($x^2(2) = 1.63$, $p = .922$), emotional ($x^2(2) = 1.024$, $p = .599$), and behavioral ($x^2(2) = 1.230$, $p = .541$) need varied as a result of the amount of trauma training received during their teacher training program

(pre-service). Significant differences were not found. Similarly, Kruskal-Wallis tests revealed teachers' perceptions of students' academic ($x^2(2) = .184$, $p = .912$), emotional ($x^2(2) = .426$, $p = .808$), and behavioral ($x^2(2) = .053$, $p = .974$) need did not vary based on the reported amount of in-service trauma training received. Table 22 details the results of these analyses.

Table 22. Training Amount and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Pre-Service Training				
Academic (*n = 326*)		.163	2	.922
Small Amount (*248*)	163.11	--	--	--
Moderate Amount (*69*)	166.00	--	--	--
Large Amount (*9*)	154.94	--	--	--
Emotional (*n = 326*)		1.024	2	.599
Small Amount (*248*)	165.73	--	--	--
Moderate Amount (*69*)	154.65	--	--	--
Large Amount (*9*)	169.54	--	--	--
Behavioral (*n = 324*)		1.230	2	.541
Small Amount (*247*)	164.58	--	--	--
Moderate Amount (*69*)	153.29	--	--	--
Large Amount (*8*)	177.75	--	--	--
In-Service Training Amount				
Academic (*n = 326*)		.184	2	.912
Small Amount (*146*)	161.64	--	--	--
Moderate Amount (*140*)	165.76	--	--	--
Large Amount (*40*)	162.38	--	--	--
Emotional (*n = 326*)		.426	2	.808
Small Amount (*146*)	165.08	--	--	--
Moderate Amount (*140*)	160.33	--	--	--
Large Amount (*40*)	168.84	--	--	--
Behavioral (*n = 324*)		.053	2	.974
Small Amount (*144*)	163.46	--	--	--

Moderate Amount (*140*)	161.26	--	--	--
Large Amount (*40*)	163.39	--	--	--

Training adequacy. No significant group differences were found when analyzing perceptions of academic ($x^2(2) = 2.574$, $p = .276$), emotional ($x^2(2) = .607$, $p = .738$), or behavioral ($x^2(2) = .967$, $p = .617$) needs based on teachers' perceptions of the adequacy of their pre-service trauma training. Similarly, significant differences were not found when analyzing perceptions of academic ($x^2(2) = 1.127$, $p = .569$), emotional ($x^2(2) = 5.066$, $p = .079$), or behavioral ($x^2(2) = 2.442$, $p = .295$) needs based on the adequacy of in-service trauma training. These results are summarized in Table 23.

Table 23. Training Adequacy and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Pre-Service Training				
Academic (*n = 326*)		.489	2	.783
Low Adequacy (*243*)	163.27	--	--	--
Moderate Adequacy (*55*)	168.68	--	--	--
High Adequacy (*28*)	155.32	--	--	--
Emotional (*n = 326*)		5.953	2	.051
Low Adequacy (*243*)	170.01	--	--	--
Moderate Adequacy (*55*)	145.65	--	--	--
High Adequacy (*28*)	142.04	--	--	--
Behavioral (*n = 324*)		2.083	2	.353
Low Adequacy (*242*)	166.19	--	--	--
Moderate Adequacy (*55*)	148.28	--	--	--
High Adequacy (*27*)	158.43	--	--	--
In-Service Training				
Academic (*n = 326*)		1.127	2	.569
Low Adequacy (*135*)	167.24	--	--	--
Neutral Adequacy (*97*)	165.64	--	--	--
High Adequacy (*94*)	155.91	--	--	--

Emotional (*n = 326*)		5.066	2	.079
Low Adequacy (*135*)	175.74	--	--	--
Neutral Adequacy (*97*)	155.65	--	--	--
High Adequacy (*94*)	154.01	--	--	--
Behavioral (*n = 324*)		2.442	2	.295
Low Adequacy (*134*)	170.95	--	--	--
Neutral Adequacy (*97*)	158.89	--	--	--
High Adequacy (*93*)	154.09	--	--	--

Training satisfaction. Kruskal-Wallis tests were used to analyze perceptions of student need based on teachers' satisfaction with the pre-service trauma training they received. Group differences were insignificant when exploring varying levels of satisfaction and teachers' perception of students' academic needs, $x^2(2) = 4.296$, $p = .117$. However, significant differences were noted specific to teachers' perceptions of the emotional ($x^2(2) = 10.321$, $p = .006$) and behavioral needs ($x^2(2) = 6.336$, $p = .042$) of students demonstrating symptoms of traumatic stress. Table 24 displays these results.

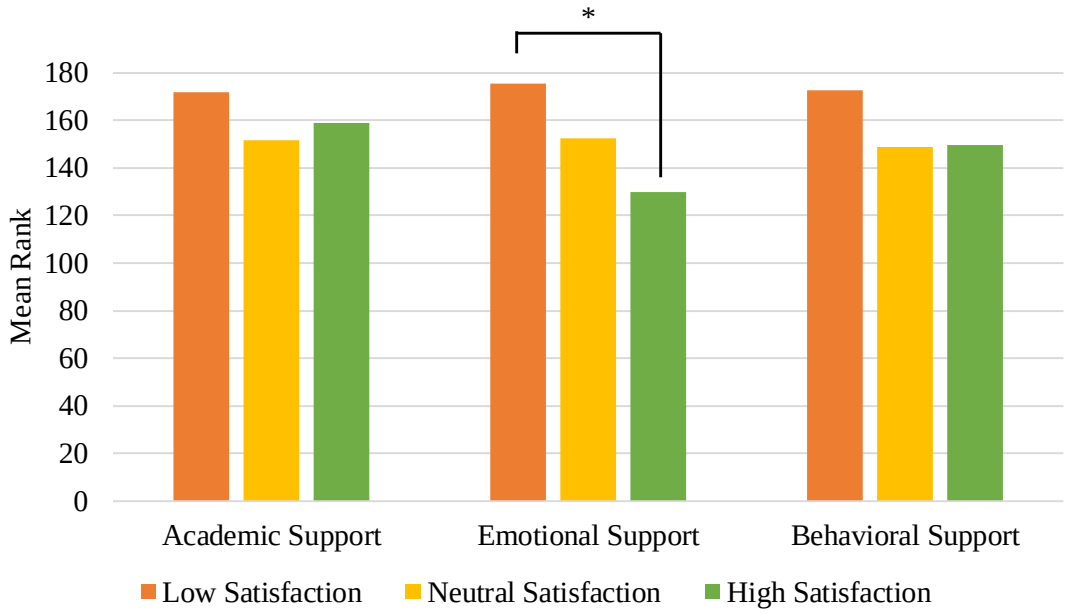
Table 24. Pre-Service Training Satisfaction and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Academic (*n = 326*)		4.296	2	.117
Low Satisfaction (*184*)	171.70	--	--	--
Neutral Satisfaction (*115*)	151.49	--	--	--
High Satisfaction (*27*)	158.78	--	--	--
Emotional (*n = 326*)		10.321	2	.006*
Low Satisfaction (*184*)	175.35	--	--	--
Neutral Satisfaction (*115*)	152.47	--	--	--
High Satisfaction (*27*)	129.72	--	--	--
Behavioral (*n = 324*)		6.336	2	.042*
Low Satisfaction (*184*)	172.80	--	--	--
Neutral Satisfaction (*114*)	148.77	--	--	--
High Satisfaction (*26*)	149.81	--	--	--

Note. * $p < .05$

Additional analysis of teachers' perceptions of the behavioral needs of these students revealed insignificant pairwise comparisons. However, *post-hoc* analysis of perceptions of emotional needs indicated significant differences between those who endorsed low levels (mean rank = 175.35) of satisfaction with the pre-service trauma training they received and those who reported high levels (mean rank = 129.72) of satisfaction, $p = .022$. Significant differences were not apparent when comparing those who endorsed moderate levels (mean rank = 152.47) of satisfaction with teachers in the High Satisfaction ($p = .596$) or Low Satisfaction ($p = .060$) groups. Figure 8 displays these *post-hoc* results.

Figure 8. Pre-Service Training Satisfaction and Perception of Student Need



Note. * $p < .05$

In contrast to satisfaction with pre-service trauma training, Kruskal-Wallis tests revealed teachers' perceptions of students' academic ($x^2(2) = 1.971$, $p = .373$), emotional ($x^2(2) = 4.609$, $p = .100$), or behavioral ($x^2(2) = 1.966$, $p = .374$) needs did not vary based

on teachers' satisfaction with the in-service trauma training received. These results are summarized in Table 25.

Table 25. In-service Training Satisfaction and Perception of Student Need

	Mean Rank	x^2	*df*	*p*
Academic (*n = 326*)		1.971	2	.373
Low Satisfaction (*122*)	171.75	--	--	--
Neutral Satisfaction (*114*)	159.63	--	--	--
High Satisfaction (*90*)	157.22	--	--	--
Emotional (*n = 326*)		4.609	2	.100
Low Satisfaction (*122*)	176.05	--	--	--
Neutral Satisfaction (*114*)	157.82	--	--	--
High Satisfaction (*90*)	153.69	--	--	--
Behavioral (*n = 324*)		1.966	2	.374
Low Satisfaction (*121*)	170.98	--	--	--
Neutral Satisfaction (*113*)	158.21	--	--	--
High Satisfaction (*90*)	156.49	--	--	--

Research Question 4b: Do Differences in Teachers' Perceptions of their Role in Supporting Students Experiencing Child Traumatic Stress Exist Based on Trauma Training?

As previously described, survey respondents provided information regarding the amount of pre-service and in-service trauma training they received as well as their perceptions of the adequacy of this training. Participants also shared their level of satisfaction with the pre-service and in-service trauma training they received. Kruskal-Wallis tests were used to determine whether perceptions of teacher role differed based on teachers' perceptions of their training.

Training amount. Kruskal-Wallis tests revealed significant differences were not present when comparing amount of pre-service trauma training to participants'

perceptions of their role in providing academic ($x^2(2) = 2.158$, $p = .340$), emotional ($x^2(2) = 1.687$, $p = .430$), or behavioral ($x^2(2) = .122$, $p = .941$) support. Similarly, no significant group differences were found when analyzing the impact of in-service trauma training amount on teachers' perceptions of their role in providing academic ($x^2(2) = 1.416$ $p = .493$), emotional ($x^2(2) = 2.160$, $p = .340$), or behavioral ($x^2(2) = 3.381$, $p = .184$) support to children experiencing symptoms of traumatic stress. Table 26 illustrates these findings.

Table 26. Training Amount and Perception of Teacher Role

	Mean Rank	x^2	*df*	*p*
Pre-Service Training				
Academic (*n = 326*)		2.158	2	.340
Small Amount (*248*)	167.13	--	--	--
Moderate Amount (*69*)	152.91	--	--	--
Large Amount (*9*)	144.56	--	--	--
Emotional (*n = 325*)		1.687	2	.430
Small Amount (*247*)	160.39	--	--	--
Moderate Amount (*69*)	168.27	--	--	--
Large Amount (*9*)	194.28	--	--	--
Behavioral (*n = 326*)		.122	2	.941
Small Amount (*248*)	164.02	--	--	--
Moderate Amount (*69*)	160.83	--	--	--
Large Amount (*9*)	169.50	--	--	--
In-Service Training				
Academic (*n = 326*)		1.416	2	.493
Small Amount (*146*)	157.56	--	--	--
Moderate Amount (*140*)	168.48	--	--	--
Large Amount (*40*)	167.76	--	--	--
Emotional (*n = 325*)		2.160	2	.340
Small Amount (*145*)	155.99	--	--	--
Moderate Amount (*140*)	166.46	--	--	--
Large Amount (*40*)	176.30	--	--	--
Behavioral (*n = 326*)		3.381	2	.184

Small Amount (*146*)	154.04	--	--	--
Moderate Amount (*140*)	172.36	--	--	--
Large Amount (*40*)	167.01	--	--	--

Training adequacy. Results of Kruskal-Wallis tests indicated group differences were insignificant when comparing pre-service trauma training adequacy to teachers' perceptions of their role in providing academic ($x^2(2) = .489$, $p = .783$), emotional ($x^2(2) = 5.953$, $p = .051$), or behavioral ($x^2(2) = 2.083$, $p = .353$) support. Similarly, group differences were insignificant when comparing in-service trauma training adequacy to teachers' perceptions of their role in providing academic ($x^2(2) = .387$, $p = .824$), emotional ($x^2(2) = .231$, $p = .891$), or behavioral ($x^2(2) = .622$, $p = .733$) support. These results are summarized in Table 27.

Table 27. Training Adequacy and Perception of Teacher Role

	Mean Rank	x^2	*df*	*p*
Pre-Service Training				
Academic (*n = 326*)		2.574	2	.276
Low Adequacy (*243*)	167.70	--	--	--
Moderate Adequacy (*55*)	152.27	--	--	--
High Adequacy (*28*)	149.14	--	--	--
Emotional (*n = 325*)		.607	2	.738
Low Adequacy (*242*)	163.02	--	--	--
Moderate Adequacy (*55*)	157.71	--	--	--
High Adequacy (*28*)	173.21	--	--	--
Behavioral (*n = 326*)		.967	2	.617
Low Adequacy (*243*)	165.79	--	--	--
Moderate Adequacy (*55*)	153.28	--	--	--
High Adequacy (*28*)	163.70	--	--	--

In-Service Training				
Academic (*n = 326*)		.387	2	.824
Low Adequacy (*135*)	166.69	--	--	--
Neutral Adequacy (*97*)	160.22	--	--	--
High Adequacy (*94*)	162.30	--	--	--
Emotional (*n = 325*)		.231	2	.891
Low Adequacy (*134*)	160.63	--	--	--
Neutral Adequacy (*97*)	163.21	--	--	--
High Adequacy (*94*)	166.16	--	--	--
Behavioral (*n = 326*)		.622	2	.733
Low Adequacy (*135*)	160.23	--	--	--
Neutral Adequacy (*97*)	162.59	--	--	--
High Adequacy (*94*)	169.14	--	--	--

Training satisfaction. Kruskal-Wallis tests found teachers' perceptions of their role in providing academic ($x^2(2) = 3.262$, $p = .196$), emotional ($x^2(2) = .2.437$, $p = .296$), or behavioral ($x^2(2) = 2.148$, $p = .342$) support did not differ based on their satisfaction with pre-service trauma training. Similarly, teachers' perceptions of their role in providing academic ($x^2(2) = 1.104$ $p = .576$), emotional ($x^2(2) = .796$, $p = .672$), or behavioral ($x^2(2) = 1.925$, $p = .382$) support did not significantly differ based on in-service training satisfaction. Table 28 summarizes these results.

Table 28. Training Satisfaction and Perception of Teacher Role

	Mean Rank	x^2	*df*	*p*
Pre-Service Training				
Academic (*n = 326*)		3.262	2	.196
Low Satisfaction (*184*)	170.33	--	--	--
Neutral Satisfaction (*115*)	152.92	--	--	--
High Satisfaction (*27*)	162.04	--	--	--
Emotional (*n = 325*)		2.437	2	.296
Low Satisfaction (*183*)	168.27	--	--	--

Neutral Satisfaction (*115*)	152.99	--	--	--
High Satisfaction (*27*)	169.96	--	--	--
Behavioral (*n = 326*)		2.148	2	.342
Low Satisfaction (*184*)	168.96	--	--	--
Neutral Satisfaction (*115*)	154.20	--	--	--
High Satisfaction (*27*)	165.87	--	--	--
In-Service Training				
Academic (*n = 326*)		1.104	2	.576
Low Satisfaction (*122*)	167.07	--	--	--
Neutral Satisfaction (*114*)	157.06	--	--	--
High Satisfaction (*90*)	166.83	--	--	--
Emotional (*n = 325*)		.796	2	.672
Low Satisfaction (*121*)	164.85	--	--	--
Neutral Satisfaction (*114*)	157.42	--	--	--
High Satisfaction (*90*)	167.58	--	--	--
Behavioral (*n = 326*)		1.925	2	.382
Low Satisfaction (*122*)	162.09	--	--	--
Neutral Satisfaction (*114*)	157.09	--	--	--
High Satisfaction (*90*)	173.53	--	--	--

Research Question 4c: Do Differences in Teachers' Perceptions of their Self-Efficacy in Supporting Students Experiencing Child Traumatic Stress Exist Based on Trauma Training?

In the final analysis of group differences, Kruskal-Wallis tests were used to determine whether teachers' self-efficacy differed based on teachers' perceptions of the amount of trauma training received, the perceived adequacy of the training, and their satisfaction with the training.

Pre-service training amount. Results of the Kruskal-Wallis tests revealed teachers' self-efficacy in providing academic ($x^2(2) = 8.556$, $p = .014$), emotional ($x^2(2) =$

18.354, $p < .0005$), and behavioral ($x^2(2) = 12.764$, $p = .002$) support varied significantly based on the amount of pre-service trauma training received. Table 29 summarizes Kruskal-Wallis tests specific to pre-service training amount and teacher self-efficacy.

Table 29. Pre-Service Training Amount and Perception of Self-Efficacy

	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		8.556	2	.014*
Small Amount (*247*)	156.91	--	--	--
Moderate Amount (*69*)	176.10	--	--	--
Large Amount (*9*)	229.67	--	--	--
Emotional (*n = 325*)		18.354	2	.000***
Small Amount (*247*)	151.88	--	--	--
Moderate Amount (*69*)	192.27	--	--	--
Large Amount (*9*)	243.78	--	--	--
Behavioral (*n = 324*)		12.764	2	.002**
Small Amount (*246*)	154.16	--	--	--
Moderate Amount (*69*)	181.66	--	--	--
Large Amount (*9*)	243.56	--	--	--

Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

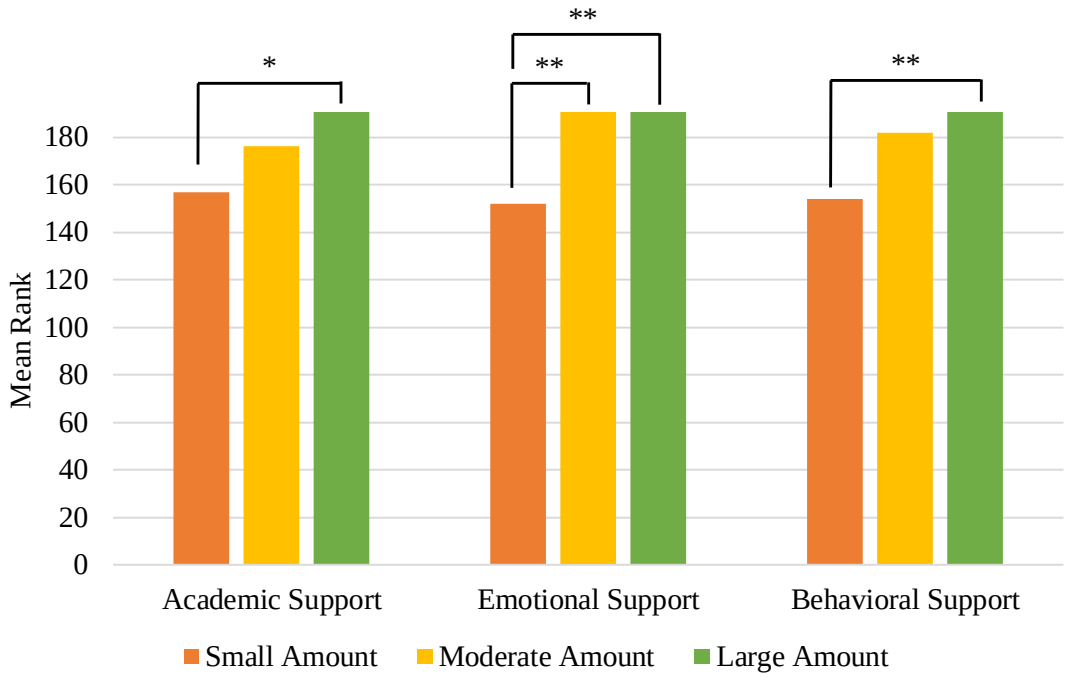
Further analysis of teachers' self-efficacy in providing academic support revealed significant differences between those who endorsed receiving small amounts of pre-service trauma training (mean rank = 156.91) and those who reported receiving large amounts of training (mean rank = 229.67), $p = .033$. These differences were not noted when comparing those who received moderate amounts of training (mean rank = 176.10) to those who endorsed small ($p = .285$) or large amounts of pre-service trauma training ($p = .220$).

Post-hoc pairwise comparisons were also used to explore teachers' self-efficacy in providing emotional support. Significant differences were present between those who

received small amounts of pre-service trauma training (mean rank = 151.88) and those who endorsed receiving moderate amounts (mean rank = 192.27), $p = .003$. Additionally, significant differences were apparent between teachers who endorsed small amounts of pre-service trauma training and those who endorsed receiving large amounts of pre-service training in this area (mean rank = 243.78), $p = .008$. Differences between groups who received moderate amounts of pre-service training and those who endorsed large amounts of training were insignificant ($p = .318$).

Similar *post-hoc* results were found when analyzing the impact of pre-service trauma training amount on teachers' self-efficacy in providing behavioral support. Though notable differences were not found between those with moderate amounts of training (mean rank = 181.66) and those with small (mean rank = 154.16, $p = .071$) or large amounts of training (mean rank = 243.56, $p = .151$), statistically significant differences were found between teachers who endorsed small amounts of training and those who reported they received large amounts ($p = .009$). Figure 9 illustrates pairwise comparisons between groups.

Figure 9. Pre-Service Training Amount and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$

In-service training amount. Significant differences among groups were present when exploring the amount of in-service training received and teachers' self-efficacy in providing academic ($x^2(2) = 19.038$, $p < .0005$), emotional ($x^2(2) = 22.284$, $p < .0005$), and behavioral ($x^2(2) = 25.205$, $p < .0005$) support in the classroom. Table 30 summarizes Kruskal-Wallis tests specific to in-service training amount and teacher self-efficacy.

Table 30. In-service Training Amount and Perception of Self-Efficacy

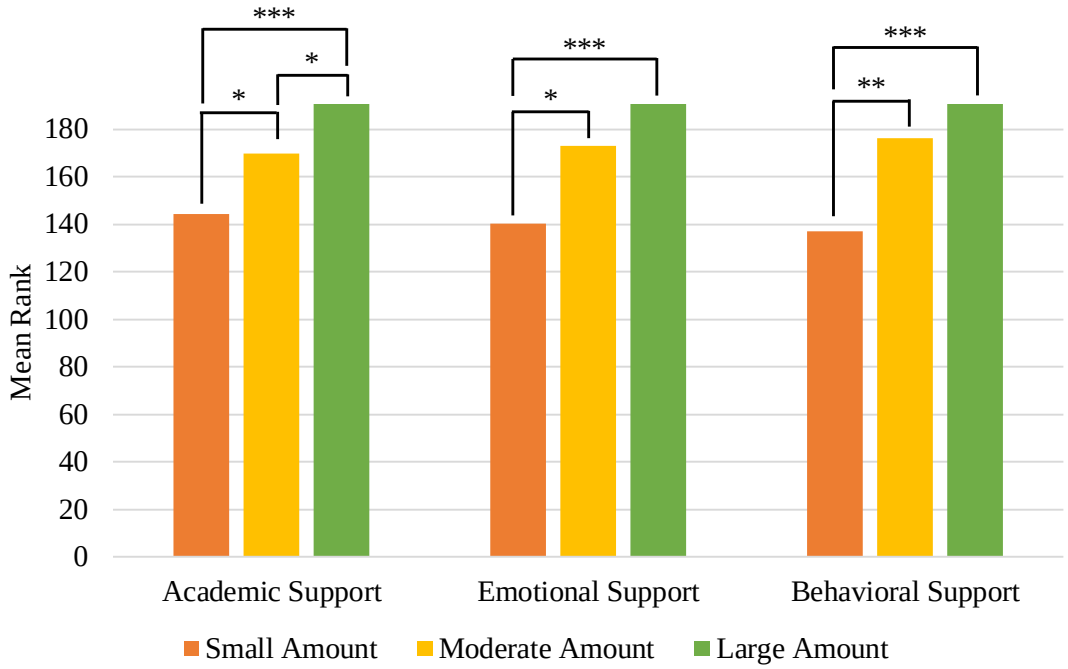
	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		19.038	2	.000***
Small Amount (*146*)	144.29	--	--	--
Moderate Amount (*139*)	169.91	--	--	--
Large Amount (*40*)	207.29	--	--	--
Emotional (*n = 325*)		22.284	2	.000***

Small Amount (*145*)	140.19	--	--	--
Moderate Amount (*140*)	173.03	--	--	--
Large Amount (*40*)	210.59	--	--	--
Behavioral (*n = 324*)		25.205	2	.000***
Small Amount (*144*)	136.83	--	--	--
Moderate Amount (*140*)	176.14	--	--	--
Large Amount (*40*)	207.19	--	--	--

Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

Post-hoc analyses were conducted to analyze differences among groups specific to teachers' self-efficacy in providing academic support in the classroom. Dunn's test results revealed significant differences in pairwise comparisons between all group combinations: Small Amounts (mean rank = 144.29) and Moderate Amounts (mean rank = 169.91, $p = .032$), Moderate Amounts and Large amounts (mean rank = 207.29, $p = .041$), and Small Amounts and Large Amounts ($p < .0005$). Pairwise comparisons specific to teachers' confidence in their ability to provide emotional support were also conducted. Results of Dunn's test illustrated significant differences between teachers who endorsed small amounts of in-service trauma training (mean rank = 140.19) and those in both the Moderate Amounts (mean rank = 173.03, $p = .006$) and Large Amounts (mean rank = 210.59, $p < .0005$) groups. Similarly, pairwise comparisons specific to teachers' confidence in their ability to provide behavioral support were significant between those who endorsed small amounts (mean rank = 136.83) of in-service trauma training and teachers in the Moderate Amounts (mean rank = 176.14, $p = .001$) and Large Amounts (mean rank = 207.19, $p < .0005$) groups. Figure 10 illustrates these differences.

Figure 10. In-Service Training Amount and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

Pre-service training adequacy. Significant differences among groups were not found when exploring pre-service training adequacy and teachers' self-efficacy in providing academic ($x^2(2) = 3.612$, $p = .164$) support. However, Kruskal-Wallis tests did find significant differences among groups specific to their self-efficacy in providing emotional ($x^2(2) = 10.289$, $p = .006$) and behavioral ($x^2(2) = 6.546$, $p = .038$) support. A summary of these analyses is provided in Table 31.

Table 31. Pre-service Training Adequacy and Perception of Self-Efficacy

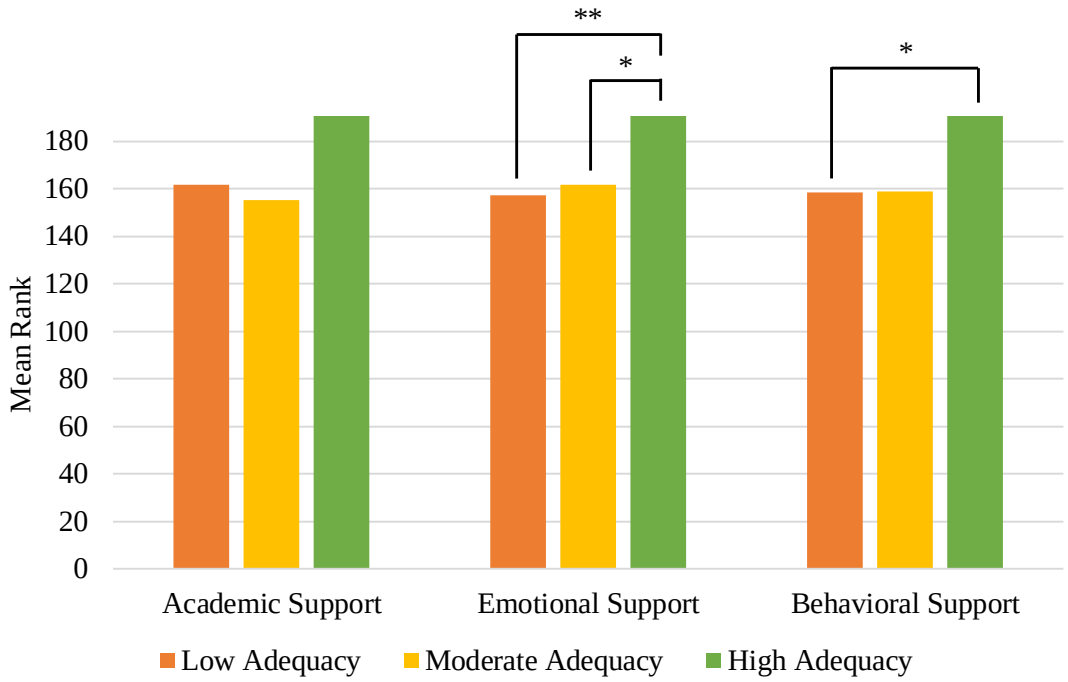
	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		3.612	2	.164
Low Adequacy (*242*)	161.52	--	--	--
Moderate Adequacy (*55*)	155.25	--	--	--
High Adequacy (*28*)	190.98	--	--	--
Emotional (*n = 325*)		10.289	2	.006*

Low Adequacy (*242*)	157.29	--	--	--
Moderate Adequacy (*55*)	161.74	--	--	--
High Adequacy (*28*)	214.84	--	--	--
Behavioral (*n = 324*)		6.546	2	.038*
Low Adequacy (*241*)	158.57	--	--	--
Moderate Adequacy (*55*)	158.70	--	--	--
High Adequacy (*28*)	203.75	--	--	--

Note. * $p < .05$

Post-hoc pairwise comparisons of these groups were conducted to further explore the relationship between perceived training adequacy and teachers' confidence in providing emotional and behavioral support. When analyzing self-efficacy specific to the provision of emotional support, significant differences were present between teachers who described high levels of pre-service trauma training adequacy (mean rank =214.84) and those who endorsed low levels of adequacy (mean rank = 157.29, $p = .004$) or neutral levels of adequacy (mean rank = 161.74, $p = .033$). In contrast, when analyzing self-efficacy specific to the provision of behavioral support, significant differences were present between teachers who described high levels of pre-service trauma training adequacy (mean rank = 203.75) and those who endorsed low levels of training adequacy (mean rank = 158.57), $p = .034$. Figure 11 illustrates significant post-hoc pairwise differences.

Figure 11. Pre-Service Training Adequacy and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$

In-service training adequacy. Kruskal-Wallis tests revealed significant differences among groups specific to teachers' self-efficacy in providing academic ($x^2(2) = 25.144$, $p < .0005$), emotional ($x^2(2) = 38.411$, $p < .0005$) and behavioral ($x^2(2) = 43.466$, $p < .0005$) support. A summary of these differences is provided in Table 32.

Table 32. In-service Training Adequacy and Perception of Self-Efficacy

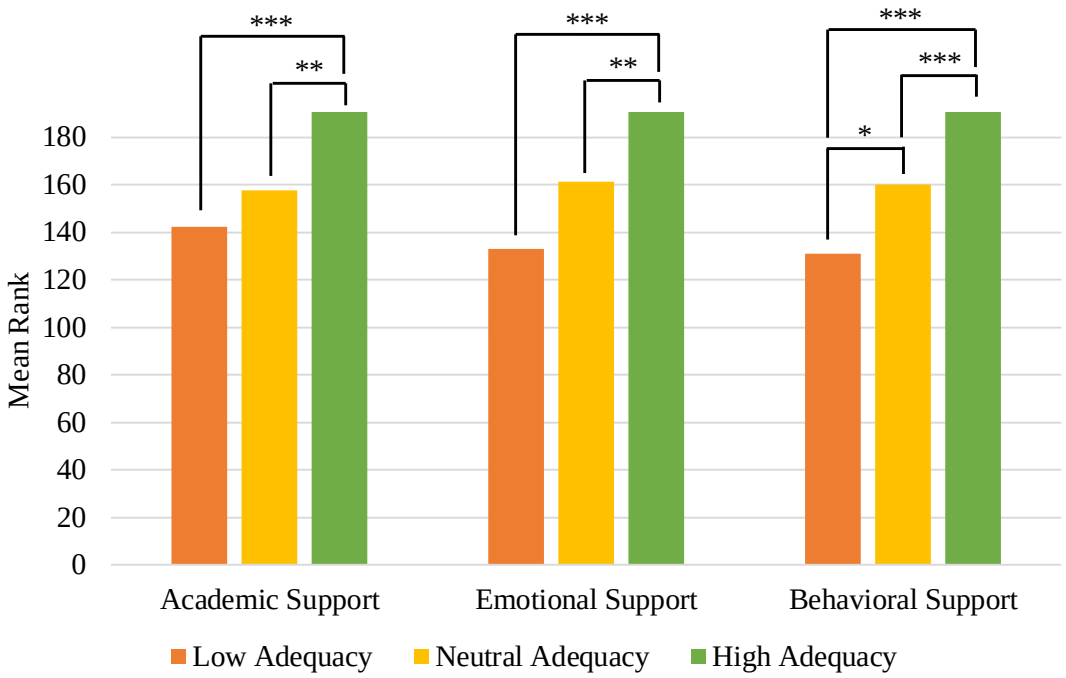
	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		25.144	2	.000***
Low Adequacy (*135*)	142.21	--	--	--
Neutral Adequacy (*97*)	157.75	--	--	--
High Adequacy (*93*)	198.66	--	--	--
Emotional (*n = 325*)		38.411	2	.000***
Low Adequacy (*134*)	132.90	--	--	--
Neutral Adequacy (*97*)	161.13	--	--	--
High Adequacy (*94*)	207.84	--	--	--

Behavioral (*n = 324*)		43.466	2	.000***
Low Adequacy (*133*)	130.84	--	--	--
Neutral Adequacy (*97*)	159.86	--	--	--
High Adequacy (*94*)	210.02	--	--	--

Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

Post-hoc analyses were conducted to further explore pairwise comparisons specific to teachers' confidence in providing academic support. Dunn's tests revealed significant differences between teachers in the High Adequacy group (mean rank = 198.66) and those in the Neutral Adequacy group (mean rank = 157.75, $p = .003$), as well as between those in the High Adequacy and Low Adequacy (mean rank = 142.21, $p < .0005$) groups. Similarly, pairwise comparisons of teachers' self-efficacy specific to emotional support resulted in significant differences between teachers in the High Adequacy group (mean rank = 207.84) and those in the Neutral Adequacy group (mean rank = 161.13, $p = .001$), as well as between those in the High Adequacy and Low Adequacy (mean rank = 132.90, $p < .0005$) groups. Finally, *post-hoc* Dunn's tests of teachers' confidence in providing behavioral support demonstrated significant differences between all adequacy groups: Low (mean rank = 130.84) and Neutral (mean rank = 159.86, $p = .045$), Neutral and High (mean rank = 210.02, $p < .0005$), and Low and High ($p < .0005$). Figure 12 illustrates results of these *post-hoc* analyses.

Figure 12. In-Service Training Adequacy and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

Pre-service training satisfaction. Significant group differences were not found when analyzing satisfaction with pre-service training and teachers' self-efficacy in providing academic support to students experiencing symptoms of child traumatic stress, $x^2(2) = 4.788$, $p = .091$. In contrast, Kruskal-Wallis tests revealed teachers' self-efficacy in providing emotional ($x^2(2) = 13.082$, $p = .001$) and behavioral ($x^2(2) = 8.298$, $p = .016$) support differed significantly based on teachers' level of satisfaction with their training. Table 33 details the differences between these groups.

Table 33. Pre-Service Training Satisfaction and Perception of Self-Efficacy

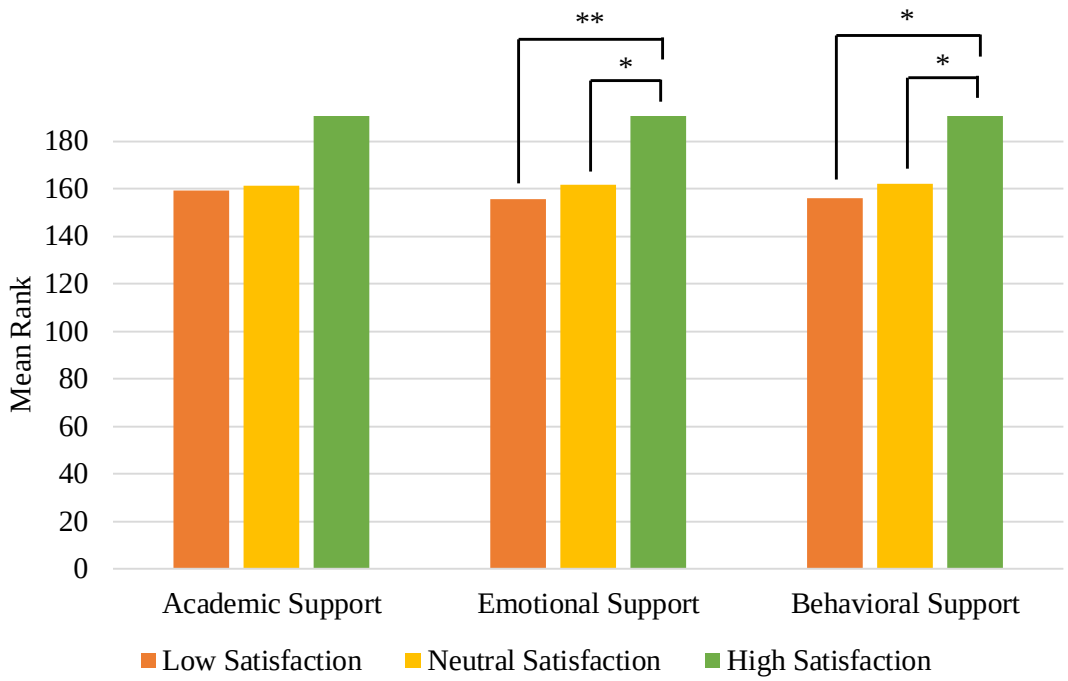
	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		4.788	2	.091
Low Satisfaction (*183*)	159.06	--	--	--
Neutral Satisfaction (*115*)	161.31	--	--	--

High Satisfaction (*27*)	196.87	--	--	--
Emotional (*n = 325*)		13.082	2	.001**
Low Satisfaction (*184*)	155.42	--	--	--
Neutral Satisfaction (*115*)	161.46	--	--	--
High Satisfaction (*26*)	223.44	--	--	--
Behavioral (*n = 324*)		8.298	2	.016*
Low Satisfaction (*183*)	155.95	--	--	--
Neutral Satisfaction (*114*)	162.01	--	--	--
High Satisfaction (*27*)	208.94	--	--	--

Note. * $p < .05$; ** $p < .005$

Post-hoc pairwise comparisons of these groups were conducted to further explore the relationship between satisfaction with pre-service trauma training and teachers' self-efficacy specific to providing emotional and behavioral support. When analyzing self-efficacy specific to the provision of emotional support, significant differences were present between teachers who endorsed high levels of satisfaction with training (mean rank = 223.44) and those who endorsed neutral (mean rank = 161.46, $p = .005$) or low (mean rank = 155.42, $p = .001$) levels of satisfaction. Similar differences were found when pairwise comparisons were made specific to teachers' self-efficacy in providing behavioral support. Statistically significant differences were found when comparing those in the High Satisfaction group (mean rank = 208.94) to those in the Neutral Satisfaction (mean rank = 162.01, $p = .042$) and Low Satisfaction (mean rank = 155.95, $p = .012$) groups. These results suggest survey respondents who reported high levels of satisfaction with their pre-service trauma training were more likely to endorse confidence in their ability to provide emotional and behavioral support to students experiencing child traumatic stress. Pairwise comparison results are illustrated in Figure 13.

Figure 13. Pre-Service Training Satisfaction and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$

In-service training satisfaction. Results of Kruskal-Wallis tests indicated teachers' confidence in their ability to provide academic ($x^2(2) = 22.015$, $p < .0005$), emotional ($x^2(2) = 25.237$, $p < .0005$), and behavioral ($x^2(2) = 29.596$, $p < .0005$) support varied significantly based on teachers' reported satisfaction with the in-service trauma training received. See Table 34 for a summary of these results.

Table 34. In-service Training Satisfaction and Perception of Self-Efficacy

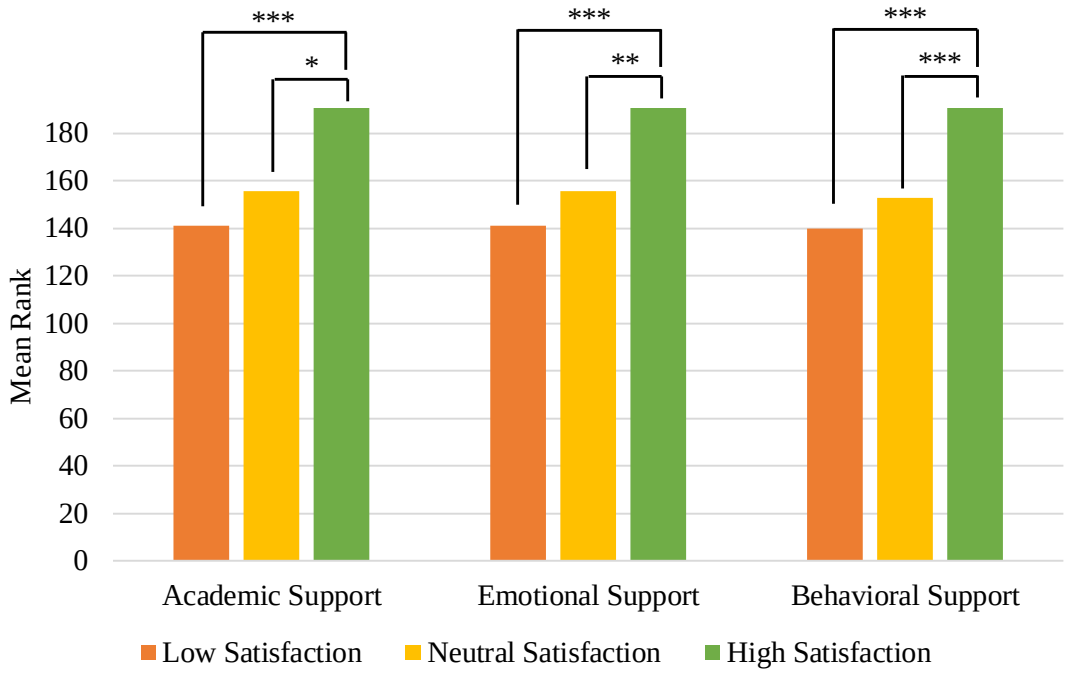
	Mean Rank	x^2	*df*	*p*
Academic (*n = 325*)		22.015	2	.000***
Low Satisfaction (*122*)	140.76	--	--	--
Neutral Satisfaction (*114*)	161.13	--	--	--
High Satisfaction (*89*)	195.88	--	--	--
Emotional (*n = 325*)		25.237	2	.000***
Low Satisfaction (*121*)	140.93	--	--	--
Neutral Satisfaction (*114*)	155.43	--	--	--

High Satisfaction (*90*)	202.26	--	--	--
Behavioral (*n = 324*)		29.596	2	.000***
Low Satisfaction (*121*)	140.00	--	--	--
Neutral Satisfaction (*114*)	152.64	--	--	--
High Satisfaction (*90*)	205.13	--	--	--

Note. *** $p < .0005$

Post-hoc analyses were conducted to further explore pairwise comparisons specific to teachers' self-efficacy in providing academic support. Dunn's tests revealed significant differences between teachers in the High Satisfaction group (mean rank = 195.88) and those in the Neutral Satisfaction group (mean rank = 161.13, $p = .011$), as well as between those in the High Satisfaction and Low Satisfaction (mean rank = 140.76, $p < .0005$) groups. When considering teachers' confidence specific to providing emotional support, Dunn's tests demonstrated significant pairwise comparisons between those who endorsed high levels of satisfaction with their training (mean rank = 202.26) and those who reported neutral satisfaction (mean rank = 155.43, $p = .001$), as well as between teachers who endorsed high levels of satisfaction and those who reported low levels of satisfaction (mean rank = 140.93, $p < .0005$). Finally, similar *post-hoc* results were evident when comparing teachers' confidence in providing behavioral support. Dunn's tests revealed significant pairwise comparisons between teachers in the High Satisfaction group (mean rank = 205.13) and those in the Moderate Satisfaction group (mean rank = 152.64, $p < .0005$), as well as between teacher in the High Satisfaction group and those in the Low Satisfaction group (mean rank = 140.00, $p < .0005$). Figure 14 depicts the pairwise comparison results.

Figure 14. In-Service Training Satisfaction and Perception of Self-Efficacy



Note. * $p < .05$; ** $p < .005$; *** $p < .0005$

CHAPTER V

DISCUSSION

Sample Characteristics

Prior to discussing the impact of teaching experience, teaching setting, and trauma training on teachers' perceptions of the needs of students experiencing child traumatic stress, their role in supporting these students, and their self-efficacy in providing this support, a summary of sample characteristics is provided. This summary is intended to assist the reader in situating the study results within the context of relevant participant characteristics.

Sample Demographics

Teacher participants primarily identified as female (84.4%), and approximately 97% of teachers described themselves as White. Participants' total years of teaching employment ranged from less than one year to 43 years (M = 14.24; SD = 9.78), and the majority of study participants indicated they taught in suburban schools (79.1%). Nearly half of participants were elementary school teachers (47.8%), followed by high school (31.2%) and middle school (21.0%) teachers.

Perceptions of Student Need

Results of the survey indicate teachers generally believe students experiencing child traumatic stress require additional academic (M = 4.01, SD = .76), emotional (M =

4.47, *SD* = .68), and behavioral (*M* = 4.20, SD = .77) support in the classroom. These perceptions align with research that reports this group of children, when compared to their peers, demonstrate more academic, emotional, and behavioral difficulties in the classroom (Milot, Ehtier, St-Laurent, & Provost, 2010; Slade & Wissow, 2007).

Perceptions of Teacher Role

Teacher respondents indicated they generally view themselves as responsible for providing additional academic (*M* = 3.94, *SD* = .78), emotional (*M* = 3.64, *SD* = .91), and behavioral (*M* = 4.54, *SD* = .60) support to students displaying symptoms of traumatic stress. When compared to school psychologists and counselors, teachers rated themselves as more responsible for meeting the academic needs of students experiencing child traumatic stress. In contrast, teachers rated school psychologists and counselors as more accountable for providing emotional and behavioral supports to this group of students. These findings align with results of the Reinke et al. study (2011) in which teachers' indicated they view school psychologists as primarily responsible for the provision of mental health services in schools.

Perceptions of Self-Efficacy

Survey participants generally described themselves as neutral to mostly confident in their ability to support the academic (*M* = 3.63, *SD* = .96), emotional (*M* = 3.06, *SD* = 1.04), and behavioral (*M* = 3.15, *SD* = 1.08) needs of students experiencing traumatic stress. Furthermore, teachers expressed the greatest amounts of self-efficacy in their ability to provide behavioral support, followed by academic and emotional support.

Trauma Training Experience

Results of the survey indicate participants are lacking in the amount of trauma-specific training they have received. Approximately 45% of participants (*n* = 147) indicated they received no training in childhood trauma while earning their teaching license or certification. Similarly, nearly half of participants (*n* = 160) reported their teacher education programs provided no training on how to support students experiencing child traumatic stress. Furthermore, approximately 43% of survey respondents (*n* = 140) indicated they have received some trauma-specific training while employed as a teacher. Approximately 42% of teachers (n = 137) endorsed receiving some in-service training on supporting students who display symptoms of child traumatic stress. Accordingly, teachers described both their pre-service and in-service trauma training as generally inadequate and endorsed low levels of satisfaction with the training received during their teacher education programs and while employed in the schools.

Teachers' lack of trauma training frames the discussion of factors influencing teachers' perceptions of the needs of students experiencing child traumatic stress, their role in supporting these students, and their level of self-efficacy in providing this support. Key findings of the current study are described below.

Key Findings

Key Finding 1: Years of Experience and Perception of Academic Need

Though length of time in the classroom does not appear to impact teachers' views of students' emotional or behavioral needs, results of this study suggest length of teaching experience does influence teachers' perceptions of students' academic needs.

Specifically, survey responses suggest that as teachers spend more time in the classroom, they begin to recognize the unique academic deficits of students who display symptoms of traumatic stress.

Furthermore, group differences in perceptions of academic need were insignificant for all other variables (i.e., school type, school setting, training amount, training adequacy, and training satisfaction). This aligns with teachers' qualitative description of the impact of "on-the-job training" on their approach to supporting students experiencing child traumatic stress. It appears teachers' informal interactions with students, families, and colleagues serve as a more impactful training experience than the limited amounts of trauma training they have received throughout their careers.

Key Finding 2: Years of Experience and Perception of Role in Providing Emotional Support

The current study suggests teachers' perceptions of the role they play in providing academic and behavioral support is not influenced by years of teaching experience. However, teachers' perceptions of their role in providing emotional support did vary as a function of their length of time in the classroom. Survey results indicated teachers in the early and late stages of their careers, when compared to mid-career teachers, were more likely to perceive themselves as responsible for providing additional emotional support to students experiencing symptoms of traumatic stress.

Key Finding 3: Years of Experience and Perception of Behavioral Self-Efficacy

Perceptions of self-efficacy in the areas of academic and emotional support did not vary based on length of time in the classroom. However, years of teaching experience

did influence teachers' views of their ability to provide behavioral support to students experiencing symptoms of traumatic stress. Specifically, teachers in the later stage of their careers, when compared to mid-career teachers, endorsed higher levels of self-efficacy in providing behavioral support in the classroom. These differences indicate teachers in the middle stages of their careers, when compared to more experienced teachers, feel less confident in their ability to provide adequate behavioral support to students displaying symptoms of child traumatic stress.

These findings contradict previous studies of the relationship between teaching experience and self-efficacy (Klassen & Chiu, 2010; Wolters & Daugherty, 2007). Whereas past studies suggest a non-monotonic relationship in which self-efficacy specific to the provision of behavioral support steadily increases until peaking at approximately twenty years of experience, the current study suggests teachers' self-efficacy in this area is lowest for mid-career teachers.

Key Finding 4: School Location and Perceptions of Need, Role, and Self-Efficacy

The influence of teaching setting was assessed through the exploration of school location (urban and suburban) and school type (elementary, middle, and high school). Group differences were insignificant when comparing urban and suburban teachers' perceptions of the needs of students experiencing child traumatic stress. Various factors may influence this lack of variability. Though some studies indicate urban youth experience higher rates of trauma exposure (Abram, et al., 2004; Foster, Kuperminc, & Price, 2004), others conclude children in rural areas report higher Adverse Childhood Experience scores than their urban peers (US DHHS, 2015). In contrast, recent literature

indicates youth living in urban and suburban areas do not differ in the amount of trauma exposure they experience (Finkelhor et al., 2011).

Findings of the current study align with the Finkelhor et al. (2011) findings and suggests school location does not impact teachers' perceptions of student need, teacher role, and personal self-efficacy. However, lack of variability in the current study may be the result of the exclusion of a large portion of urban teachers (i.e., Omaha Public School teachers). Furthermore, though the city of Omaha meets the United States Census Bureau requirements for Urban Classification (i.e., population of 50,000 or more people) (United States Department of Commerce, 2011), Omaha teachers' perceptions may differ from those who teach in larger urban areas such as New York City, Los Angeles, or Chicago.

Lack of variability in urban and suburban teachers' perceptions, in conjunction with uncertainty surrounding differences between urban and rural children's exposure to trauma, suggest teachers in all locations – urban suburban, and rural – require equal levels of trauma training and support. If future research delineates distinctions among these groups of teachers or students, schools' approach to trauma training should be adapted accordingly.

Key Finding 5: School Type and Perception of Emotional and Behavioral Need

In contrast, survey results indicate the type of school in which teachers are employed impacts teachers' perceptions of the needs of students experiencing traumatic stress. When compared to high school teachers, participants teaching in the elementary and middle school settings were more likely to view this group of students as in need of additional emotional support. Similarly, when compared to their high school and middle

school colleagues, participants teaching in the elementary school setting were more like to view students experiencing traumatic stress as in need of additional behavioral support.

These findings conflict with current research on childhood exposure to traumatic events and the known prevalence rates of trauma-related disorders. Literature indicates childhood exposure to potentially traumatic events increases with age (Finkelhor et al., 2011). Similarly, though prevalence rates of child traumatic stress are not well-documented, research on the prevalence of PTSD indicates rates of the disorder increase from childhood into adolescence (Merikangas, et al., 2010). This suggests students in the high school setting, when compared to elementary school students, are more likely to experience symptoms of traumatic stress. Consequently, it was expected that high school teachers, in contrast to elementary school teachers, would be more likely to perceive students experiencing child traumatic stress as in need of additional emotional and behavioral support.

Several factors may influence the noted difference between high school and elementary school teachers' perceptions of students' emotional and behavioral needs. First, elementary school teachers typically spend a greater amount of time with their students on a daily basis. This increased exposure to students throughout the day may lead to increased awareness of students' emotional and behavioral needs. Furthermore, research indicates internalizing symptoms (e.g., anxiety, depression, somatic complaints, and withdrawal) increase as children age, while externalizing symptoms (e.g., verbal and physical aggression) tend to decline into adolescence (Bongers, Koot, van der Ende, and Verhulst, 2003). A documented decline in externalizing symptoms suggests high school

teachers may observe an overall decrease in maladaptive behaviors that impacts their perception of the behavioral needs of students experiencing traumatic stress. Furthermore, an increase in internalizing symptoms (i.e., more covert symptoms) may indicate high school teachers are less privy to the emotional symptoms their students experience and less cognizant of their emotional needs.

Key Finding 6: School Type and Perception of Role in Providing Emotional and Behavioral Support

Results of this study indicate teachers' perceptions of their role in providing additional academic support to students experiencing child traumatic stress remained consistent across school type. However, differences were apparent when considering teachers' opinions regarding their role in providing emotional and behavioral support. As grade level increased, teachers' were less likely to perceive themselves as responsible for meeting the increased emotional and behavioral needs of students experiencing child traumatic stress. Specifically, elementary school teachers, when compared to high school teachers, were more likely to perceive themselves as responsible for providing emotional and behavioral supports to their students.

Key Finding 7: School Type and Perception of Emotional and Behavioral Self-Efficacy

Teachers' confidence in their ability to provide additional emotional and behavioral support varied across elementary, middle, and high school teachers. Survey results indicated as grade level increased, teachers' were less likely to endorse confidence in their ability to meet the increased emotional and behavioral needs of students

experiencing child traumatic stress. Consequently, elementary school teachers, when compared to their high school colleagues reported significantly higher levels of confidence in their ability to meet the increased emotional needs of students displaying symptoms of child traumatic stress.

Key Finding 8: Trauma Training Amount and Perception of Student Need and Teacher Role

Teacher participants provided a wealth of information regarding their pre- and in-service training experiences. As previously described in this chapter, quantitative results revealed the majority of teachers have received little or no trauma-specific training. Furthermore, teachers generally reported low levels of training adequacy and low levels of satisfaction with their training experiences. While qualitative results suggest a small number of teachers believe additional trauma training is unnecessary, several teachers described a need for increased in-service trauma training opportunities and expressed hope that current teacher preparation programs, as compared to programs of the past, are focusing more attention on training teachers to recognize and respond to students' trauma-related concerns. Survey results suggest these hopes may be accurate, as teachers in the early stages of their career reported receiving more pre-service training in this area than their mid- and late-career colleagues.

Interestingly, results of this study indicate teachers' perceptions of student needs and teachers' roles are not impacted by the amount of trauma training received. Though seemingly intuitive to assume an increase in training equates to an increase in knowledge or awareness, a weak literature base precludes stakeholders from fully understanding the

impact of training amount on the effectiveness of professional development. A comprehensive review of teacher in-service training indicates few studies meet rigorous evidence standards (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Nonetheless, the review concluded that professional development consisting of fewer than 15 hours of training had no statistically significant effects on student achievement.

This finding is limited to students' academic performance, and little research exists specific to mental health professional development for teachers. However, the Yoon et al. (2007) review suggests teachers likely require multiple hours of training to acquire the knowledge and skills required to support students experiencing child traumatic stress. Participants in this study endorsed small amounts of trauma-specific pre-service and in-service training. Consequently, this limited amount of training may not meet the threshold for the amount of professional development required to demonstrate impact on teachers' knowledge or skills. Furthermore, limited variance in the amount of pre- and in-service training opportunities may explain this study's findings specific to training amount and perceptions of student needs or teacher roles.

Key Finding 9: Trauma Training Amount and Perception of Self-Efficacy

Across both pre-service and in-service training experiences, teachers who received greater amounts of trauma training reported increased self-efficacy in their ability to provide additional academic, emotional, and behavioral support to students demonstrating symptoms of child traumatic stress. As amount of training increased, teachers were more likely to describe themselves as confident in their ability to meet the increased academic, emotional, and behavioral needs of these students. In all three areas

of support, teachers who endorsed receiving large amounts of trauma-specific training, as compared to those who reported small amounts of training, reported significantly higher levels of self-efficacy.

Key Finding 10: Trauma Training Adequacy and Perception of Self-Efficacy

Similarly, teachers' perceptions of the adequacy of their trauma training influenced their confidence in their ability to provide additional support to students demonstrating symptoms of traumatic stress. Specifically, perceived adequacy of pre-service training impacted teachers' self-efficacy in the areas of emotional and behavioral support, whereby teachers who described their training as highly adequate endorsed significantly higher levels of confidence in their ability to provide emotional and behavioral support. Furthermore, those who described in-service trauma training as highly adequate endorsed significantly greater amounts of self-efficacy in their ability to provide academic, emotional, and behavioral support.

Key Finding 11: Satisfaction with Trauma Training and Perception of Need

Teachers generally described their trauma training opportunities as inadequate and endorsed low satisfaction with the training they have received. Results of the current study indicate teachers' perceptions of student need were not influenced by training adequacy. However, teachers' level of satisfaction with their pre-service trauma training did appear to impact their perceptions of students' emotional and behavioral needs. As level of training satisfaction increased, teachers' were less likely to describe students experiencing traumatic stress as in need of additional emotional or behavioral support. Furthermore, when compared to teachers who endorsed high levels of satisfaction with

their pre-service trauma training, teachers who were less satisfied with their training were statistically more likely to believe students experiencing traumatic stress require additional emotional and behavioral support.

Key Finding 12: Satisfaction with Trauma Training and Perception of Self-Efficacy

Satisfaction with pre-service trauma training did not influence teachers' academic self-efficacy; however, higher levels of satisfaction were associated with increased self-efficacy in the areas of emotional and behavioral support. Furthermore, as satisfaction with in-service trauma training increased, teachers were more likely to describe themselves as confident in their ability to meet the unique academic, emotional, and behavioral needs of these students. In all three areas of support, teachers who endorsed high levels of satisfaction with their in-service training, as compared to those who reported low or neutral levels of satisfaction, reported significantly higher levels of self-efficacy.

Implications

The purpose of this study was to explore teachers' perceptions of the needs of students experiencing child traumatic stress, their role in supporting these students, and their self-efficacy in providing this support. These perceptions were explored within the context of teachers' training experiences. Results of this study draw attention to the critical need for increased trauma-specific training for teachers in all grade levels and at every stage of their careers.

Comprehensive Trauma Training

To better prepare teachers to support students experiencing child traumatic stress, teacher education programs and school districts must work in tandem to provide comprehensive training in the provision of trauma-informed classroom support. The results of the current study indicate teachers' confidence in their ability to meet the academic, emotional, and behavioral needs of these students increases with the amount of pre-service trauma training they receive. As a result, teacher education programs are encouraged to provide students opportunities to participate in introductory trauma training that emphasizes the prevalence and symptoms of child traumatic stress. This pre-service training should also provide instruction on basic academic, emotional, and behavioral interventions designed to address these symptoms in the classroom.

Furthermore, school districts are encouraged to provide continuing education opportunities that connect teachers to multidisciplinary teams – including psychologists, educational specialists, behavioral specialists, teaching colleagues, and nurses – designed to conceptualize and monitor the academic, emotional, and behavioral needs of students experiencing child traumatic stress. These teams allow experts from various fields to develop both classwide and individualized interventions designed to meet the needs of this unique group of students. Furthermore, these teams ensure teachers, as the frontline providers of intervention, are supported in their efforts.

Trauma Training Across Career Stages

The results of the current study suggest teachers' perceptions of trauma and its impact on students differ based on teachers' amount of classroom experience. As a result,

trauma-specific training should be tailored to meet the needs of teachers at various stages of their careers. For example, in the later stage of their careers, teachers are more likely to recognize the unique academic needs of children experiencing symptoms of traumatic stress. As a result, trauma training for new teachers should emphasize the impact of trauma on students' academic, emotional, and behavioral functioning and should educate teachers on methods for recognizing individual areas of need.

Teachers in the earlier stages of their career, when compared to late-career teachers, were more likely to describe themselves as responsible for providing additional emotional support to students displaying symptoms of child traumatic stress. Consequently, training designed for teachers in the later stages of their career should focus on the characteristics of the emotional support they can provide in the classroom setting (i.e., separate from the support expected from mental health professionals and likely encompassing strategies they already use with their students).

Finally, teacher participants in the earlier stages of their careers were more likely to view themselves as less capable of managing the behavioral needs of this group of students. Trauma training for teachers new to the field – as well as for those in pre-service training programs – should prepare teachers to address the wide array of behavioral management concerns they will face in the classroom setting. These measures will likely positively impact students' classroom functioning on all levels (academic, emotional, and behavioral) and have the power to prevent teachers' from burnout.

Trauma Training Across School Type

Survey results indicate teachers' perceptions of trauma and its impact on students differ based on school type (i.e., elementary, middle, or high school). As a result, trauma-specific training should be individualized to address the unique needs of elementary, middle, and high school teachers. For example, elementary and middle school teachers when compared to high school teachers, are more likely to recognize the added emotional and behavioral needs of children displaying symptoms of traumatic stress. These differences may be due to the structure of the high school setting and the shortened amount of time teachers spend with their students. Differences may also be the result of an increase in students' internalizing (i.e., covert) symptoms and decrease in students' externalizing (i.e., overt) symptoms. As a result, high school teachers will likely benefit from additional training in the identification of emotional or behavioral symptoms in high school students who are experiencing traumatic stress.

The high school teachers who participated in this study, when compared to elementary and middle school participants, were less likely to view themselves as responsible for providing additional emotional and behavioral support to students experiencing traumatic stress. Additionally, high school teachers endorsed lower levels of self-efficacy in their ability to provide emotional and behavioral support. Though unknown whether this lack of confidence influences teachers' perceptions of their role in providing emotional and behavioral supports, high school teachers would benefit from professional development opportunities that train them to provide emotional and behavioral supports in the classroom setting. Professional development in this area should

provide psychoeducation on the difference between emotional and behavioral support provided by mental health professionals or school administrators. Special emphasis should be placed on highlighting the congruence between recommended strategies and those practices teachers already use in their classrooms.

Teacher Access to Confidential Information

Across qualitative survey questions, teachers expressed frustration with the limited amount of access they have to students' social histories and mental health backgrounds. School psychologists are typically privy to this information and are bound to ethical standards that limit their disclosure of confidential information to third parties (American Psychological Association (APA), 2010; National Association of School Psychologists (NASP), 2010). As described by this study's participants, lack of access to this information hinders teachers' ability to properly support the students in their classrooms. Discord in this area of practice requires closer investigation of the APA and NASP standards specific to confidentiality.

Standard I.2.4 of the NASP Principles for Professional Ethics indicates school psychologists "respect the confidentiality of information obtained during their professional work" (p. 5). However, the Principles also highlight the need for school psychologists to, in certain circumstances, share private information with other parties. As Standard I.2.5 states, "School psychologists discuss and/or release confidential information only for professional purposes and only with persons who have a legitimate need to know" (p. 5). Though disclosure is allowed, the school psychologist must first

obtain consent from the appropriate parties (APA, 2010; NASP, 2010). NASP Standard I.2.4 explains:

> Information is not revealed to third parties without the agreement of a minor child's parent or legal guardian (or an adult student), except in those situations in which failure to release information would result in danger to the student or others, or where otherwise required by law. (p. 5)

These standards indicate there are circumstances in which knowledge of private information is necessary to properly meet the needs of an individual student. It is the psychologists' responsibility to determine who should receive access to this information and the legal guardian's right to agree or disagree to this disclosure.

As a result, school psychologists – as members of multidisciplinary support teams – must consider the potential impact of such disclosure on the team's ability to meet the academic, emotional, and behavioral needs of individual students. Given the amount of time teachers spend with students in the classroom and the responsibility placed on teachers to provide additional support to students in need, there are likely circumstances in which teachers will benefit from a greater understanding of a student's mental health background and social history (specific to traumatic events). Access to this information has the potential to increase teachers' empathy for an individual student's circumstances and to alter the teacher's approach to supporting the student. With this recommendation in mind, school psychologists are encouraged to evaluate the disclosure of private information on a case-by-case basis, to educate legal guardians on the benefits and drawbacks of sharing such information, and to train teachers on how to appropriately utilize this information to inform classroom intervention.

School Psychologists' Role in Supporting Teachers

Teacher participants indicated they view school psychologists as experts in the emotional and behavioral needs of students experiencing symptoms of child traumatic stress. However, teachers also shared concerns regarding the limited amount of time school psychologists have available to share this expertise. As a result, school psychologists are called to place additional emphasis on their role as mental health professional. School psychologists are encouraged to educate teachers and administrators on the support they can provide specific to the academic, emotional, and behavioral needs of students experiencing child traumatic stress. Furthermore, school psychologists, as mental health professionals, are called to advocate for trauma-specific training that meets the needs of the teachers and students in their schools.

School psychologists are encouraged to advocate for training that incorporates principles of systems-level trauma-informed care. Multiple trauma-informed frameworks exist and are intended for implementation in a range of settings, including hospitals, juvenile detention centers, and foster care systems. The Trauma Learning Policy Initiative (TLPI), a collaboration of Massachusetts Advocates for Children and Harvard Law School, has developed a trauma-informed framework specifically for use in school settings. This systems-level approach – known as The Flexible Framework – includes six key elements (Table 35) that address areas such as school leadership, staff training, academic and non-academic intervention, and schoolwide policies. School psychologists, in conjunction with school administrators, are encouraged to utilize this framework to develop and implement trauma-informed policies and training opportunities.

Table 35. The Flexible Framework: An Action Plan for Schools

The Flexible Framework – Six Elements
I. Schoolwide Infrastructure and Culture
a. Principal/Headmaster
b. Weaving Trauma-Sensitive Approaches in the Fabric of the School
c. Identifying and Addressing Barriers
II. Staff Training
a. Partnering with Parents and Other Caregivers
b. Supporting Staff
c. Teaching Students
III. Linking with Mental Health Professionals
a. Clinical Supports for School Staff
b. Accessing Mental Health Resources for Families and Students
IV. Academic Instruction for Traumatized Children
a. Overarching Teaching Approaches
b. Language-Based Teaching Approaches
c. Ensuring Appropriate Evaluation
V. Nonacademic Strategies
a. Building Nonacademic Relationships with Children
b. Extracurricular Activities
VI. School Policies, Procedures, and Protocols
a. Discipline Procedures
b. Communication Procedures and Protocols
c. Safety Planning
d. Collaboration with the Community

Cole, S. F., Greenwald O'Brien, J., Geron Gadd, M., Ristuccia, J., Luray Wallace, D., & Gregory, M. (2005). Helping traumatized children learn.

Limitations

Aspects of this study restrict the generalizability and interpretation of the survey results. First, participant recruitment resulted in an approximate response rate of 13%. In 1990, Babbie provided guidelines for *adequate* (50%), *good* (60%), and *very good* (70%) response rates for analysis and reporting of paper survey results. However, literature suggests response rates are declining (Dillman, Reips, & Matzat, 2010; Frippiat & Marquis, 2010), and a recent study (Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008) indicates web-based survey response rates are approximately 11% lower than

response rates for other survey types (e.g., paper, telephone). Nonetheless, the response rate for this study is low and limits the generalizability of the survey findings. Furthermore, non-response bias was not analyzed for this study. Tests for non-response bias may reveal significant differences between respondent answers and the potential answers of non-respondents.

Additionally, survey respondents for this study represent a small portion of the population and may limit the generalization of the study findings. As previously noted, respondents were primarily White females. These demographic characteristics are not representative of the characteristics of Douglas County, Nebraska or of the United States. Consequently, the results of this study may not generalize to teachers in other counties or states. Furthermore, teachers working in Omaha Public Schools were removed from the recruitment list. As a result, it is possible the survey results do not fully illustrate the perceptions of teachers within urban settings.

Due to non-normal data distribution, non-parametric tests were used to analyze the survey results. Non-parametric tests have a lower power than their parametric counterparts. As a result, it is possible not all significant results were found. Furthermore, scale and ordinal independent variables were categorized to allow for Kruskal-Wallis testing. Critical information may have been lost in the categorization process. Finally, the survey utilized for this study was developed by the researcher. Though the survey was piloted with a sample of Douglas County teachers, the psychometric properties of the instrument are not validated. Therefore, the results of this study should be interpreted with caution.

Future Directions

A search of the literature reveals very few published studies specific to teachers' perceptions of trauma and their experiences with trauma training. Given the limited amount of research available in this area, the intent of the current study was to explore a wide range of variables and potential differences among groups. Researchers are encouraged to further explore the variables included in this study.

For example, study participants provided general perceptions of the amount of trauma training received. Future studies may seek to gather total hours of training and details regarding training modality in order to gain a more nuanced understanding of the impact of trauma training on teachers' perceptions. Additionally, this study gathered general information regarding teachers' perceptions of the academic, emotional, and behavioral needs of students. The field may benefit from exploring teachers' perceptions of the specific ways in which these needs surface in the classroom.

Future research is also necessary to gather objective information regarding teachers' knowledge and skills specific to child traumatic stress and trauma-informed care. This information has the ability to inform stakeholders' decisions regarding trauma-specific professional development. Additional research is also necessary to examine the impact of increased trauma training on teachers' perceptions of the needs of students experiencing traumatic stress, their role in supporting these students, and their self-efficacy in providing this support.

Finally, the literature base will benefit from future studies that address the aforementioned limitations. For example, researchers are encouraged to validate the

psychometric properties of the data collection tool utilized in this study and to expand data collection to include a more representative sample of teachers (e.g., males, minority groups, and urban and rural teachers). Researchers are also encouraged to use various methods of research (i.e., experimental design or focus groups) to generate a more comprehensive understanding of teachers' perceptions of supporting students experiencing child traumatic stress.

APPENDIX A

FIELD TEST SURVEY

Project Title: Trauma in the Classroom: Teachers' Perspectives on Supporting Students Experiencing Child Traumatic Stress

Researcher: Kassandra Reker, M.Ed., PLMHP

Faculty Sponsors: David Shriberg, Ph.D. and Rosario Pesce, Ph.D.

You are being asked to take part in a research study field test conducted by Kassandra Reker under the supervision of Drs. David Shriberg and Rosario Pesce in the School of Education at Loyola University – Chicago. You are being asked to participate because you are an elementary, middle, or high school teacher in the United States.
Please read this form carefully and ask any questions you may have before deciding whether to participate in the field test.

Purpose: The purpose of the study is to better understand teachers' perspectives on supporting students experiencing child traumatic stress. Teachers' perspectives will be assessed using a survey. Prior to conducting the study, a field test is used to gather opinions on the quality of the survey. You are being asked to participate in the field test and to share your opinions regarding the survey.

Risk and Benefits: There are no foreseeable risks involved in participating in this field test other than those encountered in day-to-day life. You will receive no direct benefits from participating in this field test. However, your responses will contribute to the improvement of the survey and to researchers' understanding of teachers' perceptions of supporting students experiencing child traumatic stress.

Compensation: To thank you for your participation and time, you will have the opportunity to enter a drawing for one $20 Amazon gift card.

Confidentiality: Your confidentiality will be maintained to the degree permitted by Survey Monkey and other technology used. If you wish to add your email address at the end of the survey in order to receive the results of this study, a space will be provided for this information. If you do not choose to provide your email address, your survey will be entirely anonymous.

Voluntary Participation: Participation in this study is voluntary. If you decide to participate, the field test will take approximately 30 minutes to complete. If you do not want to participate in this field test, you do not have to participate. Even if you decide to participate, you are free to not answer any question or to withdraw from participation at any time without penalty. Your willingness to participate will have no effect on your current relationship with the researcher or with Loyola University – Chicago.

Contact and Questions: If you have questions about the field test or research study, please contact Kassandra Reker (kreker@luc.edu). If you have questions about your

rights as a research participant, you may contact Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent:

By indicating 'yes' to the item below, you indicate you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study field test. If you would like a copy of this form for your records, please email Kassandra Reker (kreker@luc.edu).

Do you voluntarily agree to participate in this field test by completing the following survey? You are free to discontinue your participation at any time for any reason.

- ☐ Yes, I agree to participate.
- ☐ No, I decline to participate.

Are you currently an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska?

- ☐ Yes
- ☐ No

Study Purpose: The purpose of my dissertation is to obtain information regarding teachers' perceptions of (1) the needs of students experiencing child traumatic stress, (2) their role in supporting students experiencing child traumatic stress, and (3) their level of self-efficacy in supporting students experiencing child traumatic stress. A second purpose of the study is to determine whether years of teaching experience, teaching setting, and amount of trauma training influence teachers' perceptions. Participants must be teachers currently employed by early childhood, elementary, middle, or high schools in Douglas County, Nebraska.

Field Test Instructions: Please note the amount of time it takes you to complete the survey and any questions/concerns that arise as you are participating. Use the following questions to guide you through the process. You will be asked to answer these questions at the end of the survey. Please include any relevant comments I should consider before sending my survey to study participants. If questions should arise, please do not hesitate to contact me with any questions you might have (kreker@luc.edu).

1. How long did it take you to complete the entire survey? Is this amount of time feasible?
2. Please describe the ease or difficulty of taking the survey.
3. Is any part of the survey confusing or unclear? Please describe.
4. This survey makes several references to "trauma" and "child traumatic stress."
5. Do you have any suggested changes to the survey given the purpose of my dissertation? If so, please describe.
6. Do you have recommended additions to the survey? If so, please describe.
7. Other comments or suggestions?

Thank you for taking the time to help with my dissertation. Your participation in my field test will help ensure my survey is an effective tool for data collection. I appreciate your comments and suggestions!

Survey Definitions
For the purpose of this survey, **trauma** is defined as resulting: "*from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being.*"

For the purpose of this survey, **child traumatic stress** is defined as occurring when children *"have been exposed to one or more traumas over the course of their lives and develop reactions that persist and affect their daily lives after the traumatic events have ended."*

Training Experiences
This survey references **pre-service** and **in-service** teacher training.

For the purpose of this survey, **pre-service** training is any training you received while earning your teaching license or certification.

For the purpose of this survey, **in-service** training is any training you received while employed as a teacher.

1. How did you first obtain teacher certification?
    - ☐ Undergraduate teacher training program
    - ☐ Master's level certification
    - ☐ Teacher for America
    - ☐ Other (please explain below)

2. During your pre-service teacher training, how much training in childhood trauma did you receive?
    - ☐ None
    - ☐
    - ☐ Some
    - ☐
    - ☐ A great deal

3. During your pre-service teacher training, how much training in supporting students experiencing child traumatic stress did you receive?
    - ☐ None
    - ☐
    - ☐ Some
    - ☐

- ☐ A great deal

4. How adequately or inadequately do you feel your pre-service training prepared you to support students with child traumatic stress?
    - ☐ Very adequately
    - ☐ Adequately
    - ☐ Neutral
    - ☐ Inadequately
    - ☐ Very inadequately

5. How satisfied or dissatisfied are you with the pre-service training you received on supporting students with child traumatic stress?
    - ☐ Very satisfied
    - ☐ Satisfied
    - ☐ Neutral
    - ☐ Dissatisfied
    - ☐ Very dissatisfied

6. Is there anything important to you about your pre-service trauma training that has not been asked? If so, please use the space below.

7. During your time employed as a teacher, how much in-service training in childhood trauma have you received?
    - ☐ None
    - ☐
    - ☐ Some
    - ☐
    - ☐ A great deal

8. During your time employed as a teacher, how much in-service training in supporting students experiencing child traumatic stress have you received?
    - ☐ None
    - ☐
    - ☐ Some
    - ☐
    - ☐ A great deal

9. How adequately or inadequately do you feel your in-service training prepared you to support students with child traumatic stress?
    - ☐ Very adequately
    - ☐ Adequately
    - ☐ Neutral
    - ☐ Inadequately
    - ☐ Very inadequately

10. How satisfied or dissatisfied are you with your in-service training on supporting students with child traumatic stress?
    - ☐ Very satisfied
    - ☐ Satisfied
    - ☐ Neutral
    - ☐ Dissatisfied
    - ☐ Very dissatisfied

11. Is there anything important to you about your in-service trauma training that has not been asked? If so, please use the space below.

Student Needs

Based on your time working with students experiencing child traumatic stress, please indicate the degree to which you agree or disagree with the following:

12. Students experiencing child traumatic stress require more <u>academic</u> support in the classroom than their peers.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

13. Students experiencing child traumatic stress require more <u>emotional</u> support in the classroom than their peers.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

14. Students experiencing child traumatic stress require more <u>behavioral</u> support in the classroom than their peers.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

15. Is there anything important to you about the needs of students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Staff Roles

Please indicate the degree to which you agree or disagree with the following:

16. Teachers should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

17. Teachers should be responsible for providing additional emotional support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

18. Teachers should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

19. Is there anything important to you about teachers' role in supporting students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Please indicate the degree to which you agree or disagree with the following:

20. School psychologists should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

21. School psychologists should be responsible for providing additional emotional support to students experiencing child traumatic stress.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

22. School psychologists should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

23. School counselors should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

24. School counselors should be responsible for providing additional emotional support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

25. School counselors should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

26. Is there anything important to you about school counselors' role in supporting students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Self-Efficacy

How confident, if at all, are you in your ability to…

27. Recognize the symptoms of child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

28. Determine when a child experiencing traumatic stress requires a referral to mental health services.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

29. Balance the individual needs of students experiencing traumatic stress with the needs of the class as a whole.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

Please indicate the degree to which you agree or disagree with the following:

30. I have the knowledge necessary to support students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

31. I have the skills necessary to support students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

How confident, if at all, are you in your ability to…

32. Meet the academic needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

33. Meet the emotional needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

34. Meet the behavioral needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

35. Is there anything important to you about your confidence in these areas that has not been asked? If so, please use the space below.

Demographic Information

36. How many years have you been employed as a teacher?

37. Throughout your career as a teacher, approximately what percentage of your students have experienced child traumatic stress?

38. In which type of school are you currently employed?
    - ☐ Early childhood
    - ☐ Elementary school
    - ☐ Middle school
    - ☐ High school
    - ☐ Other (please specify) _____

39. Which of the following terms best describes your current school?
    - ☐ Urban
    - ☐ Suburban

- ☐ Rural

40. What percentage of students in your school qualify for Free and Reduced Price School Meals?

41. What is your gender?
    - ☐ Female
    - ☐ Male
    - ☐ Other (please specify) _____
    - ☐ Prefer not to answer.

42. What is your age?

43. 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 (please specify) _____
    - ☐ Prefer not to answer

Thank you for completing this survey. Your time is much appreciated!

Now that you've completed the survey, please provide your opinions on the following questions. Your opinions will be used to improve the survey.

1. How long did it take you to complete the entire survey? Is this amount of time feasible?
2. Please describe the ease or difficulty of taking the survey.
3. Is any part of the survey confusing or unclear? Please describe.
4. Do you have any suggested changes to the survey given the purpose of my dissertation? If so, please describe.
5. Do you have recommended additions to the survey? If so, please describe.
6. Other comments or suggestions?

Thank you for your feedback and for participating in this field test!

If you would like to enter your email address into a drawing for one $20 Amazon gift card, please send a blank email with the subject "Survey Field Test Drawing" to SurveyFieldTestDrawing@gmail.com. Your entry will in no way be linked to the answers you've provided throughout this survey. The winner will be notified via email.

APPENDIX B

RECRUITMENT EMAIL TO FIELD TEST PARTICIPANTS

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. To better understand teachers' experiences, I am conducting a dissertation study that will survey classroom teachers in Douglas County, Nebraska. Before conducting the study, I am seeking classroom teachers' support in improving the survey. As a classroom teacher, your opinions on the content of the survey are essential, and you are invited to participate in the field test of this study. If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to participate in the field test.

The field test includes two parts: (1) completion of a 15-minute survey and (2) completion of a 15-minute checklist. The survey gathers your opinions on the needs of students experiencing traumatic stress and the checklist gathers your opinions on the survey itself.

The field test will include 20 participants. If you choose to participate, you will have the opportunity to enter a drawing for one $20 Amazon gift card.

To participate, please click the below link.

<insert Survey Monkey field test link>

Thank you in advance for considering this field test!

Sincerely,

Kassandra Reker, M.Ed.

APPENDIX C

FOLLOW-UP EMAILS TO FIELD TEST PARTICIPANTS

Field Test Follow-Up Email 1

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

This is the second email you have received regarding this field test. Since the field test is anonymous, I have no way of knowing whether you have responded. If you have already completed the field test, I greatly appreciate your doing so. If you haven't responded yet, I hope you will.

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. To better understand teachers' experiences, I am conducting a dissertation study that will survey classroom teachers in Douglas County, Nebraska. Before conducting the study, I am seeking classroom teachers' support in improving the survey. As a classroom teacher, your opinions on the content of the survey are essential, and you are invited to participate in the field test of this study. If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to participate in the field test.

The field test includes two parts: (1) completion of a 15-minute survey and (2) completion of a 15-minute checklist. The survey gathers your opinions on the needs of students experiencing traumatic stress and the checklist gathers your opinions on the survey itself.

The field test will include 20 participants. If you choose to participate, you will have the opportunity to enter a drawing for one $20 Amazon gift card.

To participate, please click the below link.

<insert Survey Monkey field test link>

Thank you in advance for considering this field test!

Sincerely,

Kassandra Reker, M.Ed.

Field Test Follow-Up Email 2

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

This is the third email you have received regarding this field test. Since the field test is anonymous, I have no way of knowing whether you have responded. If you have already completed the field test, I greatly appreciate your doing so. If you haven't responded yet, I hope you will.

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. To better understand teachers' experiences, I am conducting a dissertation study that will survey classroom teachers in Douglas County, Nebraska. Before conducting the study, I am seeking classroom teachers' support in improving the survey. As a classroom teacher, your opinions on the content of the survey are essential, and you are invited to participate in the field test of this study. If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to participate in the field test.

The field test includes two parts: (1) completion of a 15-minute survey and (2) completion of a 15-minute checklist. The survey gathers your opinions on the needs of students experiencing traumatic stress and the checklist gathers your opinions on the survey itself.

The field test will include 20 participants. If you choose to participate, you will have the opportunity to enter a drawing for one $20 Amazon gift card.

To participate, please click the below link.

<insert Survey Monkey field test link>

Thank you in advance for considering this field test!

Sincerely,

Kassandra Reker, M.Ed.

APPENDIX D

CLOSING EMAIL TO FIELD TEST PARTICIPANTS

*Subject Line: ** Field test closing in 24 hours ** Supporting Students Exposed to Trauma*

Dear Classroom Teacher,

This is the final email you will receive regarding this field test. Your role as an educator is critical, and I would greatly appreciate your opinions regarding my dissertation survey. Unfortunately, the field test will close in 24 hours. If your schedule allows, please take a moment to complete the field test. Your time is much appreciated!

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. To better understand teachers' experiences, I am conducting a dissertation study that will survey classroom teachers in Douglas County, Nebraska. Before conducting the study, I am seeking classroom teachers' support in improving the survey. As a classroom teacher, your opinions on the content of the survey are essential, and you are invited to participate in the field test of this study. If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to participate in the field test.

The field test includes two parts: (1) completion of a 15-minute survey and (2) completion of a 15-minute checklist. The survey gathers your opinions on the needs of students experiencing traumatic stress and the checklist gathers your opinions on the survey itself.

The field test will include 20 participants. If you choose to participate, you will have the opportunity to enter a drawing for one $20 Amazon gift card.

To participate, please click the below link.

<insert Survey Monkey field test link>

Thank you in advance for considering this field test!

Sincerely,

Kassandra Reker, M.Ed.

APPENDIX E

FINAL SURVEY

Project Title: Trauma in the Classroom: Teachers' Perspectives on Supporting Students Experiencing Child Traumatic Stress

Researcher: Kassandra Reker, M.Ed., PLMHP

Faculty Sponsors: David Shriberg, Ph.D. and Rosario Pesce, Ph.D.

You are being asked to take part in a research study conducted by Kassandra Reker under the supervision of Drs. David Shriberg and Rosario Pesce in the School of Education at Loyola University – Chicago. You are being asked to participate because you are an elementary, middle, or high school teacher in the United States.

Please read this form carefully and ask any questions you may have before deciding whether to participate in this study.

Purpose: The purpose of this study is to better understand teachers' perspectives on supporting students experiencing child traumatic stress.

Risk and Benefits: There are no foreseeable risks involved in participating in this study other than those encountered in day-to-day life. You will receive no direct benefits from participating in this research study. However, your responses will contribute to the researchers' understanding of teachers' perceptions of supporting students experiencing child traumatic stress.

Compensation: To thank you for your participation and time, you will have the opportunity to enter a drawing for one of four $25 Amazon gift cards.

Confidentiality: Your confidentiality will be maintained to the degree permitted by Survey Monkey and other technology used. If you wish to add your email address at the end of the survey in order to receive the results of this study, a space will be provided for this information. If you do not choose to provide your email address, your survey will be entirely anonymous.

Voluntary Participation: Participation in this study is voluntary. If you decide to participate, the survey will take approximately 15 minutes to complete. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free to not answer any question or to withdraw from participation at any time without penalty. Your willingness to participate will have no effect on your current relationship with the researcher or with Loyola University – Chicago.

Contact and Questions: If you have questions about the research study, please contact Kassandra Reker (kreker@luc.edu). If you have questions about your rights as a research participant, you may contact Loyola University Office of Research Services at (773) 508-2689.

Statement of Consent: By indicating 'yes' to the item below, you indicate you have read the information provided above, have had an opportunity to ask questions, and agree to participate in this research study. If you would like a copy of this form for your records, please email Kassandra Reker (kreker@luc.edu).

Do you voluntarily agree to participate in this study by completing the following survey? You are free to discontinue your participation at any time for any reason.

- ☐ Yes, I agree to participate.
- ☐ No, I decline to participate.

Are you currently an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska?

- ☐ Yes
- ☐ No

Survey Definitions

This survey makes several references to "trauma" and "child traumatic stress."

For the purpose of this survey, **trauma** is defined as resulting: "*from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and physical, social, emotional, or spiritual well-being.*"

For the purpose of this survey, **child traumatic stress** is defined as occurring when children *"have been exposed to one or more traumas over the course of their lives and develop reactions that persist and affect their daily lives after the traumatic events have ended."*

Training Experiences

This survey references **pre-service** and **in-service** teacher training.

For the purpose of this survey, **pre-service** training is any training you received while earning your teaching license or certification.

For the purpose of this survey, **in-service** training is any training you received while employed as a teacher.

1. How did you first obtain teacher certification?
    - ☐ Undergraduate teacher training program
    - ☐ Master's level certification

- ☐ Teacher for America
- ☐ Other (please explain below)

2. During your pre-service teacher training, how much training in childhood trauma did you receive?
   - ☐ None
   - ☐
   - ☐ Some
   - ☐
   - ☐ A great deal

3. During your pre-service teacher training, how much training in supporting students experiencing child traumatic stress did you receive?
   - ☐ None
   - ☐
   - ☐ Some
   - ☐
   - ☐ A great deal

4. How adequately or inadequately do you feel your pre-service training prepared you to support students with child traumatic stress?
   - ☐ Very adequately
   - ☐ Adequately
   - ☐ Neutral
   - ☐ Inadequately
   - ☐ Very inadequately

5. How satisfied or dissatisfied are you with the pre-service training you received on supporting students with child traumatic stress?
   - ☐ Very satisfied
   - ☐ Satisfied
   - ☐ Neutral
   - ☐ Dissatisfied
   - ☐ Very dissatisfied

6. Is there anything important to you about your pre-service trauma training that has not been asked? If so, please use the space below.

7. During your time employed as a teacher, how much in-service training in childhood trauma have you received?
   - ☐ None
   - ☐
   - ☐ Some
   - ☐

- ☐ A great deal

8. During your time employed as a teacher, how much in-service training in supporting students experiencing child traumatic stress have you received?
   - ☐ None
   - ☐
   - ☐ Some
   - ☐
   - ☐ A great deal

9. How adequately or inadequately do you feel your in-service training prepared you to support students with child traumatic stress?
   - ☐ Very adequately
   - ☐ Adequately
   - ☐ Neutral
   - ☐ Inadequately
   - ☐ Very inadequately

10. How satisfied or dissatisfied are you with your in-service training on supporting students with child traumatic stress?
    - ☐ Very satisfied
    - ☐ Satisfied
    - ☐ Neutral
    - ☐ Dissatisfied
    - ☐ Very dissatisfied

11. Is there anything important to you about your in-service trauma training that has not been asked? If so, please use the space below.

Student Needs

Based on your time working with students experiencing child traumatic stress, please indicate the degree to which you agree or disagree with the following:

12. Students experiencing child traumatic stress require more <u>academic</u> support in the classroom than their peers.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

13. Students experiencing child traumatic stress require more <u>emotional</u> support in the classroom than their peers.

- ☐ Strongly agree
- ☐ Agree
- ☐ Neutral
- ☐ Disagree
- ☐ Strongly disagree

14. Students experiencing child traumatic stress require more behavioral support in the classroom than their peers.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

15. Is there anything important to you about the needs of students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Staff Roles

Please indicate the degree to which you agree or disagree with the following:

16. Teachers should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

17. Teachers should be responsible for providing additional emotional support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

18. Teachers should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

19. Is there anything important to you about teachers' role in supporting students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Please indicate the degree to which you agree or disagree with the following:

20. School psychologists should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

21. School psychologists should be responsible for providing additional emotional support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

22. School psychologists should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

23. Is there anything important to you about school psychologists' role in supporting students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Please indicate the degree to which you agree or disagree with the following:

24. School counselors should be responsible for providing additional academic support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

25. School counselors should be responsible for providing additional emotional support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

26. School counselors should be responsible for providing additional behavioral support to students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

27. Is there anything important to you about school counselors' role in supporting students experiencing child traumatic stress that has not been asked? If so, please use the space below.

Self-Efficacy

How confident, if at all, are you in your ability to…

28. Recognize the symptoms of child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

29. Determine when a child experiencing traumatic stress requires a referral to mental health services.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

30. Balance the individual needs of students experiencing traumatic stress with the needs of the class as a whole.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral

- ☐ Somewhat confident
- ☐ Not at all confident

Please indicate the degree to which you agree or disagree with the following:

31. I have the knowledge necessary to support students experiencing child traumatic stress.

    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

32. I have the skills necessary to support students experiencing child traumatic stress.
    - ☐ Strongly agree
    - ☐ Agree
    - ☐ Neutral
    - ☐ Disagree
    - ☐ Strongly disagree

How confident, if at all, are you in your ability to…

33. Meet the <u>academic</u> needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

34. Meet the <u>emotional</u> needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

35. Meet the <u>behavioral</u> needs of students experiencing child traumatic stress.
    - ☐ Very confident
    - ☐ Mostly confident
    - ☐ Neutral
    - ☐ Somewhat confident
    - ☐ Not at all confident

36. Is there anything important to you about your confidence in these areas that has not been asked? If so, please use the space below.

Demographic Information

37. How many years have you been employed as a teacher?

38. Approximately what year did you earn your teaching certification?

39. Which of the below best describe your role in the classroom?
    - ☐ General education teacher
    - ☐ Special education teacher
    - ☐ Specialist (example: art, music, physical education)
    - ☐ Other (please specify) _____

40. Throughout your career as a teacher, approximately what percentage of your students have experienced child traumatic stress?

41. In which type of school are you currently employed?
    - ☐ Early childhood
    - ☐ Elementary school
    - ☐ Middle school
    - ☐ High school
    - ☐ Other (please specify) _____

42. Which of the following terms best describes your current school?
    - ☐ Urban
    - ☐ Suburban
    - ☐ Rural

43. What percentage of students in your school qualify for Free and Reduced Price School Meals?

44. What is your gender?
    - ☐ Female
    - ☐ Male
    - ☐ Other (please specify) _____
    - ☐ Prefer not to answer.

45. What is your age?

46. 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 (please specify) _____
- ☐ Prefer not to answer

Thank you for completing this survey. Your time is much appreciated!

If you would like to enter your email address into a drawing for one of four $25 Amazon gift card, please send a blank email with the subject "Teacher Survey Drawing" to TeacherSurveyDrawing@gmail.com. Your entry will in no way be linked to the answers you've provided throughout this survey. The winner will be notified via email.

APPENDIX F

RECRUITMENT EMAIL TO SURVEY PARTICIPANTS

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. As a classroom teacher, your experiences and views are essential. You are invited to participate in a survey conducted by Kassandra Reker, M.Ed. – a graduate student at Loyola University – Chicago. Survey participants are asked to provide their opinions on the needs of students experiencing traumatic stress and their confidence levels in supporting these students.

If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to complete the survey. Your responses to the survey are anonymous, and the survey should take no more than 15 minutes to complete.

If you choose to participate, you will have the opportunity to enter a drawing for one of four $25 Amazon gift cards.

To participate, please click the below link.

<insert Survey Monkey link>

Thank you in advance for considering this survey!

Sincerely,

Kassandra Reker, M.Ed.

APPENDIX G

FOLLOW-UP EMAILS TO SURVEY PARTICIPANTS

Survey Follow-Up Email 1

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. As a classroom teacher, your experiences and views are essential. You are invited to participate in a survey conducted by Kassandra Reker, M.Ed. – a graduate student at Loyola University – Chicago. Survey participants are asked to provide their opinions on the needs of students experiencing traumatic stress and their confidence levels in supporting these students.

If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to complete the survey. Your responses to the survey are anonymous, and the survey should take no more than 15 minutes to complete.

If you choose to participate, you will have the opportunity to enter a drawing for one of four $25 Amazon gift cards.

To participate, please click the below link.

<insert Survey Monkey link>

Thank you in advance for considering this survey!

Sincerely,

Kassandra Reker, M.Ed.

Survey Follow-Up Email 2

Subject Line: Supporting Students Exposed to Trauma

Dear Classroom Teacher,

This is the third email you have received regarding this survey. Since the survey is anonymous, I have no way of knowing whether you have responded. If you have already responded to this survey, I greatly appreciate your doing so. If you haven't responded yet, I hope you will.

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. As a classroom teacher, your experiences and views are essential. You are invited to participate in a survey conducted by Kassandra Reker, M.Ed. – a graduate student at Loyola University – Chicago. Survey participants are asked to provide their opinions on the needs of students experiencing traumatic stress and their confidence levels in supporting these students.

If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to complete the survey. Your responses to the survey are anonymous, and the survey should take no more than 15 minutes to complete.

If you choose to participate, you will have the opportunity to enter a drawing for one of four $25 Amazon gift cards.

To participate, please click the below link.

<insert Survey Monkey link>

Thank you in advance for considering this survey!

Sincerely,

Kassandra Reker, M.Ed.

APPENDIX H

CLOSING EMAIL TO SURVEY PARTICIPANTS

*Subject Line: ** Survey closing in 24 hours ** Supporting Students Exposed to Trauma*

Dear Classroom Teacher,

This is the final email you will receive regarding this survey. Your role as an educator is critical, and I would greatly appreciate your thoughts on supporting students with trauma histories. Unfortunately, the survey will close in 24 hours. If your schedule allows, please take a moment to complete the survey. Your time is much appreciated!

As you are aware, many students enter the classroom with significant trauma histories. Often times, these trauma histories negatively impact the student's social, behavioral, or academic functioning. As a result, teachers play a critical role in supporting students with exposure to traumatic events.

Unfortunately, little is known about teachers' experiences supporting students with trauma histories. As a classroom teacher, your experiences and views are essential. You are invited to participate in a survey conducted by Kassandra Reker, M.Ed. – a graduate student at Loyola University – Chicago. Survey participants are asked to provide their opinions on the needs of students experiencing traumatic stress and their confidence levels in supporting these students.

If you are an early childhood, elementary, middle, or high school teacher in Douglas County, Nebraska, you are eligible to complete the survey. Your responses to the survey are anonymous, and the survey should take no more than 15 minutes to complete.

If you choose to participate, you will have the opportunity to enter a drawing for one of four $25 Amazon gift cards.

To participate, please click the below link.

<insert Survey Monkey link>

Thank you in advance for considering this survey!

Sincerely,

Kassandra Reker, M.Ed.

REFERENCE LIST

Abram, K. M., Teplin, L. A., Charles, D. R., Longworth, S. L., McClelland, G. M., & Dulcan, M. K. (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Archives of General Psychiatry*, 61, 403– 410. doi:10.1001/archpsyc.61.4.403

Alisic, E. (2012). Teachers' perspectives on proving support to children after trauma: A qualitative study. *School Psychology Quarterly, 27*(1), 51-59.

Alisic, E., Bus, M., Dulack, W., Pennings, L., & Splinter, J. (2012). Teachers' experiences supporting children after traumatic exposure. *Journal of Traumatic Stress, 25*(1), 98-101.

Alisic, E., Zalta, A. K., van Wesel, F., Larsen, S. E., Hafstad, G. S., Hassanpour, K., & Smid, G. E. (2014). Rates of post-traumatic stress disorder in trauma-exposed children and adolescents: Meta-analysis. *The British Journal of Psychiatry, 204*(5), 335-340.

American Academy of Pediatrics, Committee on School Health (2004). School-based mental health services. *Pediatrics, 113*(6), 1839-1845.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.). Washington, DC: Author.

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.). Washington, DC: Author.

Babbie, E. (1990). *Survey research methods.* Belmont, California: Wadsworth, Inc.

Berliner, D. C. (1986). In pursuit of the expert pedagogue. *Educational Researcher, 15*(7), 5-13.

Bongers, I. L., Koot, H. M., van der Ende, J., & Verhulst, F. C. (2003). The normative development of child and adolescent problem behavior. *Journal of Abnormal Psychology, 112*(2), 179-192.

Bosquet Enlow, M., Egeland, B., Blood, E. A., Wright, R. O., & Wright, R. J. (2012). Interpersonal trauma exposure and cognitive development in children to age 8 years: A longitudinal study. *Journal of Epidemiology & Community Health, 66*(11), 1005-1010.

Bronfenbrenner, U. (1993). Ecological models of human development. In M. Gauvain & M. Cole (Eds.), *Reading on the development of children, 2nd edition* (37-43). New York: Freeman.

Burgess, A. W., & Holmstrom, L. L. (1974). Rape trauma syndrome. *American Journal of Psychiatry, 131*(9), 981-986.

Centers for Disease Control and Prevention. (2014a). About the study. Retrieved from http://www.cdc.gov/violenceprevention/acestudy/about.html

Centers for Disease Control and Prevention. (2014b). ACE study participant demographics. Retrieved from http://www.cdc.gov/violenceprevention/acestudy/demographics.html

Centers for Disease Control and Prevention. (2014c). Prevalence of individual adverse childhood experiences. Retrieved from http://www.cdc.gov/violenceprevention/acestudy/prevalence.html

Centers for Disease Control and Prevention & National Center for Health Statistics. (2013). Frequently asked questions: 2011-2012 National Survey of Children's Health. Retrieved from ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/slaits/nsch_2011_2012/01_Frequently_asked_questions/NSCH_2011_2012_FAQs.pdf

Cerezo-Jimenex, M. A., & Frias, D. (1994). Emotional and cognitive adjustment in abused children. *Child Abuse & Neglect, 18*(11), 923-932.

Child and Adolescent Health Measurement Initiative. (2013a). 2011/12 National Survey of Children's Health (2011/12 NSCH) Sampling and Survey Administration. Retrieved from http://www.childhealthdata.org/docs/drc/2011-12-nsch-sampling-and-administration.pdf?sfvrsn=1

Child and Adolescent Health Measurement Initiative. (2013b). Overview of adverse child and family experiences among U.S. children. Retrieved from http://www.childhealthdata.org/docs/drc/aces-data-brief_version-1-0.pdf?Status=Master

Child Welfare Information Gateway. (2015). Understanding the effects of maltreatment on brain development. Washington, DC: U.S. Department of Health and Human Services, Children's Bureau.

Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007a). How and why do teacher credentials matter for student achievement? (Working paper 2). CALDER. Washington, DC: The Urban Institute. Retrieved from http://www.caldercenter.org/sites/default/files/1001058_Teacher_Credentials.pdf

Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2007b). Teacher credentials and student achievement in high school: A cross-subject analysis with student fixed effects (Working paper 11). CALDER. Washington, DC: The Urban Institute. Retrieved from http://files.eric.ed.gov/fulltext/ED509665.pdf

Cole, S. F., Greenwald O'Brien, J., Geron Gadd, M., Ristuccia, J., Luray Wallace, D., & Gregory, M. (2005). Helping traumatized children learn. Retrieved from: http://tlpi.jacksonwhelan.netdna-cdn.com/wp-content/uploads/2013/06/Helping-Traumatized-Children-Learn.pdf

Creswell, J. W. (2009). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.

Crocq, M. A. (2000). From shell shock and war neurosis to posttraumatic stress disorder: A history of psychotraumatology. *Dialogues in Clinical Neuroscience, 2*(1), 47–55.

Dillman, D. A., Reips, U., & Matzat, U. (2010). Advice in surveying the general public over the internet. *International Journal of Internet Science, 5*, 1-4.

Eckenrode, J., Laird, M., & Doris, J. (1992). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology, 29*(1), 53-62.

Elliott, J. G., & Stemler, S. E. (2008). Teacher authority, tacit knowledge, and the training of teachers. In T. E. Scruggs & M. A. Mastroieri (Eds.), Personnel preparation (75-88). United Kingdom: Emerald Group Publishing Limited.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventative Medicine, 14*(4), 245-258.

Finkelhor, D., Turner, H., Ormrod, R., & Hamby, S. L. (2009a). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics, 124*(5), 1411-1423.

Finkelhor, D., Turner, H., Ormrod, R., Hamby, S., & Kracke, K. (2009b). Children's exposure to violence: A comprehensive national survey. Retrieved from http://permanent.access.gpo.gov/lps125206/227744.pdf

Finkelhor, D., Turner, H., Hamby, S., & Ormrod, R. (2011). Polyvictimization: Children's exposure to multiple types of violence, crime, and abuse. Retrieved from https://www.ncjrs.gov/pdffiles1/ojjdp/235504.pdf

Foster, J., Kuperminc, G., & Price, A. (2004). Gender differences in posttraumatic stress and related symptoms among inner-city minority youth exposed to community violence. *Journal of Youth and Adolescence, 33*, 59-69. doi:10.1023/A:1027386430859

Franklin, C. G. S., Kim, J. S., Ryan, T. N., Kelly, M. S., & Montgomery, K. L. (2012). Teacher involvement in school mental health interventions: A systemic review. *Children and Youth Services Review, 34*(5), 973-982.

Friedman, M. J. (2013). Finalizing PTSD in DSM-5: Getting here from there and where to go next. *Journal of Traumatic Stress, 26*, 548-556.

Frippiat, D. & Marquis, N. (2010). Web surveys in the social sciences: An overview. *Population, 65*(2), 285-312.

Goodman, R. D., Miller, M. D., & West-Olatunji, C. A. (2012). Traumatic stress, socioeconomic status, and academic achievement among primary school students. *Psychological Trauma: Theory, Research, Practice, and Policy, 4*(3), 252-259.

Graham-Bermann, S. A., Castor, L. E., Miller, L. E., & Howell, K. H. (2012). The impact of intimate partner violence and additional traumatic events on trauma symptoms and PTSD in preschool-aged children. *Journal of Traumatic Stress, 25*(4), 393-400.

Harris, D. N., & Sass, T. R. (2007). Teacher training, teacher quality, and student achievement (Working paper 3). CALDER. Washington, DC: The Urban Institute. Retrieved from http://files.eric.ed.gov/fulltext/ED509656.pdf

Harris, K. M., Halpern, C. T., Whitsel, E., Hussey, J., Tabor, J., Entzel, P., & Udry, J. R. (2009). The National Longitudinal Study of Adolescent to Adult Health: Research Design. Retrieved from http://www.cpc.unc.edu/projects/addhealth/design

Herman, J. L. (1992). *Trauma and recovery*. New York, NY: BasicBooks.

Hildyard, K. L., & Wolfe, D. A. (2002). Child neglect: Developmental issues and outcomes. *Child Abuse & Neglect, 26*(6), 679-695.

Home, A. M. (1981). Toward a model of change in consciousness-raising groups. *Social Work with Groups, 4*(1-2), 155-168.

Kendall-Tackett, K. A., & Eckenrode, J. (1996). The effects of neglect on academic achievement and disciplinary problems: A developmental perspective. *Child Abuse & Neglect, 20*(3), 161-169.

Kim, J., & Cicchetti, D. (2003). Social self-efficacy and behavior problems in maltreated children. *Journal of Clinical Child and Adolescent Psychology, 32*(1), 106-117.

Kini, T., & Podolsky, A. (2016). Does Teaching Experience Increase Teacher Effectiveness? A Review of the Research. Retrieved from: https://learningpolicyinstitute.org/our-work/publications-resources/does-teaching-experience-increase-teacher-effectiveness-review-research

Kisiel, C. L., Fehrenbach, T., Torgersen, E., Stolbach, B., McClelland, G., Griffin, G., & Burkman, K. (2014). Constellations of interpersonal trauma and symptoms in child welfare: Implications for a developmental trauma framework. *Journal of Family Violence, 29*(1), 1-14.

Ko, S. J., Ford, J. D., Kassam-Adams, N., Berkowitz, S. J., Wilson, C., Wong, M., Brymer, M. J., & Layne, C. M. (2008). Creating trauma-informed systems: Child welfare, education, first responders, health care, juvenile justice. *Professional Psychology: Research and Practice, 39*(4), 396-404.

Kounin, J. S. (1970). *Discipline and group management in classrooms.* New York: Holt, Rinehart, & Winston.

Kurtz, P. D., Gaudin Jr., J. M., Wodarski, J. S., & Howing, P. T. (1993). Maltreatment and the school-aged child: School performance consequences. *Child Abuse & Neglect, 17*(5), 581-589.

Ladd, H. F., & Sorensen, L. C. (2015). Returns to teacher experience: Student achievement and motivation in middle school. (Working paper 112). CALDER. Washington, DC: The Urban Institute. Retrieved from http://www.caldercenter.org/sites/default/files/WP%20112%20Update_0.pdf

Leither, J., & Johnson, M. (1994). Child maltreatment and school performance. *American Journal of Education, 102*(2), 154-189.

Lifton, R. (1973). *Home from the war: Vietnam veterans: Neither victims nor executioners.* New York: Simon and Schuster.

Leys, R. (2000). *Trauma: A Genealogy*. Chicago: University of Chicago Press.

Manfreda, K. L., Bosnjak, M., Berzelak, J., & Vehovar, V. (2007). Web surveys versus other survey modes: A meta-analysis comparing response rates. *International Journal of Market Research, 50*(1), 79-104.

Manly, J. T., Kim, J. E., Rogosch, F. A., & Cicchetti, D. (2001). Dimensions of child maltreatment and children's adjustment: Contributions of developmental timing and subtype. *Development and Psychopathology, 13*(4), 759-782.

Masson, J. M. (1984). *The assault on truth: Freud's suppression of the seduction theory*. New York: Farrar, Straus and Giroux.

McLaren, L. & Hawe, P. (2005). Ecological perspectives in health research. *Journal of Epidemiology & Community Health, 59*(1), 6-14.

McMillen, J. C., Zima, B. T., Scott Jr., L. D., Auslander, W. F., Munson, M. R., Ollie, M.T., & Spitznagel, E. L. (2005). Prevalence of psychiatric disorders among older youths in the foster care system. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(1), 88-95.

Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., Benjet, C., Georgiades, K., & Swendsen, J. (2010). Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry, 49*(10), 980-989.

Mills, R., Alati, R., O'Callaghan, M., Najman, J. M., Williams, G. M., Bor, W., & Strathearn, L. (2011). Child abuse and neglect and cognitive function at 14 years of age: Findings from a birth cohort. *Pediatrics, 127*(1), 4-10.

Milot, T., Ethier, L. S., St-Laurent, D., & Provost, M. A. (2010). The role of trauma symptoms in the development of behavioral problems in maltreated preschoolers. *Child Abuse & Neglect, 34*(4), 225-234.

National Alliance on Mental Illness (2013). School-based mental health. Retrieved from https://www2.nami.org/Template.cfm?Section=NAMI_Policy_Platform&Template=/ContentManagement/ContentDisplay.cfm&ContentID=153160

National Association of School Psychologists (2010). Principles of professional ethics. Retrieved from: https://www.nasponline.org/Documents/Standards%20and%20Certification/Standards/1_%20Ethical%20Principles.pdf

National Association of School Psychologists (2015). *The importance of mental and behavioral health services for children and adolescents* (Position statement). Bethesda, MD: Author.

National Child Traumatic Stress Network (n.d.). Impact of complex trauma. Retrieved from http://www.nctsn.org/sites/default/files/assets/pdfs/impact_of_complex_trauma_final.pdf

National Child Traumatic Stress Network. (2003). What is child traumatic stress? Retrieved from http://www.nctsnet.org/sites/default/files/assets/pdfs/what_is_child_traumatic_stress_0.pdf

National Child Traumatic Stress Network. (2008). Psychological and behavioral impact of trauma: Elementary school students. Retrieved from http://www.nctsn.org/sites/default/files/assets/pdfs/ctte_elementary.pdf

National Institutes of Health, National Institute of Mental Health (n.d.). Any Disorder Among Children. Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/any-disorder-among-children.shtml

National Institute of Mental Health. (n.d.). Use of Mental Health Services and Treatment Among Children. Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/use-of-mental-health-services-and-treatment-among-children.shtml

National Scientific Council on the Developing Child. (2010). Persistent Fear and Anxiety Can Affect Young Children's Learning and Development: Working Paper No. 9. Retrieved from http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp9/

Nickerson, A., Aderka, I. M., Bryant, R. A., & Hofmann, S. G. (2012). The relationship between childhood exposure to trauma and intermittent explosive disorder. *Psychiatry Research, 197*, 128-134.

Papay, J. P., & Kraft, M. A. (2015). Productivity returns to experience in the teacher labor market: Methodological challenges and new evidence on long-term career improvement. *Journal of Public Economics, 130*, 105-119. doi:10.1016/j.jpubeco.2015.02.008

Pelcovitz, D., van der Kolk, B., Roth, S., Mandel, F., Kaplan, S., & Resick, P. (1997). Development of a criteria set and a structured interview for disorders of extreme stress (SIDES). *Journal of Traumatic Stress, 10*, 3–16. doi:10.1023/A:1024800212070

Pecora, P. J., Williams, J., Kessler, R. J., Downs, A. C., O'Brien, K., Hiripi, E., & Morello, S. (2003). Assessing the effects of foster care: Early results from the Casey national alumni study. Seattle, WA: Casey Family Programs.

Rahim, M. (2014). Developmental trauma disorder: An attachment-based perspective. *Clinical Child Psychology and Psychiatry, 19*(4), 548-560.

Rea, L. M., & Parker, R. A. (2005). *Designing & conducting survey research: A comprehensive guide*. San Francisco, California: John Wiley & Sons, Inc.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly, 26*(1), 1-13.

Ringel, S., & Brandell, J. R. (2011). *Trauma: Contemporary directions in theory, practice, and research*. London: SAGE.

Russell, D. E. H. (1984). *Sexual exploitation: Rape, child sexual abuse, and workplace harassment*. Beverly Hills, California: Sage Publications.

Salazar, A. M., Keller, T. E., Gowen, L. K., & Courtney, M. E. (2013). Trauma exposure and PTSD among older adolescents in foster care. *Social Psychiatry & Psychiatric Epidemiology, 48*, 545-551. doi: 10.1007/s00127-012-0563-0

Scull, A. (2009). *Hysteria: The Biography*. Oxford: OUP Oxford.

Scheeringa, M. (2014). *PTSD for children 6 years and younger*. Retrieved from http://www.ptsd.va.gov/professional/PTSD-overview/ptsd_children_6_and_younger.asp

Shonk, S. M., & Cicchetti, D. (2001). Maltreatment, competency deficits, and risk for academic and behavioral maladjustment. *Developmental Psychology, 37*(1), 3-17.

Shonkoff, J. P., & Garner, A. S. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics, 129*(1), e232-46. doi:10.1542/peds.2011-2663

Slade, E. P., & Wissow, L. S. (2007). The influence of childhood maltreatment on adolescents' academic performance. *Economics of Education Review, 26*, 604-614.

Stolbach, B. C., Minshew, R., Rompala, V., Dominguez, R. Z., Gazibara, T., & Finke, R. (2013). Complex trauma exposure and symptoms in urban traumatized children: A preliminary test of proposed criteria for developmental trauma disorder. *Journal of Traumatic Stress, 26*(4), 483-491.

Substance Abuse and Mental Health Services Administration. (2014a). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. Retrieved from http://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf

Substance Abuse and Mental Health Services Administration. (2014b). *Trauma-Informed Care in Behavioral Health Sciences.* Retrieved from http://store.samhsa.gov/shin/content//SMA14-4816/SMA14-4816.pdf

Talbot, J. A., Szlosek, D., & Ziller, E. C. (2016). Adverse childhood experiences in rural and urban contexts. Retrieved from http://muskie.usm.maine.edu/Publications/rural/Adverse-Childhood-Experiences-Rural.pdf

Terr, L. C. (1979). Children of Chowchilla: A study of psychic trauma. *The Psychoanalytic Study of the Child, 34*, 547-623.

Toth, S. L., Cicchetti, D., Macfie, J., Rogosch, F. A., & Maughan, A. Narrative representations of moral affiliative and conflictual themes and behavioral problems in maltreated preschoolers. *Journal of Clinical Child Psychology, 29*(3), 307-318.

Toth, S. L., Manly, J. T., & Cicchetti, D. (1992). Child maltreatment and vulnerability to depression. *Development and Psychopathology, 4*(1), 97-112.

Tourangeau, K., Le, T., & Nord, C. (2005). Early Childhood Longitudinal Study, Kindergarten Class of 1998–99 (ECLS–K), Fifth-Grade Methodology Report (NCES 2006–037). U.S. Department of Education. Washington, DC: National Center for Education Statistics.

United States Census Bureau. (2015). Douglas County, Nebraska. Retrieved from http://quickfacts.census.gov/qfd/states/31/31055.html

United States Department of Commerce. (20110. Urban area criteria for the 2010 census. Retrieved from: http://www2.census.gov/geo/pdfs/reference/fedreg/fedregv76n164.pdf

United States Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2015). Child maltreatment 2013. Retrieved from http://www.acf.hhs.gov/sites/default/files/cb/cm2013.pdf

United States Department of Health and Human Services (US DHHS), Health Resources and Services Administration. (2015). The health and well-being of children in rural areas: A portrait of the nation 2011-2012. Retrieved from http://mchb.hrsa.gov/nsch/2011-12/rural-health/childs-family/tbl/adverse-childhood-experiences.html

van der Kolk, B. A. (2005). Developmental trauma disorder. *Psychiatric Annals, 35*(5), 401-408.

van der Kolk, B. A., Pynoos, R. S., Cicchetti, D., Cloitre, M. C., D'Andrea, W., Ford, J. D., Lieberman, A. F., Putnam, F. W., Saxe, G., Spinazzola, J., Stolbach, B. C., & Teicher, M. (2009). Proposal to include a developmental trauma disorder diagnosis for children and adolescents in DSM-V. Retrieved from http://www.traumacenter.org/announcements/DTD_papers_Oct_09.pdf

van der Kolk, B. A., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress, 18*(5), 389-399.

van der Kolk, B. A., Weisaeth, L., & van der Hart, O. (1996). History of trauma in psychiatry. In B. A. van der Kolk, A. C. McFarlane, & L. Weisaeth (Eds.), *Traumatic stress: The effects of overwhelming experience in mind, body, and society* (47-76). New York: Guilford.

Walker, J. I. (1983). Comparison of "rap" groups with traditional group therapy in the treatment of Vietnam combat veterans. *Eastern Group Psychotherapy Study, 7*(2), 48–57.

Wamser-Nanney, R., & Vandenberg, B. R. (2013). Empirical support for the definition of a complex trauma even in children and adolescents. *Journal of Traumatic Stress, 26*(6), 671-678.

Webster, R. (2003). *Freud*. London: Weidenfeld & Nicolson.

Weisaeth, L. (2002). The European history of psychotraumatology. *Journal of Traumatic Stress*, *15*(6), 443–452.

Weist, M. D., Goldstein, J., Evans, S. W., Lever, N. A., Axelrod, J., Schreters, R., & Pruitt, D. (2003). Funding a full continuum of mental health promotion and intervention programs in the schools. *Journal of Adolescent Health: Supplement, 32*(6), 70-78.

Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement. Retrieved from http://ies.ed.gov/ncee/edlabs

Zilberstein, K. (2014). Neurocognitive considerations in the treatment of attachment and complex trauma in children. *Clinical Child Psychology and Psychiatry*, *19*(3), 336-354.

VITA

Dr. Reker earned her doctoral degree in school psychology from Loyola University Chicago. Prior to earning her doctoral degree, Dr. Reker earned her Master of Education in educational psychology at Loyola University Chicago. She completed an American Psychological Association (APA)-accredited internship at the Boys Town Center for Behavioral Health through the Nebraska Internship Consortium in Professional Psychology (NICPP). During her tenure at Loyola, Dr. Reker served as a member of several research teams within the School Psychology department and conducted research specific to homeless youth, dropout prevention, sexual health programs, and supervision in school psychology. She is trained in Cognitive Behavioral Intervention for Trauma in School (CBITS) and Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). Dr. Reker is also a National Association of School Psychologists (NASP) PREPaRE trainer.