Running head: PERCEPTIONS OF CHILDHOOD TRAUMA

THE INTERSECTION OF CHILDHOOD TRAUMA, TRAUMA-INFORMED PRACTICES, AND SPECIAL EDUCATION: PERCEPTIONS OF SPECIAL EDUCATION TEACHERS

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Elizabeth A. Mason

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COMMITTEE MEMBERS

Committee Chair: Jessica Wirth-Hall, Ed.D

Associate Professor of Special Education

Slippery Rock University

Committee Member: Ashlea Rineer-Hershey, Ph.D

Associate Professor of Special Education

Slippery Rock University

Committee Member: Michelle Ludwig, Ed.D

Director of Pupil Services

Spring Grove Area School District

ABSTRACT

Childhood trauma impacts approximately half of school-aged youth in the United States, with many students experiencing one or more adverse childhood experiences (ACEs) that contribute to complex mental health, social, and educational challenges by the time they are seniors in high school. Childhood trauma is particularly impacting students receiving special education services, as trauma-related factors often cause learning disabilities, behavioral difficulties, and social challenges in the school setting. This qualitative case study examined the perspectives of special education teachers regarding the effects of childhood trauma, their roles in implementing trauma-informed practices, and the professional development opportunities they have participated in within a K-12 public school district in central Pennsylvania. Using semi-structured interviews, key themes emerged concerning the challenges teachers face in providing trauma-informed practices. Findings suggest that teachers view trauma as a critical factor affecting students' academic performance and social-emotional regulation, requiring a coordinated, schoolwide approach to trauma-informed care. The study concludes with recommendations for school districts to adopt ongoing, culturally responsive professional development and foster partnerships within the community organizations to enhance support systems for special education students impacted by childhood trauma. These findings highlight the importance of implementing strategic enhancements in professional development, specifically designed to provide special education teachers with the essential tools to effectively support the diverse needs of special education students affected by childhood trauma.

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CHAPTER ONE

Childhood trauma affects approximately half of school-age youth in U.S. schools. Nearly half of the same number of youth reporting exposure to at least one adverse childhood experience (ACE) also exhibit symptoms of anxiety and depression. Nearly one-third of students experience two or more ACEs by the time they are 17 years of age. Twelve out of 25 students in a typical classroom may have been affected by trauma, with close to 8 of those 25 students having experienced two or more ACEs by the time they are seniors in high school (McDowell Institute, 2022).

The effects of childhood trauma and its transference to adulthood intersect in medicine, psychology, and education. In 1995, the U.S. Department of Education promoted the concept of school-linked services to connect schools with their communities in response to the growing number of students facing significant psychological issues (U.S. Department of Education, 2022). The resulting evolution of school-based mental health practices and policies has grounded educators' understanding of childhood trauma and trauma-informed practices in public schools.

The intersection of childhood trauma and special education is a critical and complex area of concern in education. A child's exposure to trauma can be the root cause of learning disabilities, health problems, and social challenges that lead to behavioral problems in school. Special education teachers play a vital role in identifying signs of childhood trauma, child abuse, and neglect. Research on how to effectively support special education teachers' understanding of childhood trauma is under considered (Chudzik et al, 2024; Goldenthal et al., 2024; Gill et al., 2015; Hunter et al., 2015; Miller & Santos, 2020). Through a semi-structured interview process, this qualitative study sought to understand special education teachers' perceptions of childhood trauma, their role in providing trauma-informed practices, and the professional development they have received on trauma-informed practices to support students who receive special education services. Interviews were conducted with special education teachers to identify common themes in professional development related to childhood trauma and trauma-informed practices. The results of this study could to be used to guide future professional development for special education teachers on childhood trauma and trauma-informed practices within a school district and the greater community.

Problem to Be Studied

Across the nation, educators are reporting an increased prevalence and greater intensity of children being exposed to traumatic events (Kramer, Sigel, Connors-Burrow, Worley, Church, & Helpenstill, 2015; Levine, Sutherland, & Tagnesi, 2017; Rosen & Cowan, 2013). A child's exposure to one or more traumatic events has been proven to disrupt a child's learning and psychosocial development (American Psychological Association, 2021. Children with disabilities and a history of trauma exposure have higher rates of mental health challenges, academic-related distress, and have greater difficulty forming peer relationships (Pickens & Tschopp, 2017; Winder, 2015). Despite the foundational trauma-informed frameworks provided through the New Haven Competencies (2014) and the Substance Abuse and Mental Health Services Administration's (SAMHAS) Trauma and Justice Strategic Initiative, there is a lack of thorough research on special education teachers' perceptions of childhood trauma and its impact on special education services (Cook & Newman, 2014). Special education teachers are unsure of their role in implementing trauma-informed practices. Additionally, research is lacking on special education teachers' perceptions of the professional development they have received for responding to children who have experienced trauma and also qualify for special education services.

Research Questions

- 1. What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?
- 2. What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?
- 3. What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and qualify for special education services?

Overview of Trauma-Based Theoretical Frameworks

Trauma-informed practices in the public school system were developed from the theoretical frameworks of attachment theory, family systems theory, Maslow's hierarchy of needs, ecological family systems theory, the polyvagal theory, and the sanctuary model (Bloom, 2008; Bowlby, 1958; Bronfenbrenner, 1975; Delahooke, 2019; Duplechain et al., 2008; Maslow, 1943; Purser, 2022; Rabstejnek, 2009). Drawing from the psycho-analytical research of Sigmund Freud, Jean Piaget, Melanie Klein, Michael and Alice Balints, and Margaret Ribble, Bowlby (1958) theorized the five instinctual responses an infant develops. During the first 12 months of a child's life, instinctual responses develop and mature at different rates, binding a child to its mother. Bowlby's discoveries are known as the attachment theory. Infants exhibit a crying response when they are hungry and when they want to be touched for warmth. As the infant grows, they

begin to follow a person with their eyes. They want to remain close to their mother and will exhibit a clinging response. Around six months old, an infant will smile, a response activated by the mother's behavior. Sucking is a behavior in an infant's repertoire at birth, and it continues to develop. For a child to survive, each of these responses ties an infant to their mother (Bowlby, 1958).

Bowen's family systems theory (Jakimowicz et al., 2020) hypothesizes a motherfather-child triad comprising eight concepts. Fusion or distancing can occur within a family unit. For example, a mother and father may experience tension due to a recent stressful event and triangulate with their child to maintain a calm environment. Sometimes, when tension within the family unit is greater, the triad can be extended. Differentiation occurs when an individual can separate their emotional and intellectual responses. A highly differentiated person can respond to stress in a way that enables their intellectual and emotional systems to function properly. When an undifferentiated family unit experiences stress, the stress may cause the family unit to break down. Stress can influence a single-generation family unit. If the family unit does not fuse, parents can pass down patterns of low fusion to their children. The unresolved emotional imbalances of the nuclear family can be transferred to the extended family. Each transference is triangulated, and the pattern is repeated. In a family with multiple siblings, one or more siblings might be selected for triangulation over others. Emotional cutoff may create unresolved emotional detachment or emotional dependency for the child and influence future family projections. Societal regression is the last of the developmental sequence. It explains how intellectual and emotional functioning can be diminished in a society when undifferentiated people triangulate to make unreasonable decisions (Rabsteinek, 2009).

Figure 1

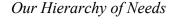
Bowen's Family Systems Theory

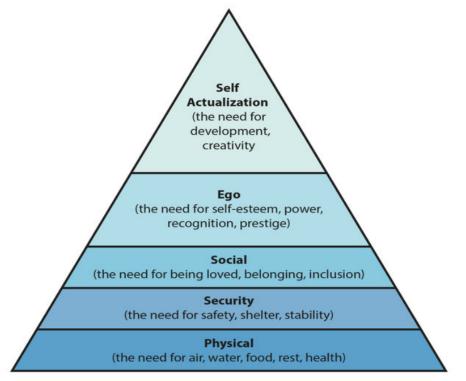
Bowen Theory concept	Definition
Differentiation of self	The ability to maintain a degree of autonomy within a group, or to keep thoughts and emotions (or emotional reactions) separate, especially when confronted with pressure of togetherness or peer group pressure.
Emotional Process	The notion that all mechanisms within a group may be generalised across other similar groups.
Emotional Cut-off	A consequence of emotional 'stuckness', or when the anxiety and distress due to intense closeness becomes intolerable and the individual reacts by becoming distant and unavailable emotionally.
Family Projection	Unresolved problems of the parents (or leaders) are projected onto the children (or organisation members). For example, blaming or scapegoating.
Multigenerational Transmission	Particular issues or problems persist within the unit despite leadership change.
Nuclear Family Emotional System	Patterns where individuals are functioning in parallel to others within the 'family' (team/ unit) group. A situation where each member of the group is impacted by the emotional atmosphere within the group. This may result in blending of fusing of individuals emotional selves.
Sibling Position	Ability to function is impacted by the individual's birth order and number of other siblings.
Triangling	A configuration of three individuals, where the third person may stabilise the relationship. The third person alleviates the stress and tension that may exist between the initial two individuals. Triangles may interlock resulting in either increased or decreased anxiety within the system, depending upon the level of differentiation of individuals involved.

Note: From "Bowen family systems theory: Mapping a framework to support critical care nurses' wellbeing and care quality," by S. Jakimowicz, L. Perry, and J. Lewis, 2020, *Nursing Philosophy: An International Journal for Healthcare Professionals*, e12320, (*https://doi.org/10.1111/nup.12320*).

Maslow's hierarchy of needs theory states that five categories of needs determine human behavior: physiological, safety, love and belonging, esteem, and selfactualization. These needs are identified within a hierarchy. An individual's most basic needs are at the bottom of the pyramid, and higher-level needs are at the top. The needs of an individual can only be met when their basic needs have been satisfied. A need cannot be treated in isolation. An individual's desires are driven by being satisfied and dissatisfied by all other motivations (Maslow, 1943).

Figure 2





Note. From "Our hierarchy of needs: True freedom is a luxury of the mind" by N. Burton, 2024, *Psychology Today*. Retrieved July 11, 2024 from

https://www.psychologytoday.com/us/blog/hide-and-seek/201205/our-hierarchy-of-needs

According to Maslow (1943), physiological needs are what every human requires for survival. They include food, water, rest, clothing, and shelter. These needs must be

met before moving on to the next level within the hierarchy. Safety needs include an individual's protection within an orderly, predictable, and organized environment where unexpected or dangerous events do not occur. The need for love and belonging relates to an individual giving and reciprocating the love and affection found within family bonds and friendship. Esteem needs lead to feelings of self-confidence, worth, strength, capability, and adequacy. Self-actualization is the fulfillment of an individual's potential and relies on the prior satisfaction of all the other needs within the hierarchy.

To understand human development, consider the ecological system theory where growth occurs (Bronfenbrenner, 1975). Since 1975, longitudinal changes in the American family have governed human development. Mothers have gone to work, and the number of adults caring for children at home has decreased. Children growing up in single-parent homes have increased as more family systems are separated by divorce. Instead of parents bearing the full responsibility, children are raised by the entire community. Due to economic hardship and urbanization, rapid and evolving changes have revealed the isolation of extended families. Low-income families are forced to live within a centralized location in large cities. Environmental factors shape a child's physical development, while social conditions impact poverty. Together, these elements play a crucial role in human development (Bateman & Yell, 2019; Bronfenbrenner, 1975).

The polyvagal perspective, through the concept of neuroception, illustrates how human phylogenetic responses to stress have evolved over time to enhance our survival and well-being (Delahooke, 2019; Purser, 2022). Understanding neuroception reveals how individuals adapt their behavior. The brain and body work together bidirectionally to determine how a person's nervous system regulates their stress response. When someone experiences a behavioral challenge, their nervous system automatically adapts to the stress response through social *engagement*, *fight or flight*, or *shutting down*. These three neurophysiological states adapt to move a human's body to a safe place. Sometimes, a person can overreact or underreact to their environment. This is called a faulty neuroception. Based on their trauma history, an individual can detect a threat to their environment even when they are safe (Purser, 2022).

The sanctuary model is a total system approach for creating and changing an organizational culture through a shared vision. The model was developed within the psychiatric setting by Dr. Sandra Bloom and has advanced into an evidence-based system designed to address the impacts of interpersonal, intergenerational, and multigenerational trauma (1995). The model has seven characteristics: a culture of *nonviolence*, a culture of *emotional intelligence*, a culture of *social learning*, a culture of *shared governance*, a culture of *open communication*, a culture of *social responsibility*, and a culture of *growth and change* (Bloom, 2008). Through a group experience, the sanctuary model provides a safe and healing environment for children. Punishment is only used to provide an alternative learning experience that does not trigger a previous traumatic experience. Conflict resolution is facilitated through safe and predictable methods that can be understood and redirected (Bloom, 1995). Redirecting a traumatized event ensures that the event is not repeated.

In summary, studies have reported children exposed to trauma have an increased chance of developing mental health disorders such as PTSD (Blodgett & Lanigan, 2018; Kramer et al., 2015; Chudzik et al, 2024; Woods-Jaeger et al., 2018). Understanding the relationship between trauma and other stressor-related disorders currently defined in the

DSM-V and the theoretical frameworks of trauma-informed practices supports the imperative need for children to receive effective treatment and support when they have experienced trauma. A substantial amount of research on teachers' perceptions of how to realize, recognize, respond to, and resist re-traumatizing children exposed to trauma is prevalent in education (Substance Abuse and Mental Health Services Administration [SAMHSA], 2024); however, there is a significant lack of research centered on special education teachers' perceptions on how to realize, recognize, respond to, and resist re-traumatizing children exposed to the substance as a significant lack of research centered on special education teachers' perceptions on how to realize, recognize, respond to, and resist re-traumatizing children exposed to childhood trauma (Chudzik et al., 2024; Goldenthal et al., 2024; Miller & Santos, 2020).

Trauma and Traumatic Event(s)

Childhood trauma is an "event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014, p. 7). Traumatic events include physical or sexual abuse, domestic violence, community and school violence, medical trauma, motor vehicle accidents, acts of terrorism, war, natural and human-made disasters, suicides, and other traumatic losses (American Psychological Association [APA], 2021; Pickens & Tschopp, 2017; SAMHSA, 2014; Winder, 2015). Trauma can be a one-time event that threatens bodily injury, causing neurological and/or psychological harm (American Psychological Association, 2021; SAMHSA, 2014). This is known as simple trauma. Conversely, trauma can be complex and longer in duration, involving multiple incidents, personal threats, and violence (Brunzell et al., 2015; Hudspeth, 2015; Winder, 2015). In 2011, the National Survey of Children's Health reported that 48% or 34,825,789 children in the U.S. experience a traumatic event before graduating high school (Bethell et al., 2014; Goldenthal et al., 2024). As children grow older, 22.6% have had two more experiences (Bethell et al., 2014). When a child experiences a life event that negatively affects their well-being, it can lead to adverse physical or emotional responses (Kerker et al., 2015). While one child's reactions and symptoms may be based on anxiety or fear, others may experience externalizing anger, aggression, or dissociative symptoms (Kerker, et al., 2015). A trauma response can influence a child's perceptions and how they respond to any situation. Events can be based on environmental circumstances that create feelings of uncertainty that may compromise their safety. The traumatic exposure can be serious and long-lasting (Rossen, 2020; Romero et al., 2018; SAMHSA, 2014). Traumatic experiences can impact any age, gender, socioeconomic status, race, ethnicity, geography, or sexual orientation (SAMHSA, 2014).

When children experience a traumatic event, their brain development diminishes, and their academic, social-emotional, and behavioral success within an educational environment is influenced (Bosquet et al., 2012; Thomas et al., 2019). Children experience subjective reactions to trauma events, including changes in their feelings and thoughts, as well as psychological responses based on their ecology (NCTSN, 2012). Trauma reactions may persist long after the event and might manifest differently based on their prior experiences and cultural perspectives (APA, 2021; Crone et al., 2010; Thomas et al., 2019).

A child's experience may come from an intrinsic or extrinsic childhood trauma factor (Delahooke, 2019; NCTSN, 2012). Many children exposed to trauma may show

immediate or obvious effects from singular or multiple trauma events (Pickens & Tschopp, 2017; SAMHSA, 2014). Research has found that children who have been exposed to interpersonal trauma, such as physical or sexual abuse, have difficulty forming relationships (Anderson et al., 2015; Pickens & Tschopp, 2017). Comprehensively, the influence of childhood trauma is widespread and a systemic problem across the nation (NCTSN, 2012; Pickens & Tschopp, 2017). Educators are seeing the impact of childhood trauma in their classrooms, and they do not feel prepared (Alisic et al., 2012; Gothenthal et al., 2024; Hunter et al., 2021; NCSEA, 2019; SAMHSA, 2014). In particular, special education teachers provide students exposed to childhood trauma with significant support when they qualify for special education services. However, there is limited research on special education teachers' perceptions of the impact of childhood trauma and effective ways to help these students through traumainformed practices.

Adverse Childhood Experiences (ACEs) Study

The Centers for Disease Control and Prevention and Kaiser Permanente collaborated and conducted the first adverse childhood experiences (ACEs) study from 1995 to 1997. The principal investigators were Vincent Felitti, M.D. and Robert Anda, M.D. Felitti et al. (1998) surveyed over 13,000 predominantly white, well-educated adults from upper and middle-class communities enrolled in the Kaiser Health Maintenance Organization (HMO) in San Diego, California.

The survey asked questions about childhood incidences of abuse, dysfunctional home lives, neglect, and current adult behaviors like smoking, alcohol use, and food consumption within the first 18 years of their lives (Delahooke, 2019; Nakazawa, 2015;

Romero et al., 2018). For those who completed the ACE questionnaire, each participant's score in the following categories, ranging from 0-10, was calculated: abuse (emotional, physical, and sexual); neglect (emotional and physical); and household dysfunction (domestic violence, substance abuse, mental illness, parental separation/divorce, and crime) (Burke, 2018; Delahooke, 2019; "Educational Neuroscience," 2017). A score of zero meant no adverse childhood experiences were reported, while a score of one or greater was attributed to the number of ACEs an adult experienced during their childhood (Anda, 2018). These adverse experiences can be a single event, acute events, or events sustained over time. Of those who participated in the study, 21% had been sexually abused during their childhood, 19% had a member of their household with a mental illness, and 28% had been physically abused (Fyke, 2018). Two-thirds of the participants reported having at least one adverse childhood experience, and many reported having more than one experience (Anda, 2018; Fyke, 2018).

When comparing ACE scores, adults with four or more ACEs are twice as likely to smoke, seven times more likely to be an alcoholic or have sex before the age of 15, and twice as likely to have cancer, heart, or liver disease. With an ACE score of five or greater, an individual is 40 times more likely to use illicit drugs (Anda, 2018). With an ACE score of six or more, an individual is 30 times more likely to attempt suicide. Lastly, with an ACE score of seven or more, an individual is 360 times more likely to have heart disease, even if they do not smoke, drink excessively, or are overweight (Anda, 2018; Fyke, 2018).

When Kaiser Permanente and the CDC concluded their study, they found that the number of ACEs was strongly associated with high-risk health behaviors and correlated with mental and physical health concerns. ACEs occur through all races, economic classes, and geographic regions, with a higher prevalence among impoverished people ("Adverse Childhood Experiences," 2014; Nakazawa, 2015; Romero et al., 2018). These stressors include witnessing parents' financial difficulties and having inadequate food, shelter, and medical care (Wade et al., 2014). Economic disadvantages make it difficult for families to provide a supportive and nurturing environment (Woods-Jaeger et al., 2018). This may lead to an intergenerational cycle of ACEs.

Despite these significant results, the study did not gain noteworthy attention until 2012 (Fyke, 2018). The ACE study originally uncovered the relationship between childhood stressors, social well-being, adult risk-taking, and chronic illnesses. The study also identified the tremendous impact that verbal, physical, emotional, and sexual abuse, alcoholism, or neglect had on an individual, as well as the connection between trauma in childhood and increased health-related risk factors later in life (Burke, 2018).

The prevalence of ACEs that Felitti and Anda found in the adults they surveyed through their study explains the significance of how a child is affected by traumatic events in their lives. Childhood trauma manifests after a traumatic experience. A traumatic experience can occur once in a child's life, or they may be exposed to multiple traumas. Most children experience an acute traumatic event and return to their previous level of functioning ("Adverse Childhood Experiences," 2014; Wade et al., 2014). Children who have been exposed to chronic, complex, secondary trauma, and toxic stress are at a higher risk of demonstrating at-risk behaviors, psychiatric disorders, and various health-related concerns, such as heart disease, cancer, chronic lung disease, and a shortened lifespan (Anda, 2018; Bethell et al., 2014).

Since the ACE study, researchers have continued to expand their understanding of adverse childhood experiences. The National Survey of Children's Health (NSCH) was conducted in 2003, 2007, 2011, and 2012 in all 50 states by the National Center for Health Statistics (Felitti et al., 1998). The survey, which represented children under the age of 18, found that the most common ACEs across all 50 states were economic hardship, parental divorce or separation, and living with a parent who has an alcohol or drug use problem. The prevalence of ACEs increases with a child's age, except in economic hardship. Economic hardship and poverty were reported equally for children of all ages. The most commonly reported ACEs within every state were the abuse of alcohol or drugs, exposure to neighborhood violence, and the occurrence of mental illness (Sacks et al., 2014). Since the inception of the ACE study and its longitudinal impact, additional research has expanded on the influence of other adverse experiences on children of all ages, such as poor academic achievement, incarceration, unemployment, poverty, and the diagnosis of a disability (Anda, 2018; Felitti et al., 1998; Nakazawa, 2015; Wade et al., 2014).

Dr. Burke Harris, a pediatrician and founder of the Center for Youth Wellness in San Francisco, California, studied over 700 children. Her investigation explored the connection between childhood adverse childhood experiences (ACEs) and a child's health (2018). When a child's brain is constantly afraid, it may overidentify situations as threatening (Romero et al., 2018). Harris concluded that when exposed to high levels of stress, MRI scans showed a shrinking of a child's hippocampus and an increase in the size of their amygdala (Burke Harris, 2018). These findings explain why children with higher ACEs have learning difficulties and behavior problems (Burke, 2018; Delahooke, 2019; Pickens & Tschopp, 2017).

Childhood Trauma and the Intersection of Special Education

The research from the ACE study laid the ground work for educators to consider the influence of childhood trauma in their classrooms (Felitti et al., 1998). Current research synthesizes the impact of childhood trauma in a teacher's classroom, within a school building, and across an educational institution. Researchers report that children who have experienced abuse and neglect are four times more likely to receive special education services (Beckman, 2017; Blodgett & Lanigan, 2018; Chudzik et al., 2024). This highlights the need to expand research on how special education teachers can better support students who qualify for special education services.

Childhood trauma and special education are critical and complex areas of concern within education. A child's early life exposure to a traumatic event has a neurobiological impact that may have long-lasting aversive effects (Beckman, 2017; Child Welfare Information Gateway, 2017; NCTSN, 2012; Woods-Jaeger et al., 2018). Research states that approximately 80% of children in special education have been exposed to trauma (Blodgett & Lanigan, 2018). Childhood trauma can impact a child's physical and mental health, which can lead to disabilities that hinder educational achievement (Chudzik et al., 2024; Crone et al., 2010; NCTSN, 2012; Sacks et al., 2014; Tuchinda, 2020; Wade et al., 2014; Woods-Jaeger et al., 2018). Research and governmental reports have indicated that approximately 20% of children in the U.S. have behavioral difficulties and meet the criteria to receive mental health services (Lambert et al., 2022). Three out of four children who have mental, emotional, or behavioral problems have an ACE score (Chudzik et al., 2024; Crone et al., 2010; NCTSN, 2012; Sacks et al., 2014; Tuchinda, 2020; Wade et al., 2014; Woods-Jaeger et al., 2018). Comprehensively, in 2017, over 331,000 children received special education services under the disability category of Emotional Disturbance (ED), representing about 0.5% of the school-age population (Lambert et al., 2022). However, only some of these children receive mental health services, and even a smaller number receive special education services.

Significant research has been conducted on the importance of understanding adverse experiences and childhood trauma in medicine, psychology, and education. For many years, researchers have arrived at the same conclusion: Teachers are not adequately prepared to support students with childhood trauma (Alisic et al., 2012; Anderson et al., 2015; Chudzik et al., 2024; Goldenthal et al., 2024; Miller & Santos, 2020). To move forward, research needs to be expanded, and special education teachers' perceptions of how to support students who receive special education services must be examined.

Significance of Study

During a child's developmental periods, chronic exposure to trauma has longlasting aversive effects (NCTSN, 2012; Woods-Jaeger et al., 2018). Trauma impairs a child's brain physiology, affecting one's memory system and ability to think, organize priorities, and learn. When a child's neurobiology changes due to trauma exposure, it can interfere with academic and social-emotional success, resulting in cognitive, physical, or behavioral disorders (SAMHSA, 2014).

Research has emphasized the importance of teachers understanding how childhood trauma impacts the children in their classrooms, outlining the need for professional development in trauma-informed practices (Alisic et al., 2012; NCSEA, 2019; Knoster et al., 2021; Rossen & Cowan, 2013). According to the U.S. Department of Education and Office of Special Education and Rehabilitation Services (2021), children with trauma exposure who receive special education services have higher rates of mental health challenges (p. 13). However, there is under-examined research centered around special education teachers' perceptions of how to realize, recognize, respond, and resist re-traumatizing children with ACEs in special education settings (Chudzik et al., 2024; Goldenthal et al., 2024; Miller & Santos, 2020). Given the limited exploration of perceptions regarding childhood trauma among special education teachers, while these educators possess knowledge about childhood trauma, their understanding of how to effectively implement trauma-informed practices adequately is fragmented (Kumar, 2020; Markelz & Bateman, 2022; Tuchinda, 2020; Winder, 2015).

This qualitative case study will seek to understand special education teachers' perceptions regarding the prevalence and impact of childhood trauma in relation to the provision of special education services. Special education teachers' perception of their role in supporting students with childhood trauma will be examined. Lastly, special education teachers' perceptions of the professional development they have received in trauma-informed practices will be analyzed in order to support school districts in determining how to best support special education teachers and the students they teach.

Delimitations

In any research, it is imperative to acknowledge that there are delimitations. This qualitative study focused exclusively on interviewing special education teachers, establishing a bounded system (Coombs, 2022). Although general education teachers, school counselors, social workers, and school psychologists support students receiving

special education services academically, behaviorally, and socially-emotionally, research highlights a gap in understanding special education teachers' perceptions of childhood trauma and trauma-informed practices. In the qualitative study, only special education teachers were purposefully and homogeneously sampled. Eight of the twelve participants attended a district-wide professional development series on trauma and trauma-informed practices, potentially influencing their perceptions. As a result, these participants may have similar knowledge concerning the prevalence and impact of trauma in relation to the provision of special education services, which may have shaped their understanding and responses. The participants in this research study were from one K-12 school district in central Pennsylvania. This limits the ability to apply findings to other districts across the county, state, and country, including urban or rural areas, other states, or regions with differing demographics, resources, and policies. Lastly, this study used a qualitative approach with semi-structured interviews to focus on capturing the perceptions of special education teachers rather than quantifiable measures. This approach was designed to gain depth in understanding but may limit broader applicability.

Definitions of Important Terms

Adverse Childhood Experiences (ACEs) – A childhood incidence of abuse (emotional, physical, and sexual), neglect (emotional and physical); and household dysfunction (domestic violence, substance abuse, mental illness, parental separation/divorce, and crime) (Burke Harris, 2018; 2019; "Educational Neuroscience," 2017).

Attachment theory - During the first 12 months of a child's life, an instinctual response is developed binding a child to their mother (Bowlby, 1958).

Childhood trauma – "An event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014, p. 7.)

Complex trauma – Multiple events or longer events or experiences that can be personal threats and/or violence (Brunzell et al.,2015; Hudspeth, 2015; Winder, 2015).

Ecological systems theory – Over the years, longitudinal changes in the American family have occurred governing human development (Bronfenbrenner, 1975).

Extrinsic childhood trauma - Includes a child's reaction to family, community, and/or a cultural environmental event (Delahooke, 2019; NCTSN, 2012).

Family systems theory – After a child is born, a mother-father-child triad is formed comprising eight concepts that influence the family unit (Rabsteinek, 2009).

Intrinsic childhood trauma - May be a child's result of their prior history and exposure to trauma (Delahooke, 2019; NCTSN, 2012).

Maslow's hierarchy of needs – Five hierarchical categories of needs determine human behavior: physical, security, social, ego, and self-actualization (Maslow, 1943).

Polyvagal theory – A human's phylogenic response to stress has changed to help one survive and thrive (Purser, 2022).

Sanctuary model – An evidence-based system for change from the effects of one's interpersonal, intergenerational, and multigenerational trauma (Bloom, 1995).

Simple trauma – One event or experience that threatens bodily injury or neurological and/or psychological harm (Brunzell et al.,2015; Hudspeth, 2015; Winder, 2015).

Traumatic event(s) –Traumatic events include physical or sexual abuse, domestic violence, community and school violence, medical trauma, motor vehicle accidents, acts of terrorism, war, natural and human disasters, suicides, and other traumatic losses (APA, 2021; Pickens & Tschopp, 2017; SAMHSA, 2014; Winder, 2015).

Trauma-informed practices – Guiding practices educators use to support the academic and behavioral challenges students with and without disabilities face when they have experienced trauma (Hunter et al., 2021; Kumar, 2020). Trauma-informed practices are holistic and culturally responsive and should be applied systematically and with fidelity (Thomas et al., 2019). School-wide trauma-informed practices should be used in conjunction with a multi-tiered system of support (MTSS) through a positive behavior intervention and support (PBIS) framework.

In summary, schools are the most common setting where children receive mental health supports through trauma-informed practices. Despite recent developments in legislation and trauma research, effectively supporting special education teachers in their understanding of childhood trauma remains limited (Tuchinda, 2020; Winder, 2015. Adopting an integrated and effective approach to providing academic, social-emotional, and behavioral support for special education students requires changes to the standard prevention and intervention approaches used in schools. It is imperative to understand special education teachers' perceptions regarding the prevalence and impact of childhood trauma in relation to the provision of special education services. Special education teachers need to have a firm understanding of their role when implementing traumainformed practices through the special education services they provide. Additionally, special education teachers require adequate professional development to support children who have experienced trauma and also qualify for special education services. The findings of this case study will be used to theorize what school districts should do to support special education teachers who work with students affected by childhood trauma (Starman, 2013).

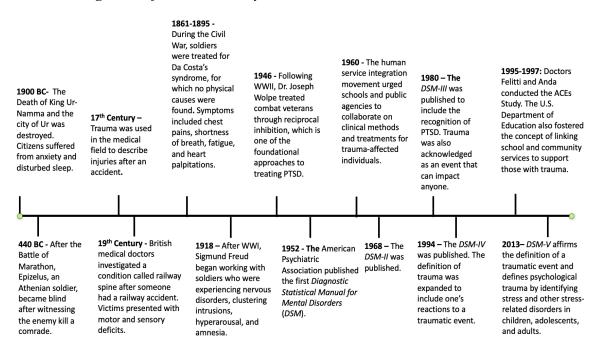
CHAPTER TWO

Childhood trauma includes experiences and events that can harm a child's wellbeing (Thomas et al., 2019). According to the U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration (SAMHSA), childhood trauma can impact an individual no matter their age, gender, socioeconomic status, race, ethnicity, geographic location, or sexual orientation (2014). The impact of childhood trauma is evident throughout history. Often, a child's exposure to trauma occurs early in development. Research reports that almost two-thirds of adults experience ACEs during their childhood (Thomas et al., 2019). The research from the ACEs study laid the groundwork for educators to consider the influence of childhood trauma in their classrooms (Felitti et al., 1998). Current research has synthesized the impact of childhood trauma in teachers' classrooms, within a school building, and across an educational institution. However, there is a need to expand the research to explore how special education teachers can better support students who qualify for special education services.

Special education teachers must familiarize themselves with a child's socialemotional, physical, cognitive, and communication skills. They are required to know how internalizing and externalizing behaviors are manifested through a trauma response (Hunter et al., 2021). Special education teachers face challenges in understanding their role in supporting students who have experienced childhood trauma. They require more preparation and professional development on trauma-informed practices to adequately support students who have been exposed to childhood trauma and qualify for special education services. The effects of trauma can be seen throughout recorded history (Figure 3), starting in 1900 BC (Figley et al., 2017). After the death of King Ur-Nammu, the founder of one of the Sumerian dynasties, the city of Ur was destroyed. It was documented that citizens experienced heightened levels of anxiety and disturbed sleep (Figley et al., 2017). In 440 BC, after the Battle of Marathon, Epizelus, an Athenian soldier, became blind after witnessing the enemy kill one of his comrades. This early example illustrates a chronic psychological reaction to witnessing death in a military conflict.

Figure 3

Historical Background of Trauma Theory



Since the 17th century, the term trauma has been used in the medical field to describe physical injuries caused by weapons or accidents that required surgical intervention (Figley, et al., 2017). Trauma, as a scientific concept, was not identified until the middle of the 19th century when British medical practitioners investigated a condition called *railway spine*. The condition occurred after victims were involved in a railway accident. Railway victims presented with physical conditions but also reported motor and sensory deficits. In 1855, physician John Erichsen attributed railway spine syndrome to natural causes. In 1883, surgeon Herbert Page called the emotional and neurological responses *nervous shock* (Figley et al., 2017; Sütterlin, 2020). Later, in 1889, neurologist Hermann Oppenheim termed the paradoxical condition *traumatic neurosis* since victims were experiencing both psychological and physical wounds. Jean-Martin Charcot attributed the symptoms to a hysteria disorder influenced by genetics. He also described the emotional responses as nervous shocks, a term coined by Herbert Page (Figley et al., 2017; Sütterlin, 2020).

Charcot's prominent role, as a groundbreaking neurologist, led to the development of somatic disorders and neurological and psychological conditions. Pierre Janet, Charcot's student, identified a key characteristic of psychological trauma known as *dissociation*. Dissociation occurs when the mind separates itself from the main body of consciousness, making integration impossible. Today, dissociation is recognized as a pathogenic process supporting the diagnosis of post-traumatic stress disorder (PTSD) (Figley et al., 2017; Sütterlin, 2020).

During the American Civil War, soldiers were treated for Da Costa's syndrome, a condition named after the surgeon Jacob Mendes Da Costa. Symptoms included chest pains, shortness of breath, fatigue, and heart palpitations, but no physical causes of these symptoms were found (Figley et al., 2017). After World War I, Sigmund Freud began working with soldiers who were traumatized by the fear of exploding bombs, machine guns, and artillery shillings. The soldiers presented with nervous disorders, repeatedly

reliving their experiences through clustering intrusions, hyperarousal, and amnesia (Figley et al., 2017; Sütterlin, 2020).

Following World War II, Dr. Joseph Wolpe, a psychiatrist, treated combat veterans. He recognized that to extinguish an anxiety response, an incompatible response must be exhibited through reciprocal inhibition. Reciprocal inhibition occurs when a desired behavioral response is increasingly introduced to a stimulus that typically causes an undesired response (Figley et al., 2017). Reciprocal inhibition later became one of the foundational approaches for treating post-traumatic stress disorder. In 1952, the American Psychiatric Association (APA) published the first *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (Figley et al., 2017).

In 1960, as clinical methods and treatments to address trauma-affected individuals were being developed, a human service integration movement emerged, urging schools and public agencies to collaborate. During this time, statewide school-based initiatives were formed in California, Florida, Kentucky, Missouri, New Jersey, and Oregon (Adelman & Taylor, 1999).

After the Vietnam War, a second edition of the *DSM* was published in 1968. With the continued modernization of warfare, veterans experienced even more physical and psychological conditions that were left undiagnosed and treated. The American Psychiatric Association recognized PTSD in the third edition of the *DSM* in 1980. The recognition of the diagnosis of PTSD paved the way for empirical research on trauma and its impact on humans (Figley et al., 2017). In the *DSM-III*, trauma is acknowledged as an event outside the human experience that can adversely affect anyone. Successively, in the *DSM-IV*, published in 1994, the definition of trauma was expanded to include not only the events of trauma but also one's reaction to a traumatic event (Figley et al., 2017).

The ACE research that Felitti et al. conducted from 1995 through 1997 provided foundational knowledge and a broader understanding of how childhood trauma impacts a person across all aspects of their life. Concurrently, in 1995, the U.S Department of Education promoted the concept of connecting school and community services to provide a system of care support for individuals facing significant psychological concerns arising from physical or substance abuse, teen pregnancy, gang violence, or delinquency (Adelman & Taylor, 1999). In 2013, The American Psychiatric Association affirmed that "a traumatic event is one event that threatens injury, death, or the physical integrity of self or others" through the publication of the *DSM-V* (American Psychological Association, 2021; Levine et al., 2017: NCTSN, 2012). The *DSM-V* defines psychological trauma by identifying trauma and other stress-related disorders in children, adolescents, and adults (Sacks et al., 2014).

Since 1900 BC, the medical and psychiatric fields have advanced trauma theory. Researchers have found that children with mental health disorders experience academic difficulties, social withdrawal, and isolation; have difficulty maintaining positive relationships; and engage in behaviors that can be disruptive in many facets of their lives (American Psychological Association, 2021). The evolution of school-based mental health practices and policies has expanded through the development of two national resource centers: the Center for Mental Health in Schools at the University of Maryland and the Center for Mental Health in Schools at the University of California (Bateman & Yell, 2019). However, mental health disorders among children have become a public health issue due to their early onset and prevalence, and the impact they have on the child and their family (Bateman & Cline, 2019; SAMHSA, 2014).

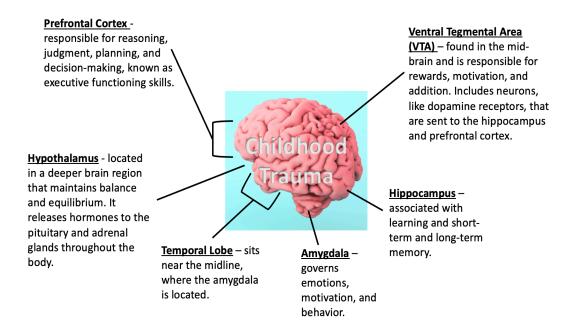
Trauma and the Brain

While it is vital to understand the historical background of trauma, connecting these developments to the brain is significant for understanding how trauma harms a child's brain. Trauma impairs a child's brain physiology, thereby affecting one's memory system and ability to think, organize priorities, and learn. When a child's neurobiology changes, their ability to pay attention, follow directions, work with teachers, and make friends is compromised ("Education Brief", n.d.; Nakazawa, 2015; Purser, 2022). Neuroscience research provides substantial evidence that brain structure changes when someone experiences trauma through cognitive and behavioral dysregulation (Hudspeth, 2015). Individuals who experience complex trauma have impairments in attachment, behavioral control and regulation, cognition, self-concept, and sensory and motor development (Hudspeth, 2015; Nakazawa, 2015). Neurons are the building blocks of the brain (Potter-Efron, 2012). During a child's development, neurons create various network systems over time. These systems regulate simple to complex brain functions. When a child experiences a traumatic event, their limbic system is aroused and disrupted (Pickens & Tschopp, 2017; Potter-Efron, 2012).

To fully understand how trauma impacts a child's brain, it is helpful to review the parts of the brain and their functions (see Figure 4). The amygdala, located inside the temporal lobe near the midline (Potter-Efron, 2012), is the brain's fear center. It governs emotions, memory, motivation, and behavior, helping a child identify threats in their environment. When triggered by stress, it becomes overactive, resulting in an

Figure 4

Trauma and the Brain



exaggerated response (Burke Harris, 2018; Delahooke, 2019; Hudspeth, 2015; Potter-Efron, 2012). The brain is continuously undergoing development (Whitman & Kelleher, 2016). Over time, when a child is exposed to continuous chronic trauma and stress, the amygdala continually responds, leaving the child in a heightened state (Potter-Efron, 2012). A child's brain development can be interrupted and compromised, later affecting their cognitive, emotional, and behavioral health concerns (Bosquet Enlow et al., 2012; Hudspeth, 2015). Throughout childhood, the structural formation of a child's brain evolves. These changes are significantly influenced by the child's environment and experiences (Whitman & Kelleher, 2016).

The prefrontal cortex sits behind the forehead at the front of the brain. It is responsible for reasoning, judgment, planning, and decision-making (Pickens & Tschopp, 2017; Whitman & Kelleher, 2016). These faculties are also known as executive

functioning skills. When a child experiences stress, the amygdala alerts the prefrontal cortex. The prefrontal cortex may override an instinctual reaction through the release of noradrenaline, causing the amygdala to exhibit a fight, flight or freeze response (Burke Harris, 2018; Potter-Efron, 2012).

The hippocampus is the region of the brain associated with learning, as well as and short-term and long-term memory (Burke Harris, 2018; Whitman & Kelleher, 2016). Studies have determined that the hippocampus is smaller for individuals who have experienced trauma (Child Welfare Information Gateway, 2017). The hippocampus can help differentiate between threatening and nonthreatening situations, and a damaged hippocampus may increase the likelihood of inappropriate behavior (Potter-Efron, 2012). The hippocampus plays a tremendous role in a child's memory and the shaping of the brain itself (Whitman & Kelleher, 2016).

The hypothalamus is located in a deeper brain region that maintains balance and equilibrium (Potter-Efron, 2012). The hypothalamus releases hormones to the pituitary and adrenal glands, which pump chemicals, such as adrenaline and cortisol, throughout the body (Nakazawa, 2015; Potter-Efron, 2012). During extreme stress, changes in the secretion of stress hormones and neurotransmitters can occur, which may cause defensive aggression (Bosquet Enlow et al., 2012).

The ventral tegmental area (VTA), found in the mid-brain, is responsible for rewards, motivation, and addiction. The VTA includes many different neurons, specifically dopamine receptors, which can be sent to the hippocampus and prefrontal cortex (Burke Harris, 2018; Potter-Efron, 2012). When the VTA is overloaded, sensitive dopamine receptors, often referred to as the feel-good chemical, are triggered (Burke Harris, 2018). When dopamine is sent to the hippocampus and prefrontal cortex, it may cause changes in a child's cognitive, behavioral, or emotional regulation.

When a child experiences trauma, their body engages in a stress response. Allostasis is an adaptive response to a challenging event. When successfully managed, it leads to greater resilience. An allostatic load compromises resiliency, causes a negative response, and impacts a child's brain and body over time (Burke Harris, 2018; Delahooke, 2019). During a stress response, messages are transmitted to the adrenal glands, which produce hormones that help regulate metabolism, immune health, and blood pressure. When the brain responds to stress, areas of the brain that support reasoning and the regulation of thoughts and feelings are put on hold (Potter-Efron, 2012; Romero, et al., 2018). A child's immune and inflammatory systems can be dysregulated during a stress response. Therefore, a stress response can have a profound effect on a child, potentially leading to significant health problems later in life (Burke Harris, 2018; Romero et al., 2018).

Neuroscience research explains that a child's early development periods are crucial. Early child development is a time when the presence or absence of an experience may result in significant changes (Burke Harris, 2018). When a child has been exposed to trauma, their brain generates an emotional response. Sometimes this emotional response is one a child may or may not be consciously aware of (Potter-Efron, 2012). Brain studies have concluded that youth who have reported childhood trauma have smaller amounts of gray and white matter (Child Welfare Information Gateway, 2017; Delahooke, 2019). However, through trauma-informed care approaches, neuroscientists have determined that the brain can rewire itself to heal earlier damage (NCSEA, 2019). This is a characteristic called *neuroplasticity*. The brain can change how neurons interact, and the neurons in the brain begin communicating with each other (Potter-Efron, 2012). This is how a neural network is formed. Understanding the development of trauma-based psychiatric disorders also helps to explain how a child's brain is influenced by trauma. **The** *DSM-V's* **Trauma-Related Psychiatric Disorders in Children, Adolescents and Adults**

The *DSM-V* (2013) identifies seven trauma and other stress-related disorders in children, adolescents, and adults. The first, *reactive attachment disorder* (RAD), manifests itself during infancy or early childhood. It is characterized by patterns of persistent and severe developmentally inappropriate attachment behaviors, where a child, when distressed, does not speak or respond to an adult for comfort, support, protection, or nurturing. A child may marginally respond to an adult when they exhibit a caring effort, show reduced or absent expressions during daily interactions with an adult, or demonstrate emotional dysregulation. Overall, a child does not show a preferred attachment to any particular adult (American Psychiatric Association, 2013).

Second, *disinhibited social engagement disorder* is identified when a child persistently and inappropriately approaches and interacts with unfamiliar adults or shows patterns of inappropriate behavior when there is inconsistent adult care. This disorder can be seen in children with an extensive history of neglect, whose attachment to an adult range from disturbed to severe. This impacts their peer relationships and results in a lack of reticence with other children due to their attention-seeking social impulsivity. RAD and disinhibited social engagement disorder can comorbidly occur with other conditions related to neglect and developmental delays in cognition and language (American Psychiatric Association, 2013).

Third, post-traumatic stress disorder (PTSD) can affect children, adolescents, and adults after the first year of life when they have been exposed to, witnessed, learned about, or repeatedly experienced one or more threatening events, such as death, injury, or sexual violence. Symptoms may begin within the first three months after the traumatic event or have a delayed expression. Anyone who has experienced a traumatic event may have recurrent or involuntary memories, dreams, dissociative reactions, intense or prolonged psychological distress, or dissociative or physiological reactions to internalizing or externalizing cues. An individual can also demonstrate persistent avoidance of stimuli related to a traumatic event, inability to remember significant aspects of the event, behavioral outbursts, self-destructive behaviors, hypervigilance, problems concentrating, or difficulty sleeping. Children, adolescents, and adults diagnosed with PTSD can have symptoms that meet other mental disorder criteria, such as conduct disorder, oppositional defiant disorder, and mild traumatic brain injury (TBI) (American Psychiatric Association, 2013).

Fourth, an *acute stress disorder* occurs within three days after a child, adolescent, or adult has been exposed to, witnessed, learned about, or repeatedly experienced one or more threatening events, such as death, injury, or sexual violence. One may experience intrusive symptoms, inability to experience positive emotions, dissociative or avoidance symptoms, sleep disturbance, hypervigilance, or an exaggerated startle response. These symptoms may cause impairment in one or more areas of functioning but are not attributed to the psychological effects of substance use or medical conditions. An acute stress disorder may evolve into PTSD after one month. Children six years and younger may exhibit reoccurring symptoms through play. Acute stress disorder and PTSD are more prevalent among females compared to males due to neurobiological differences in stress response (American Psychiatric Association, 2013).

Fifth, an *adjustment disorder* involves the development of emotional or behavioral symptoms in response to an acute stressor and occurs within three months of the identified stressor. An adjustment disorder lasts no longer than six months after the stress consequence has ceased. The stressor can be a single event or multiple recurrent stressors. These stressors can impact one person, an entire family, or a large group or community. Adjustment disorders do not meet the criteria of any other mental disorder and are not caused by the exacerbation of preexisting mental disorders. Adjustment disorders can be accompanied by other mental and medical disorders and may be a leading psychological response to a medical disorder (American Psychiatric Association, 2013).

Six, other specified trauma-and stressor-related disorders and unspecified trauma- and stressor-related disorders are identified when there is clinically significant distress or impairment in all areas of functioning. Trauma- and stressor-related disorder is diagnosed when a clinician specifies why symptoms do not meet the criteria for any trauma- and stressor-related disorder. Unspecified trauma- and stressor-related disorder is used when a clinician does not specify the reason that the criteria are not met for a particular disorder. This diagnosis is often made when there is insufficient information to make a more definite diagnosis, yet symptoms still cause significant distress (American Psychiatric Association, 2013). Historians have discovered that neurobiological changes in individuals exposed to trauma were documented as early as 1900 BC (Figley et al., 2017; Hudspeth, 2015). As early as the 17th century, doctors identified the physical signs of war-related trauma, and psychologists connected these physical signs to psychological conditions. Medical and psychological research has established a robust connection between childhood trauma and the negative impact early exposure can have on success in adulthood. In the field of education, teachers have reported how trauma exposure influences a child's academic, emotional, and social development in their classrooms. However, there is a significant lack of research centered around special education teachers' perceptions of how to realize, recognize, respond to, and resist re-traumatizing children exposed to trauma (Chudzik et al., 2024; Goldenthal et al., 2024; Miller & Santos, 2020).

Trauma-Informed Early Intervention

A child's early life experiences will shape their brain development and determine their intelligence, emotions, and personality (Child Welfare Information Gateway, 2017). When a child experiences a traumatic event, there will be a neurobiological impact (Beckman, 2017). During developmental periods, a child's chronic exposure to trauma has long-lasting aversive effects (NCTSN, 2012; Woods-Jaeger et al., 2018). Consequently, there is a need for intervention during infancy and throughout early childhood.

Research estimates that one in two preschool-aged children have experienced a traumatic event (Chudzik et al., 2024). When a child is exposed to toxic stress and trauma, it can present as deficits in attention, emotional dysregulation, learning difficulties, and oppositional behaviors (Sacks et al., 2014; Wade et al., 2014). These

adversities can influence a child's acquisition of important developmental milestones (Beckman, 2017; Blodgett & Lanigan, 2018; Figley, 2017; Jimenez et al., 2016; Slade & Wissow, 2007). Understanding a child's environment — including how their family responds to traumatic events — and intervening early has resulted in positive outcomes during early childhood years (Crone et al., 2010; NCTSN, 2012). Learning about a child and their family's values, beliefs, and practices will help to identify the most culturally appropriate interventions (Crone et al., 2010; Thomas et al., 2019).

Using data from the National Survey of Child and Adolescent Well-Being II (NSCAW), researchers investigated 912 children ages 18 to 71 months. Eighty-one percent of the children's caregivers were under the age of 35 years old, and 28.5% did not have a high-school diploma. Nearly 28.5% were unemployed, and two-thirds (62.8%) had incomes below the federal poverty level. Using a multivariable logistic regression analysis, 98% of children were reported to have experienced at least one ACE. Caregivers reported that 39.9% of children had experienced two or three ACEs, and 50.5% had experienced four or more ACEs. The study concluded that before a child turns five years old, having a higher number of ACEs is associated with mental health and chronic medical problems due to an increase in allostatic load (Burke Harris, 2018; Delahooke, 2019; Kerker et al., 2015).

In a secondary analysis from the Fragile Families and Child Wellbeing Study, a sample size of 1,007 children was studied through teacher-reported academic outcomes using a Likert scale and child behavior checklists during the last month of a child's kindergarten year (Jimenez et al., 2016). The study found that if a child had more than

three ACEs, there was a direct correlation to below-average school performance in language and literacy, attention problems, and aggression (Jimenez et al., 2016).

The data from both studies explain the adverse effects trauma has on a child before they turn five years old. When a child learns under conditions of extreme stress, structural changes in the brain occur ("Adverse Childhood Experiences," 2014; Beckman, 2017). The perceptions of stress may vary from child to child; however, a certain stress threshold may be traumatic relating to social-emotional support. When children experience social-emotional stress, they are not able to develop self-help and problemsolving skills, leading to disruptions in their brain architecture. These disruptions can cause an increased risk of stress-related disease and cognitive impairment well into their adult years ("Adverse Childhood Experiences," 2014).

Supporting a child's brain development should start with maternal health, as this is when the mother-child attachment begins (Bowlby, 1958; Child Welfare Information Gateway, 2017). A safe, supportive, and nurturing environment has also been shown to reduce the risk of negative outcomes, like abuse, neglect, and household dysfunction, associated with childhood trauma (Child Welfare Information Gateway, 2017; Woods-Jaeger et al., 2018). Socioeconomic disadvantages, leading to an intergenerational cycle of trauma, are another contributing factor (Bloom, 1995; Woods-Jaeger et al., 2018). Any disruptions to a child's neurobiology, as shown by ACEs, influence neurodevelopment and have lasting effects on the brain's structure (Hall et al., 2012; Purser, 2022).

During a child's early developmental periods, chronic exposure to trauma has long-lasting aversive effects and can be the root cause of learning disabilities, health problems, and social challenges that can lead to behavioral problems (Chudzik et al., 2024; Crone et al., 2010; NCTSN, 2012; Sacks et al., 2014; Tuchinda, 2020; Wade et al., 2014; Woods-Jaeger et al., 2018). It is imperative for early-intervention special education teachers to have professional development on trauma-informed practices to adequately support their students who have been exposed to childhood trauma and qualify for special education services.

Trauma-Informed School-Wide Supports

In 1892, the National Education Association (NEA) established the Committee of Ten. The committee's goal was to recommend and standardize how to prepare students to become meaningful members of society (Levine & Ornstein, 1993). For many years, the educational system has been habitually based on tradition (Levine & Ornstein, 1993; Schwan & McGarvey, 2012). Changes in legislation have demonstrated the importance of providing research-based practices to meet the academic, social, and emotional needs of all students (Tuchinda, 2020; Winder, 2015). Yet, there has been an increase in the number of children with behavioral difficulties and mental health concerns, leading to more children being identified with a wide spectrum of disabilities that require special education services, and resulting in a public health crisis (Chudzik et al., 2024). According to psychologist Ross Greene, "Good teaching means being responsive to the hand you've been dealt" (Greene, 2014, as cited in Cooley, 2018, p.1). For educators to meet the needs of a 21st-century student, an examination of ACEs and childhood trauma should be brought to the forefront (Schwan & McGarvey, 2012).

Data from the National Survey of Children's Health (NSCH) reported that 46% of American children have experienced trauma, and some children bring their experiences of childhood trauma into the classroom environment. These experiences often interfere with their academic and social-emotional success, resulting in cognitive, physical, or behavioral disorders (SAMHSA, 2014). If these stressors go unrecognized, their effects on a child's learning and behavior may become mislabeled in school (Fyke, 2018).

The 2019 amendment to the Pennsylvania School Code includes a definition of trauma:

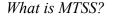
An event, series of events or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's cognitive functioning and physical, social, emotional, mental or spiritual well-being. (24 P.S. Section 1-102; 1949)

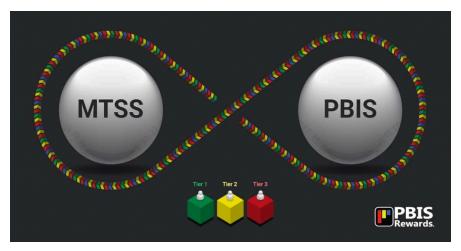
Educational institutions should be trauma informed by applying a trauma lens to all academic learning (Rossen & Bateman, 2020). The Every Student Succeeds Act (ESSA) of 2015 and the Individuals with Disabilities Education Act (IDEA) of 2004 require teachers to meet the academic and behavioral needs of diverse learners in the general education classroom (Soleimanpour et al., 2017). ESSA provides funding for mental health services and evidenced-based trauma-informed interventions (Soleimanpour, et al., 2017).

Multi-tiered systems of support (MTSS), formally known as response to instruction and intervention (RtII), and positive behavior intervention support (PBIS) are universal systems (see Figure 5) that provide high-quality instruction and intervention to meet students' needs (Bateman & Yell, 2019). MTSS is not a curriculum but a broad framework that uses a systematic approach to establish the behavioral and cultural supports all students need in order to achieve social, emotional, and academic success. Academic and behavioral data are acquired and monitored regularly to adjust instructional and behavioral interventions (Cooley, 2018; Hunter et al., 2015; Romero et al., 2018; Rossen & Cowan, 2013). Foundationally, school-wide academic and behavioral expectations should be required for all students to be successful.

PBIS and social emotional learning (SEL) are two frameworks used in many schools nationwide (Anderson-Ketchmark & Alvarez, 2010; Hunter et al., 2021;

Figure 5





Note. From "What is MTSS?" by PBIS Rewards, 2024. Retrieved July 14, 2024, from https://www.pbisrewards.com/blog/what-is-mtss/

Stormont et al., 2008). PBIS involves three levels of support: universal or primary prevention (Tier 1), secondary intervention and support (Tier 2), and tertiary interventions and support (Tier 3) (Anderson-Ketchmark & Alvarez, 2010; Hunter et al., 2021). With the implementation of system-wide preventative programs like PBIS and MTSS, academic and behavioral needs can be handled differently. The PBIS and MTSS models promote academic growth and establish behavioral expectations and interactions among all stakeholders, including administration, teachers, students, and their families (Romero et al., 2018). When a universal behavioral framework is implemented, students experience vast improvements in their academic achievement and their social and emotional competence. In addition, bullying behaviors are effectively reduced (Center on PBIS, 2022; Hunter et al., 2021; U.S. Department of Education, 2022). There is an overall reduction in inappropriate behavior, a decrease in the number of discipline referrals and suspensions, and a reduction in restraints and seclusions (Center on PBIS, 2022).

Interventions that are effective in supporting students with multiple ACEs include trauma-informed practices, social-emotional learning programs, mental health support, individualized education plans (IEPs), and supportive school environments (Brunzell et al., 2015; Cooley, 2018; SAMHSA, 2014). These strategies aim to create a safe and nurturing environment for students, address their emotional and behavioral needs, and provide appropriate resources and support to help them succeed academically and emotionally (Chudzik et al., 2024.; Crone et al., 2010; Fantuzzo et al., 2013; Gamache et al., 2010; Hunter et al., 2015).

In 2008, researchers examined urban children's relationship to violent exposure, trauma, and standardized testing. Using the Wechsler Preschool and Primary Score of Intelligence and the Test of Early Reading Ability, it was found that intellectual and academic achievement may be repressed and independently affected when children are exposed to trauma (Delaney-Black et al., 2008). Another similar study was conducted in 2013 within the School District of Philadelphia, one of the eighth-largest public schools, educating students in one of the top-ten poorest cities in the U.S. (Fantuzzo et al., 2013). The study examined concentrations of student risk factors and how they correlated with academic achievement in reading and math. Risk factors included a child's low birth

weight, inadequate prenatal care, mothers without a high school diploma, lead exposure, homeless status, and child maltreatment. One of the lowest concentrations was mothers without a high school diploma, which correlated with poor reading and mathematics scores, as well as low school attendance. Similarly, inadequate prenatal care and lack of connection to public health services were associated with poor reading achievement. Homelessness, instability, and child maltreatment were correlated with lower reading achievement and attendance rates. The researchers concluded that due to these concentrations of risk factors and their connection to academic achievement, federal and state resources must be allocated to support the educational well-being of these children (Kramer et al., 2015; Fantuzzo et al., 2013).

A study involving US students in grades K-6 within a Northwestern metropolitan area examined early risk factors influenced by school attendance, behavioral problems, and academic achievement (Blodgett & Lanigan, 2018). A frequency analysis was conducted based on the prevalence of ten types of ACE exposure. Data were analyzed based on race, grade level, gender, special education status, and free- or reduced-lunch enrollment Twenty-seven percent of students had one of the three risk factors, 17% had two, and 5% had all three risk factors (Blodgett & Lanigan, 2018). Thirty-four percent of students were not meeting academic grade-level standards. Thirteen percent of students were identified with significant attendance concerns, and 28% of students had significant behavioral concerns. As the number of school concerns increased, the average ACE score for children also increased (Blodgett & Lanigan, 2018). ACEs and childhood trauma inform how schools respond to each child's academic and social-emotional development. A longitudinal study conducted across five different years examined traumatic stress and academic indicators of fifth graders (NCSEA, 2019). Children with traumatic stress had lower average reading, mathematics, and science achievement scores, which correlated with their SES and free- or reduced-lunch status (NCSEA, 2019). In another study, the reading scores of 163 urban elementary children in second through fifth grade were examined to determine the impact of violent, traumatic exposure (Duplechain et al., 2008). Three standardized assessment measures defined the adverse effects on reading scores. These findings suggest that a child's exposure to violence does influence school achievement long term (Duplechain et al., 2008).

Educators must recognize and understand how a child's ACEs and risk factors may contribute to academic outcomes. Children with more than two ACEs are 2.67 times more likely to repeat a grade in school than children who did not have the same experiences (Bethell et al., 2014). Children with three or more ACEs are significantly more likely to perform below grade level, be labeled for special education, be suspended or expelled, or drop out of school ("Education Brief", n.d.). Extensive research suggests that understanding ACEs and psychological trauma can provide insights into students' academic achievements (American Psychological Association, 2021; Goodman et al., 2012; NCSEA, 2019; Romero et al., 2018; Slade & Wissow, 2007). Through fair and equitable decision making, educators, healthcare providers, parents, and community members must work to communicate and collaborate to take control of the negative impacts ACEs have on many of today's children ("Educational Neuroscience," 2017; Hudspeth, 2015). In particular, special education teachers must have professional development on trauma-informed practices to adequately support students who have been exposed to childhood trauma and qualify for special education services.

Trauma-Informed Behavioral Dysregulation and Student Discipline

Behavior is a child's response to internal or external experiences (Delahooke, 2019). Behaviors are a form of communication (Barbara, 2007; Romero et al., 2018). When analyzing behavior, the antecedent is what happens prior to the behavior occurring. The behavior occurs immediately after the antecedent, and the consequence, not to be confused with punishment, will determine how a student responds to a similar antecedent in the future (Otten & Tuttle, 2011). Children are not born with bad behavior. They must be taught acceptable behaviors using a proactive approach, modeling, and continual reinforcement (Cooley, 2018; Stormont et al., 2008).

Behaviors manifest internally and externally as the body's response to stress. Research confirms that precursors to problematic behaviors in children stem from having stressful or traumatic experiences (Anderson-Ketchmark, & Alvarez, 2010; Otten & Tuttle, 2011; Stormont et al., 2008; Woods-Jaeger et al., 2018). Children with poor behavioral skills are at risk for developing problems that impact society, such as dropping out of school, depression, anxiety, substance abuse, gang membership, low self-esteem, social maladjustment, and medical problems (Otten & Tuttle, 2011; Burke-Harris, 2018).

Childhood trauma can manifest itself through behaviors teachers see in the classroom. Empirical studies have identified five common symptoms of trauma in children: re-experiencing the trauma, avoidance, arousal, internalizing behaviors, and externalizing behaviors (Goodman et al., 2012; Hunter et al., 2021). Sometimes, these behaviors can be misdiagnosed and mistaken for another disorder (Nakazawa, 2015).

Some behaviors develop in a top-down approach and develop over time through the connections of the cerebral cortex and prefrontal cortex. Both the cerebral cortex and prefrontal cortex affect cognitive and social behavior. Other behaviors develop through a bottom-up method since they materialize not from intentions but subconsciously (Potter-Efron, 2012). A child's brain is dynamically influenced by the nervous system, which creates a feedback loop (Delahooke, 2019). Bottom-up behaviors occur subconsciously and do not require conscious thought. Understanding behavior through a top-down or bottom-up approach determines the appropriate treatment (Delahooke, 2019; Potter-Efron, 2012; Purser, 2022). Understanding any child's behavioral response or function helps tailor therapeutic approaches (Delahooke, 2019; Romero et al., 2018).

When children do not feel safe, when they cannot fully relax, when they feel all alone in keeping themselves safe and handling the world, they are always on guard, and they cannot trust anyone but themselves for safety (Delahooke, 2019; Romero et al., 2018; Purser, 2022). Therefore, a child who has experienced complex trauma may not learn in the same way as a child who has never been exposed to ACEs (Fyke, 2018; Goodman et al., 2012; Romero et al., 2018). Children with trauma have a reduced capacity for cognitive control, attention, memory, response inhibition, and emotional reasoning (Hudspeth, 2015). In the classroom, children may struggle with listening and processing information. When academic demands are placed on them, they may have an adverse reaction that is disproportionate to their peers.

Researchers have used MRI neuroimaging to show how traumatic stress can significantly alter one's limbic system. As a result, it was discovered that the parts of the brain concerned with helping students reason and regulate their thoughts and feelings are put on hold. When children are in a heightened state of arousal, their heart rate increases, blood pressure rises, and a reaction occurs (Levine et al., 2017). If a child's brain is living in a state of fear and survival, it will lead to exaggerated and impulsive responses. Children will overidentify situations as threatening and respond by fighting, fleeing, or freezing. During a fight response, when given a task, a child may become defiant, impulsively not complete their work or becoming aggressive. During a freeze-or-flight response, they may internalize their feelings and exhibit periods of shutting down or show signs of withdrawal, anxiety, or depression (Potter-Efron, 2012). Classroom management is not just about responding to misbehavior; it is about teaching children how to independently control and manage their behavior (Pickens & Tschopp, 2017). Educators should look at behavior through a trauma-informed lens. Every student should have an educational experience that is safe, supportive, and conducive to learning (Markelz & Bateman, 2022).

Schools are required to impose sanctions or penalties for disruptive conduct. Nevertheless, children who have experienced trauma have behavioral responses from trauma that manifest differently, often leading to exclusionary practices (Barbara, 2007). Children develop behavioral patterns that help them survive trauma while often sabotaging their success at school (Romero et al., 2018). Discipline should teach students how their behavior impacts themselves and other children (Markelz & Bateman, 2022).

The IDEA requires evidence-based best practices to address behavior and discipline. In addition, under the Fifth and Fourteenth Amendments, all children are afforded due process rights when a school imposes discipline (Markelz & Bateman, 2022). Disciplinary procedures and policies, such as disproportionate zero-tolerance

policies and exclusionary disciplinary measures that include suspensions and expulsions, exacerbate behavioral issues when a child has been exposed to trauma (NCSEA, 2019). Trauma-informed disciplinary practices ensure the safety and security of all students (Dykes, 2008; "Education Brief, n.d.; Losen et al., 2013; Purser, 2022).

The rates of suspension for students with disabilities at the middle and high school levels are higher compared to elementary students. Research shows that 20% of secondary students with disabilities have been suspended in a single year, compared to less than 10% of their peers without disabilities ("Education Brief", n.d.). The rate for students who are suspended with Emotional Disturbances (ED) is higher at the elementary level compared to middle and high school, leading to a more significant disparity between Black and White students (Losen et al., 2013). Children who are suspended from school have a higher risk of involvement in the juvenile justice system. Due to federal, state, district, and individual school policies and practices, students with disabilities contribute to a higher rate of disciplinary exclusion; therefore, strategies and treatment options should be brought to the forefront and reconsidered (Losen et al., 2013). Consequently, to prevent a special education student from being suspended or expelled, special education teachers must know their role in implementing traumainformed practices and have adequate professional development to ensure that the needs of their students are being met.

Trauma-Informed Practices

Trauma-informed practices are the guiding principles used to support the academic and behavioral challenges faced by students with and without disabilities when they have experienced childhood trauma (Hunter et al., 2020; Kumar, 2020). These

holistic and culturally responsive trauma practices should be applied systematically and with fidelity (Thomas et al., 2019). Trauma-informed practices can be used in concurrence with PBIS, SEL, and MTSS frameworks within a regular education or special education classroom.

Research expounds on the pervasiveness of ACEs and childhood trauma, but a systematic framework for trauma-informed practices within the school system has not been developed (Goldenthal et al., 2024; Hunter, et al., 2021; Thomas et al., 2019). Using a multidisciplinary framework rooted in pediatric science, the APA has drawn parallels to enhance our understanding of child development (2014). Building on the findings of the ACEs study, researchers have identified numerous trauma-informed interventions and practices for educators that consider a child's biology, health and development, and ecology of their social and physical environment (Anda, 2018; APA, 2014; Felitti et al., 1998). In conjunction, SAMHSA (2014) has developed the four R's when identifying inclusive trauma-informed practices. All stakeholders need to realize how trauma affects families, children, organizations, and communities. Second, stakeholders must recognize the signs of childhood trauma. Third, they must *respond* to trauma by applying a traumainformed approach to all areas of functioning and, fourth, they must resist retraumatization. Stakeholders do not want to create environments where families, children, organizations, and communities are re-traumatized, given their experiences.

In 2016, Chafouleas et al. applied their three-tiered model to other public health models. Tier one is the universal approach that provides system-wide programming for all children in the school environment. Tier two provides targeted, small-group interventions, while tier three provides intervention to those students who need the most support. The model developed by Chafouleas et al. (2016) is similar to the continuum of services identified by Adelman and Taylor (1999). Their intervention continuum begins with primary prevention through preschool-age support of a child's psychosocial development. Support continues through targeted school-based interventions provided by regular education teachers. Then, with the support of specialized teachers, intensive interventions and targeted treatments are provided to special education students and those students experiencing severe to chronic mental health concerns (Adelman & Taylor, 1999).

Trauma affects neurobiological development and alters a child's abilities to perform academically due to internalizing and externalizing the behaviors they are experiencing. A review of the literature explains that trauma-informed practices include establishing positive student and teacher relationships, teaching coping skills and selfregulation strategies, developing executive functioning skills, fostering resiliency through targeted interventions within the school and community, and establishing community involvement (Anderson et al., 2015; Bateman & Yell, 2019; Brunzell et al., 2015; Center on PBIS, 2022; Cooley, 2018; Slade & Wissow, 2007; Soleimanpour, et al., 2017).

Often, educators mistake a student's behavioral trauma response as a lack of respect or defiance. However, the neurobiological response to trauma in children is typically fight, flight, or freeze. With this understanding, it's crucial to teach students coping skills and help them process their emotions to build resiliency during or after a trauma response (Anderson et al., 2015; Brunzell et al., 2015; Soleimanpour et al., 2017). Moreover, creating and maintaining a positive school climate — supported by all school team members — is essential for addressing these responses effectively (Anderson, et al., 2015; Bateman & Yell, 2019; Center on PBIS, 2022).

Self-Regulation

There are many trauma-informed practices. One is teaching students how to selfregulate. Self-regulation involves the limbic system and uses a bottom-up approach to strengthen a child's physical and emotional regulation. Self-regulation activities should be repetitive and can include mindful breathing, visualizations, short bursts of exercise, and any type of sensory integration (Brunzell, et al., 2015). Teaching resiliency is another trauma informed practice for self-regulation that involves fostering positive self-talk and cultivating a sense of gratitude as part of the developmental process (Brunzell et al., 2015). When students are taught resiliency, they are better able to recognize how their emotions affect their bodies. Teaching these skills when a student has a calm mindset will help when they are experiencing periods of behavioral dysregulation (Williams & Scherrer, 2017).

Executive Functioning

Explicitly teaching executive function (EF) skills is another trauma-informed practice that connects past experiences to an action students need to perform. Executive functioning skills are cognitive skills managed by the brain's prefrontal cortex that may include cognitive, behavioral, and emotional regulation (Cooley, 2018; Slade & Wissow, 2007). Executive functioning skills are used when making plans, recalling directions or multi-step tasks, sustaining attention, evaluating ideas, self-monitoring, shifting tasks or ideas, asking for help, and self-regulating (Cooley, 2018; Otten & Tuttle, 2011; Slade & Wissow, 2007). Weaknesses in EF skills can cause a child to have difficulties in all academic areas. Incorporating the explicit teaching of EF skills may cause a shift in classroom practices, but it will enable teachers to respond more effectively to the needs of the students with deficits in these areas (Levine et al., 2017; Pickens & Tschopp, 2017).

Trauma-Informed Interventions

About 1% to 5% of students will need more individualized instruction and support to maintain and generalize socially acceptable behavioral expectations in traumainformed practices (Bateman & Yell, 2019). Small groups of students may meet with school counselors, school psychologists, and school-based mental health providers to address behavioral skill or performance deficits (Bateman & Cline, 2019; Bateman & Yell, 2019; Center on PBIS, 2022). Without the support of a mental health professional, concerns compound, children fall behind their peers in school, and they struggle to make and maintain connections. Children and adolescents who have been exposed to trauma and stress require the support of multiple systems; the school system cannot tackle all the issues a child and family are experiencing. Therefore, collaboration with multiple providers in and outside of the school setting is essential (Bateman & Cline, 2019; Bateman & Yell, 2019; Center on PBIS, 2022; Goh & Bambara, 2012; Stormont et al., 2008).

When a student is not in school, they are within their local neighborhood community. This community environment plays a significant role in their well-being. According to Hall et al. (2012), 21% to 67% of behavioral and physical health problems that cause people to seek social services are attributable to ACEs. Current research indicates that 40% to 60% of children exposed to clinically significant problems require treatment (Pernebo & Almqvist, 2016). Community-based models help children identify and address their behavioral and emotional needs, especially in under-resourced communities (Goldenthal et al., 2024; Pernebo & Almqvist, 2016). Nonetheless, about 75% of children requiring mental health services within their community do not receive them (Goldenthal et al., 2024).

Communities must provide support services in collaboration with schools. Most trauma-informed community interventions are grounded in cognitive behavior therapy or child-parent psychotherapy (Pernebo & Almqvist, 2016; Thomas et al., 2019). Group interventions for children have been a preferred treatment method; however, there is little evidence showing a correlation between the experiences of school-aged children and their parent's use of mental health services. Some researchers support hiring and placing mental health professionals and social/emotional learning consultants in a classroom while addressing ineffective and behavioral dysregulation ("Education Brief," n.d.; Hudspeth, 2015; Losen et al., 2013). Others advocate for providing parent training in school to help parents become more knowledgeable about supporting their child both at home and in the classroom (Fyke, 2018; Woods-Jaeger et al., 2018).

Thomas et al. (2019) reviewed research on trauma-informed practices and interventions published between 1998 and 2018. Thirty-three articles were identified, and 30 different interventions were explored. Thomas et al. (2019) revealed that a systematic framework for implementing trauma-informed practices in schools has not been developed despite the evolving landscape of research supporting these practices (Goldenthal et al., 2024; Hunter, et al., 2021). The researchers also noted a lack of disciplinary evidence supporting the effectiveness of trauma-informed practices used by teachers in their classrooms. They concluded that more vigorous interdisciplinary research must be conducted so all stakeholders can help address and support children experiencing trauma in schools (Thomas et al., 2019).

Many states are developing training networks that provide evidence-based training, offer web-based assessments, and facilitate communication across community systems (NCSEA, 2019; NCTSN, 2012; SAMHSA, 2014). Overall, developing a systemwide approach to trauma-informed practices among school and community partners including mental-health, child-advocacy-and-welfare, law-enforcement, and juvenilejustice workers — will continually enhance the ability to support children exposed to trauma. In particular, special education teachers need additional professional development on trauma-informed practices to adequately support students with childhood trauma who also qualify for special education services.

Teachers' Perceptions of Childhood Trauma

All educators must have an understanding of instructional strategies that support any child with a trauma history (NCSEA, 2019; NCTSN, 2012; Romero et al., 2018; SAMHSA, 2014; Thomas et al., 2019). Childhood trauma affects approximately half of all school-age youth in U.S. schools, with close to the same number of youth reporting exposure to at least one adverse childhood experience (ACEs). Nearly one-third of students experience two or more ACEs by the time they are 17 years of age. This means that 12 out of 25 students in a typical classroom may have been affected by trauma, with close to 8 of those 25 students having experienced two or more ACEs by the time they are seniors in high school (McDowell Institute, 2022). Children bring their trauma experiences into the school system, and research suggests that adversity, trauma, and stress significantly affect a child's social, emotional, and cognitive development (Fyke, 2018; SAMHSA, 2014). It is imperative for educators to understand how to recognize, address, and respond to childhood trauma.

Many nationally recognized organizations have established trauma-informed frameworks to support behavioral health sectors that work with individuals with traumatic experiences. First, in 2013, the "Advancing the Science of Education, Training and Practice in Trauma" national conference on trauma competencies was held at Yale University. From this, the New Haven Competencies (See Table 1) were established by an advisory board comprising 60 psychologists, psychiatrists, and social workers experienced in working with children and adults who had a history of trauma. The competencies were based on prior work completed in the field of psychology to identify trauma-informed standards across various ages and trauma experiences. The eight trauma-focused competencies integrated general knowledge about trauma while highlighting trauma-specific principals to educate a broader population, including educators (Cook & Newman, 2014).

Second, with the development of the New Haven Competencies, the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Center for Trauma-Informed Care (2014) established an expert panel to craft concepts and a framework for public health agencies adaptable to any service system, including education. SAMHSA's trauma-informed approach (Table 2) is supported through a set of four assumptions and six principals essential to providing a trauma-informed approach for public institutions including education.

Table 1

New Haven Trauma-Focused Competencies

- (1) Demonstrate understanding about trauma reactions and tailor trauma interventions and assessments in ways that honor and account for individual, cultural, community, and organizational diversity.
- (2) Demonstrate understanding and ability to tailor assessment and interventions to account for developmental lifespan factors.
- (3) Demonstrate the ability to understand, assess, and tailor interventions and assessments that address the complexities of trauma-related exposure, including any resultant long- and short-term effects.
- (4) Demonstrate the ability to appropriately appreciate, assess. and incorporate trauma survivors' strengths, resilience. and potential for growth in all domains.
- (5) Demonstrate understanding about how trauma impacts a survivor's and organization's sense of safety and trust.
- (6) Demonstrate the ability to recognize the practitioners': (1) capacity for self-reflection and tolerance for intense affect and content, (2) ethical responsibility for self-care, and (3) selfawareness of how one's own history, values, and vulnerabilities impact trauma treatment deliveries.
- (7) Demonstrate the ability to critically evaluate and apply up-to-date existing science on research-supported therapies and assessment strategies for trauma-related disorders/difficulties.
- (8) Demonstrate the ability to understand and appreciate the value and purpose of the various professional and paraprofessional responders in trauma work and work collaboratively and cross systems to enhance positive outcomes.

Note. From "A consensus statement on trauma mental health: The New Haven

Competency Conference process and major findings," by J.M. Cook and E. Newman,

2014, Psychological Trauma: Theory, Research, Practice, and Policy, 6(4), p. 303.

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The New Haven Competencies and SAMHSA's Trauma-Informed Approach:

Key Assumptions and Principals (see Table 2) provides educators with organizational

knowledge about trauma and how to implement trauma-informed practices (Cook &

Newman, 2014; SAMHSA, 2014). Teachers observe academic and behavioral changes in

a student daily. What a teacher observes in a child exposed to trauma is consistent across

research (Andreson-Ketchmark & Alvarez, 2010; Crone et al., 2010; Lambert et al.,

2022; Otten & Tuttle, 2011). Children exhibit emotional, behavioral, and academic

PERCEPTIONS OF CHILDHOOD TRAUMA

Table 2

SAMHSA's Trauma-Informed Approach: Key Assumptions and Principals

The Four R's: Key Assumptions in a Trauma- Informed Approach	Six Key Principals of a Trauma-Informed Approach
Realizes trauma and understands how trauma can affect families, groups, organizations, and communications as well as individuals. Recognizes the signs of trauma. These signs may be gender-, age-, or setting-specific and may be manifest by individuals seeking or providing services in these settings.	Safety: Children or adults feel physically and psychologically safe.Trustworthiness and Transparency: Organizational operations and decisions are conducted with transparency.Peer Support: Individuals with lived experiences of trauma or, in the case of children, this may be family members of
Responds by applying the principals of a trauma-informed approach to all areas of functioning.	children who have experienced traumatic events and are key caregivers in their recovery.
Resists re-traumatization by recognizing how organizational practices may trigger painful memories and re-traumatize clients with trauma histories.	Collaboration and Mutuality: The organization recognizes that everyone has a role to play in a trauma-informed approach.
	Empowerment, Voice, and Choice: Throughout the organization and among the clients serviced, individuals' strengths and experiences are recognized and built upon.
	Cultural, Historical, and Gender Issues: The organization actively moves past cultural stereotypes and biases; offers access to gender responsive services; leverages the healing value of traditional cultural connections; incorporates policies, protocols, and processes that are responsive to the racial, ethnic, and cultural needs of individuals serviced; and recognizes and addresses historical trauma.

Note. Adapted from SAMHSA's concept of trauma and guidance for a trauma-

informed approach by the Substance Abuse and Mental Health Services

Administration, 2014 (HHS Publication No. SMA 14-4884).

problems. They can also be more withdrawn, anxious, depressed or impatient, noncompliant, and impulsive (Gamache Martin et al., 2010). Teachers need to understand what childhood trauma is, how to identify when a child has had a traumatic experience, and how to support students exposed to trauma through trauma-informed practices (Purser, 2022).

From an early age, research indicates that 78% of children have reported multiple childhood trauma exposures before they enter kindergarten (Rossen & Cowan, 2013). Teachers play a significant role in a child's development and in supporting a child's recovery after a traumatic event (Alisic et al., 2012). At times, recovering from childhood trauma can take a long time, depending on the magnitude of the event (Rossen & Cowan, 2013). Teachers are faced with balancing their mission of educating students with the need to support students who have experienced or are currently experiencing trauma (Alisic, 2012). Within the classroom, a trauma-informed perspective helps teachers investigate the elicitation of a traumatic stress response (Pickens & Tschopp, 2017). When teachers understand trauma reminders, they can better support the child and facilitate a safe classroom environment (NCSEA, 2019; SAMHSA, 2014). Similarly, teachers need to understand the cultural context in which a student may have experienced a traumatic event (Rossen & Cowen, 2013; Thomas et al., 2019). Depending on the developmental level of a child, trauma can lead to structural changes in the brain and impede development, cognition, memory, and learning. Teachers must understand these influences and identify the most appropriate interventions (Anderson et al., 2015; Rossen & Cowen, 2013). Students who feel safe and connected to school are ready to learn.

Schools can provide students with the infrastructure to support them through the implementation of trauma-informed best practices and interventions.

Using an internet-based survey, Gamache Martin et al. (2010) conducted a study in the U.S. and Canada that gathered the beliefs of 112 early-childhood through 12thgrade teachers about maltreatment in children. The teachers believed that physical and sexual abuse led to internalizing and disruptive behaviors, as well as academic difficulties. They also felt that emotional neglect impacted students' academic success and fostered internalizing behaviors, such as emotional dependence and self-harm. Twenty-one percent of teachers were not aware of how physical and sexual abuse could influence their students' classroom behaviors. In contrast, other teachers had an advanced understanding of the impact of physical and sexual abuse on children compared to emotional or physical neglect (Gamache Martin et al., 2010). Overall, the teachers were unsure whether a child's behaviors. Teachers need education on distinguishing the behaviors of children who have experienced trauma from those associated with psychiatric disorders like ADHD (Gamache Martin et al., 2013).

Through a survey of over 700 teachers, Alisic (2012) found that 89% had worked with one or more children who had been exposed to childhood trauma, yet only 9% indicated they had received relevant trauma training. When a child has been exposed to trauma, teachers often feel they lack the competence and time to address the child's social and emotional needs while also managing the needs of the rest of the class (Alisic, 2012; NCSEA, 2019). Teachers want to be there for the children they are educating, but some students do not want to be treated differently (Alisic, 2012). It is difficult for

teachers to know when and how to react if they cannot determine whether the behavioral problems stem from a traumatic event or other circumstances (Alisic, 2012).

Anderson et al. (2015) conducted a study exploring trauma-informed professional development utilizing results from a needs assessment, a series of professional development workshops, post-workshop surveys, and insights gained from focus groups (Anderson et al., 2015). The researchers identified several themes from the focus group analysis. Teaching staff were concerned about childhood trauma and toxic stress exposure at home. Increased academic demands on students required teachers to adapt their pedagogical practices, resulting in greater stress for both students and teachers. The researchers found that teachers were unsure of how to intervene when a child's behavior interfered with the learning environment. Teachers felt they had not received adequate professional development and information to support their students effectively. However, when teachers were provided with professional development, they became confident working with children experiencing trauma (Anderson et al., 2015).

Utilizing a trauma-informed approach benefits both children and teachers. Schoolbased treatment and formalized intervention for children exposed to trauma are needed (Slade & Wissow, 2007). Through direct collaboration with schools and external intervention services, children can get the support they need. However, not all families have the means to get their child to and from community and social service agencies or to cover the associated costs (Slade & Wissow, 2007). Teachers can link families and community services (Alisic et. al., 2012). However, to effectively support their students and reduce the burnout rate among early-career educators, teachers must receive trauma training in their preparation programs (NCSEA, 2019; Hunter et al., 2021). Given the amount of time teachers spend with children during the school day, they play a vital role in identifying signs of trauma. After the COVID-19 pandemic in 2021, the U.S. Department of Education and Office of Special Education and Rehabilitative Services released a resource to enhance the promotion of mental health and the social and emotional well-being among children. COVID-19 was a traumatic event that exacerbated the mental health crisis, leaving all public health workers and educators ill-equipped to address the academic, social, emotional, and behavioral needs of children. The resource highlighted seven challenges and seven recommendations to improve school-based mental health support services for children in early childhood through higher education (U.S Department of Education, 2021).

A 2019 amendment to the Public School Code of 1949 states that school-wide trauma-informed approaches must be used, and public school professional education plans must include one hour of training related to trauma-informed approaches. The training should address recognizing signs of trauma, implementing evidence-based best practices, and reviewing the school's policies on connecting students with appropriate services tailored to the local community and approved by the Pennsylvania Department of Education (PDE) (P.L. 146, No 18 Cl. 24).

In 2021, the PDE published a research agenda outlining Pennsylvania teachers' ability to recognize and respond to childhood trauma, including trauma and distress related to COVID-19 (Knoster et al., 2021). PDE used a modified survey from developed by Kognito's, a New York City-based developer specializing in research-supported role-play conversations, Whitepaper: "Are teachers and staff ready to apply trauma informed practices?", which reported survey findings from over 8,000 K-12 educators across 11

states (McDowell Institute, 2022). Over 4,500 educators throughout the Commonwealth responded to the survey, and PDE that one in two educators did not feel satisfactorily prepared to recognize signs of childhood trauma within their classrooms. Three out of five educators stated that they were not satisfactorily prepared to use communication strategies to help the children in their classroom who have experienced trauma. Additionally, three out of four educators felt they needed better preparation to implement trauma-informed practices in their teaching. PDE and Kognito's white paper concluded that 95% of educators believe they should receive specific training in trauma-informed practices (Knoster et al., 2021).

A child's exposure to one or more traumatic events has been proven to disrupt their learning and psychosocial development. Children with disabilities and a history of trauma exposure have higher rates of mental health challenges, academic-related distress, and have greater difficulty forming peer relationships. Little is known about special education teachers' perceptions and the impact of childhood trauma on the provision of special education services. There is a lack of clear understanding regarding special education teachers' role in implementing trauma-informed practices through special education services. Additionally, research is limited on special education teachers' perceptions of the professional development they have received for responding to children who have experienced trauma and qualify for special education services (Chudzik et al., 2024; Goldenthal et al., 2024; Hunter et al., 2021; Miller & Santos, 2020).

Childhood Trauma and the IDEA

The Individuals with Disabilities Education Act (IDEA) is one vehicle for assisting students in acquiring the skills they need to overcome their childhood trauma. For a child to receive special education services, Part of B of the IDEA mandates that schools, under the Child Find obligation, evaluate all children with disabilities, including those with emotional and mental health needs, who require special education (Tuchinda, 2020; Winder, 2015). The IDEA requires schools to educate students with disabilities, no matter their ethnic or cultural differences (Otten & Tuttle, 2011). A child first meets the criteria to receive special education services when a comprehensive evaluation shows they have qualified under one of the thirteen disability categories recognized by IDEA (Markelz & Bateman, 2022; Tuchinda, 2020; Winder, 2015). Second, the child's disability must adversely affect their educational performance and indicate a need for related services and specially designed instruction (Markelz & Bateman, 2022; Tuchinda, 2020; Winder, 2015). Once a child is identified with a disability, where there is a need for specially designed instruction and related services, the school team must develop an Individualized Education Program (IEP). The IEP must be reasonably calculated and outline the set of services the child needs to receive a free and appropriate public education (FAPE) (Otten & Tuttle, 2011; Tuchinda, 2020; Winder, 2015). A range of support services must be included, such as related services or mental health services, to ensure that the student's educational needs are met (U.S. Department of Education, 2021).

Case Law and the Limitations of the IDEA

Before the Education for All Handicapped Children Act of 1975 (EAHCA) was passed, millions of students were excluded from public school (Markelz & Bateman, 2022). During this time, many students were attending public school, but their needs were not being met. Even with the amendment of IDEA in 2004, childhood trauma was not recognized as a contributor to a child's disability. IDEA mandates that all students, regardless of their disability, receive an educational benefit. To receive special education services, one of the thirteen disabilities under IDEA is required, but mental health diagnoses are not included (Winder, 2015). Several court cases highlight this conclusion and support the multifaceted intersection of trauma and special education.

In the first case, *Earl v. Compton Unified School District*, a class action suit was filed in federal court by students and teachers who alleged that students were traumatized by experiencing and witnessing violence, racism, homelessness, abuse, neglect, loss of family and friends, and being placed in the foster care system. Compton Unified School District, located in Compton, California, is known for having one of the highest crime rates in the nation. The school district did not have a systematic approach for addressing the needs of traumatized students under IDEA or the Americans with Disabilities Act (ADA). Six years after the case was filed, the plaintiffs and the defendant collaborated to develop Compton Unified School District's wellness initiative. It was a multi-pronged program designed to address the academic, social-emotional, attendance, and behavioral needs of the students (*Earl v. Compton Unified Sch. Dist.*, 2017).

The second case, *Upper Darby School District v. Price*, involved a student who reported experiencing traumatic events over the summer. The student socially withdrew

from his peers after the incident, and his grades deteriorated. The district claimed that it had no reason to suspect that the student had a disability. The district denied the student access to a free and appropriate public education (FAPE) by failing to timely evaluate the student after he reported the traumatic event he experienced. The hearing officer opined that the student's continuous academic and behavioral troubles triggered the district's child-find duties and that the district should have evaluated the student's IDEA eligibility under the category of ED. The student was entitled to compensatory education, and the district was required to reimburse the parents for the first independent educational evaluation (IEE) (*Price v. Upper Darby Sch. Dist.*, 2016).

In the third case, *Horne v. Potomac Preparatory P.C.S.*, a six-year-old child attempted suicide by jumping out of a school window. Before the LEA agreed to conduct an evaluation where the student was denied eligibility to receive special education, 15 additional disciplinary incidents occurred. Over the course of three months, the student was suspended six times and expelled four times for physically assaulting teachers and students. After completing two independent educational evaluations, the evaluators concluded that he was eligible for services under ED with mixed disturbance of emotions and conduct. The LEA acknowledged that the student had behavioral problems, but the behaviors did not impact his progress or access to the general education curriculum. Over three years, he had 31 documented incidents of behavior. He demonstrated an inability to build or sustain interpersonal relationships and had a pervasive mood of unhappiness. The court determined that the LEA did not comply with their Child Find obligations, and he qualified for ED services under IDEA (Horne v. Potomac Preparatory P.C.S, 2016).

In the fourth case, N.C. ex rel. M.C. v. Bedford Central School District, the Southern District of New York upheld the LEA's denial of special education eligibility to a high school student whose behavior significantly declined when he experienced repeated sexual abuse. The student was exposed to sexual misconduct with his male cousin that involved viewing pornographic videos and watching his cousin engage in sexual intercourse. In addition to these traumatic experiences, he was diagnosed with ADHD and reading deficits. He received accommodations through a Section 504 Plan. From December 2002 to March 2003, he was suspended for fighting and assaulting a student and was found in possession of marijuana and drug paraphernalia. During the second suspension, he was referred for a special education evaluation. The LEA determined that he did not meet the criteria to receive special education services under ED, despite his trauma exposure, as it did not impact his education. The court ruled that his aggression, fighting, and drug possession did not represent appropriate behavior under normal conditions. However, these behaviors were not enough to classify him with ED. Rather, they are characteristics of social maladjustment. Social maladjustment is not one of the 13 disability categories under IDEA; therefore, he did not qualify for special education services (N.C. ex rel. M.C. v. Bedford Central School District, 2007).

In the fifth case, *Springer v. Fairfax County School Board*, the plaintiffs alleged their son was a student with a disability and entitled to a FAPE under IDEA's definition of ED. The LEA determined that he did not meet the criteria for ED. The hearing officer determined that he was a child with a disability. He had academic, attendance, behavioral, and legal problems. He was suspended for recklessly driving on school property, cutting class, committing forgery, leaving school without permission, and stealing a car on school grounds. He was later arrested for being found in possession of burglary tools and tampering with a car. After several psychological assessments, evaluators identified him as socially maladjusted with a conduct disorder. The Fairfax County School Board appealed the decision that was later reversed by a state-level review officer. That officer agreed with the LEA's determination that he did not meet the criteria for ED (*Springer v. Fairfax County School Board*, 1997).

Trauma can be manifested in myriad ways. These court cases demonstrated how ACEs and childhood trauma impacted each child academically, behaviorally, and emotionally in school, whether or not they were identified for special education services (*Earl v. Compton Unified Sch. Dist.*, 2017; *Horne v. Potomac Preparatory P.C.S*, 2016; *N.C. ex rel. M.C. v. Bedford Central School District*, 2007; *Price v. Upper Darby Sch. Dist.*, 2016; *Springer v. Fairfax County School Board*, 1997). While some case law presented the unresolved behavioral issues these children faced, it also concluded with the converging rulings of hearing officers. For special education teachers to provide inclusive and supportive environments for all students in their classroom, there must be a clear intersection of trauma-informed practices and special education (Kumar, 2020). Special education teachers need professional development on trauma-informed practices to adequately support students who have been exposed to childhood trauma and also qualify for special education services.

The number of children either not appropriately referred or inaccurately determined to require special education and related services has continually increased (Dykes, 2008). Additionally, there are failures in the educational system relating to inequalities in the referral process, assessment, and special education replacement

procedures for students with ACEs (Dykes, 2008; Tuchinda, 2020). The sociodemographic factors in a community have a strong influence on the proportion of students identified with disabilities (Shippen et al., 2009). IDEA does not have a disability category that captures the multi-faceted impact of trauma on the brain and behavior, and IDEA does not mention childhood trauma in its statute or regulations (Tuchinda, 2020). Children with ACEs are often categorized under IDEA as having an Other Health Impairment (OHI) or Emotional Disturbance (ED). There is also a comorbidity factor that closely resembles mental health disorders and ED characteristics (Lambert, 2022).

OHI is defined as "having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness concerning the educational environment that adversely affects a child's educational performance" (IDEA, 2004). At the federal level, an Emotional Disturbance (ED) is defined as having

a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

(A) An inability to learn that cannot be explained by intellectual, sensory, or health factors.

(B) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.

(C) Inappropriate types of behavior or feelings under normal circumstances.

(D) A general pervasive mood of unhappiness or depression.

(E) A tendency to develop physical symptoms or fears associated with personal or school problems. (IDEA, 2004)

A child must meet one of the intensity and duration characteristics in order to qualify for ED. The definition also includes schizophrenia, but it does not apply to socially maladjusted children (Bateman & Cline, 2019; Tuchinda, 2020; Winder, 2015). Recent research by Lambert et al. (2022) examines the five characteristics outlined in the federal definition of ED. The study explored 491 students identified with ED across four major demographical regions in the U.S. Using the Scales for Assessing Emotional Disturbance-3 (SAED-3), the researchers concluded that 22% of students demonstrated characteristics of ED across all five areas. Scores were high in unhappiness or depression, where 16.1% of students were indicative of ED and 24.8% were highly indicative of ED. Also, when looking at ratings of physical symptoms or fears, 18.7% of students were indicative of ED and 26.1% of students were highly indicative of ED (Lambert et al., 2022).

IDEA does not properly address the educational needs of children who have experienced childhood trauma as it relates to unhappiness, depression, and symptoms of fear (Tuchinda, 2020; Winder, 2015). Different states apply various interpretations of ED, given the criteria outlined by IDEA (Winder, 2015). Some states use a combination of terms like *behavior*, *emotional*, or *social* in conjunction with *disability*, *disorder*, or *impairment* (Bateman & Cline, 2019). The IDEA definition excludes children who lack an appropriate support system, a factor which can contribute to a child's maladjustment (Winder, 2015). Given these findings, special education teachers must be able to recognize childhood trauma and how understand how it manifests specifically in disability categories like OHI and an ED. Special education teachers face challenges due to a lack of professional development on trauma-informed practices, which hinders their ability to adequately support students exposed to childhood trauma who also qualify for special education services. They need additional professional development and training to meet the needs of the heterogeneous groups of students in their classrooms (Hunter et al., 2021).

Childhood Trauma, Trauma-Informed Practices, and Special Education Services

ACEs can be the root cause of learning disabilities, health problems, and social challenges that lead to behavioral problems (Tuchinda, 2020). Students who have experienced many adversities may require additional support within the school system and community (Dykes, 2008; "Education Brief", n.d.; Losen et al., 2013; Shippen et al., 2009). Rogers (2003) and other researchers questioned the social construction of disabilities by identifying a disability as a cultural institution of formal and informal discourse, achievement, and ability. Interactions among teachers, parents, and students, along with primary language literacy (developed at home and in the community) and secondary discourse (practices developed through school), can change a child's brain physiology, thus impairing their academic efforts (Knotek, 2003; Rogers, 2003; Wade et al., 2014). Largely, empirical studies confirm a discernable negative effect of ACEs on a child's developmental, emotional, and behavioral functioning (Dykes, 2008; "Education Brief", n.d.; Losen et al., 2013; Rogers, 2003; Shippen et al., 2009).

Ethnographic and micro-ethnographic studies have identified and explained patterns that shape a child's school achievement (Knotek, 2003). These studies revealed information about students who receive special education services. In some circumstances, students who were exposed to crime, violence, and poverty; who lacked educational resources; and who were having difficulty in school might not qualify for special education services under the category of Specific Learning Disability (SLD) using the discrepancy model (Knotek, 2003). Social and emotional contexts shape relationship norms, behaviors, and discourse among children. These contexts also shape and inhibit the multidisciplinary team and how they objectively make decisions and diagnose a child when determining special education services (Knotek, 2003; Tuchinda, 2020). Given these circumstances, a child may not qualify for special education services under any of the disability categories, and therefore, special education services cannot be provided.

A study by Chudzik et al. (2024), used a smaller portion of a mixed methods study to investigate early childhood special education (ECSE) teachers' perceptions toward childhood trauma-informed practices. Only qualitative data were reviewed as part of this study. The researchers concluded that many ECSE teachers have the knowledge to support children with disabilities who have experienced trauma, but they do not feel prepared to help them. Another finding from the study revealed that many professional development activities attended by ECSE teachers covered foundational information about childhood trauma and trauma-informed practices. However, special education teachers need much more specialized training to help them address and modify a child's behavior influenced by trauma. Finally, participants affirmed a lack of support from administrators and support staff when implementing trauma-informed practices (Chudzik et al., 2024). This research coincides with earlier findings from Miller and Santos (2020), who emphasized that the field of special education must meet the needs of students who have experienced trauma, based on positional statements from the NEA, the Department of Early Childhood (DEC), and the Council for Expectational Children (CEC).

In a research study involving children aged three to five years old, Kerker et al. (2015) discovered that for each additional ACE reported, there was a 77% higher chance of receiving a low score on the Vineland Adaptive Behavior Scale. This scale is frequently used to evaluate an individual's cognitive abilities, encompassing their language proficiency, social behavior, and self-care skills. In another research study with 81,184 adults, Karoliina et al. (2007) found that having two ACEs almost doubles the risk of developing a disability compared to having no ACEs. Furthermore, having seven or eight ACEs was associated with a sixfold increase in the risk of developing a disability (Karoliina et al., 2007).

Overall, while multiple calls for action have been made by national organizations and researchers, there is still more to be done to support children with childhood trauma. A Google Scholar search using the key phrase *perceptions of special education teachers and children with trauma* yielded fewer than ten peer-reviewed articles. Given that almost half of the children who have been abused or neglected also qualify to receive special education services, sufficient training for special education teachers and teams is imperative (Hunter et al., 2021). Through the Google Scholar search, it is evident that researchers have not extensively explored special education teachers' perceptions of the impact of childhood trauma compared to the provision of special education services. There is a lack of clarity about special education teachers' role in implementing traumainformed practices through special education services. Additionally, there is little research on special education teachers' perceptions of the professional development they have received for responding to children who have experienced childhood trauma and qualify for special education services.

Summary

A child's early life experiences will shape their brain development and determine their intelligence, emotions, and personality (Child Welfare Information Gateway, 2017). During a child's developmental periods, chronic exposure to childhood trauma has longlasting adverse effects (NCTSN, 2012; Woods-Jaeger et al., 2018). Childhood trauma can manifest itself through behaviors teachers see in the classroom. If these stressors go unrecognized, a child's learning can be negatively affected and they may be mislabeled in school (Fyke, 2018). These experiences often interfere with their academic and socialemotional success, resulting in cognitive, physical, or behavioral disorders (SAMHSA, 2014). Educational institutions should be trauma-informed by applying a trauma lens to all academic learning (Rossen & Bateman, 2020). Children with ACEs need to have a safe, supportive, and nurturing environment to reduce the risks associated with adverse experience exposure (Woods et al., 2018). The New Haven Competencies and SAMHSA's Trauma-Informed Approach: Key Assumptions and Principals provide educators with knowledge about trauma and guidance in implementing trauma-informed practices (Cook & Newman, 2014; SAMHSA, 2014).

The intersection of trauma and special education is a critical and complex area of concern within education. A child's adverse childhood experiences can be the root cause of learning disabilities, health problems, and social challenges that lead to behavioral problems in school (Tuchinda, 2020). Given the amount of time special education teachers spend with children during the school day, they play a vital role in identifying

signs of trauma, child abuse, and neglect. With recent developments in legislation and trauma research, effectively supporting special education teachers and their understanding of childhood trauma is limited (Tuchinda, 2020; Winder, 2015). Shifting to an integrated and effective approach to providing academic, social-emotional, and behavioral support for special education students requires changes to standard prevention and intervention approaches in schools. It is imperative to understand special education teachers' perceptions regarding the prevalence and impact of childhood trauma concerning the provision of special education services. Special education teachers need to understand their role when implementing trauma-informed practices through the special education services they provide. Additionally, special education teachers need adequate professional development to support children who have experienced trauma and also qualify for special education services. The next chapter will discuss the methodology for this research.

CHAPTER THREE

The intersection of trauma and special education is a critical and complex area of concern in education. Across the nation, educators are reporting an increased prevalence and greater intensity of childhood trauma among students who receive special education services. Exposure to one or more traumatic events has been proven to disrupt a child's learning and psychosocial development. Research exploring special education teachers' perceptions and the impact of childhood trauma on the provision of special education services is under-considered. There is a lack of inquiry into special education teachers' role in implementing trauma-informed practices through special education services. Additionally, there is a scarcity of research exploring special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and qualify for special education services.

Research Questions

- 1. What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?
- 2. What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?
- 3. What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and qualify for special education services?

Pilot Study

The researcher conducted a qualitative pilot study in the spring of 2018 (Mason, 2018). The purpose of the qualitative pilot study was to examine how ACEs (Felitti,

1998) and childhood trauma influence the special education referral process and how special education teachers are supported. Hour-long, unstructured, synchronous, and mediated interviews were conducted with four special education teachers through Adobe Connect. Each participant taught in the public-school system, with teaching experiences ranging from 5 to 14 years.

All participants stated that their school district utilized a school-wide evaluation process through either the discrepancy or the MTSS model. Fifty percent of the participants voiced that this model was not providing satisfactory support for students with ACEs due to staffing constraints and lack of teacher training. Additionally, in each of the participant's districts, state mandates require a Student Assistance referral for a student to receive mental health or drug/alcohol-related services.

The remainder of the participants explained that once identification is achieved, the special education process is followed on a continuum of Least Restrictive Environment (LRE) where students remain in the regular education classroom for as long as they can be successful, particularly those with a diagnosed learning disability. However, when students are diagnosed with an Emotional Disturbance, the continuum of support can be ineffective since administration moves students with severe behaviors quickly, and even unjustifiably, to alternative placement. These unjustifiable placements occur when a Functional Behavior Assessment (FBA) and Positive Behavior Support Plan (PBSP) have not been conducted and/or implemented.

Each participant described how their school district took advanced precautions to make their school trauma-responsive. These measures included seeking additional guidance counselors throughout the district when a traumatic event occurs, implementing school-wide endeavors like ALICE (Alert, Lockdown, Inform, Counter, and Evacuate) and Stop the Bleed training and encouraging teachers to participate in professional learning committees with book studies on poverty and trauma. One participant mentioned the benefits of having monthly local mental health consultation support with the district's emotional support teachers and guidance counselors. Most importantly, each participant emphasized the importance of a district-wide, school-based outpatient behavioral and mental health program.

Limitations of the Pilot Study

One limitation of the pilot study was that the researcher did not interview general education teachers. They could have provided substantial information on how ACEs influence children within their classrooms academically, emotionally, and socially. However, interviewing general education teachers did not align to the purpose of the pilot study.

Conclusions of the Pilot Study

For students with ACEs, school districts need a comprehensive special education referral and evaluation process that addresses all needs. Districts should consider implementing school-based outpatient behavioral and mental health programs across all grade levels. Through these programs, students with ACEs can receive therapy, psychiatric and psychological evaluations, and medication management, all while at school. In addition, trauma training should not be superficial. All administrators, teachers, and staff should be well-equipped to provide a trauma-sensitive environment through professional development, monthly faculty meetings, and morning meetings.

Description of Participants

As a result of the pilot study and review of literature, the researcher concluded that a significant number of special education students have been exposed to childhood trauma; yet research around special education teachers' perceptions of childhood trauma are under-examined. Participants in this case study were purposefully and homogeneously sampled special education teachers currently working in a K-12 school district in central Pennsylvania. Each special education teacher participant provided itinerant, supplemental, or full-time special education services to students within the district. They supported a variety of students, including those receiving learning support, intensive learning support, life skills support, and autistic support services. The participants had a range of general education and special education teaching experiences and numerous years of providing instruction in public and private education.

Descriptions of Instrumentation/Measurement Procedures

Based on the pilot study's interview guide, a revised open-ended interview guide (Table 3) was used in this qualitative case study. The original interview guide (see Appendix C) had seven open-ended questions and four sub-questions. A revised openended interview guide was developed to capture each participant's detailed responses and personal accounts to the specific interview guide questions (Patton, 2002). Given the results of the pilot study and a review of Cook and Newman's (2014) inquiry outlining The New Haven Competencies and SAMHSA's Trauma and Justice Strategic Initiative (2014), the researcher revised the original seven open-ended interview guide questions. An additional five questions were added for clarity. Some revisions to the interview guide questions were aligned to the trauma-focused New Haven Competencies, addressing the scientific understanding of trauma, how to appropriately assess and tailor interventions around the complexities of trauma exposure, the practitioners' role in trauma treatment delivery, and the application of development, and current best practices to trauma service delivery (Cook & Newman, 2014). Additional interview guide revisions were synthesized with SAMHSA's four key assumptions in a trauma-informed approach and six key principals of a trauma informed approach, resulting in the identification of 12 comprehensive interview guide questions shown in Table 3 (SAMHSA, 2014). Common themes from the revised interview guide questions were then analyzed, leading to the development of the three research questions used in this current study and also shown in Table 3.

A qualitative approach was chosen to generate an in-depth understanding of special education teachers' perceptions of childhood trauma in its natural and real-life context (Coombs, 2022). The researcher conducted face-to-face interviews following semi-structured and pedagogical interviewing models, allowing each participant to engage honestly and express their complex viewpoints and experiences (Patton, 2002; Tracy, 2013). Using narrative and naturalistic inquiry, each *tour*, *experience*, *future prediction*, and *factual* interview question directly related to the special education teachers' perceptions regarding childhood trauma, trauma-informed practices, and the intersection of special education (Clandinin et al., 2007; Tracy, 2013). Interview guide questions one, two, three, and four aligned to the main research question addressing special education teachers' perceptions of the prevalence and impact of childhood trauma in special education. Questions five, six, seven, and eight of the interview guide explored

Table 3

Research Questions	Interview Guide Question/Topic
Research Question 1 – What are special education teachers' perceptions regarding the prevalence and impact of trauma in relation to the provision of special education services in the district?	 Briefly explain what you know about childhood trauma. Describe the types of trauma students in your special education classroom have been exposed to. How do you see the complexities of trauma impacting your students' short-term and long-term? What is currently happening in your school to promote academic, behavioral, and social-emotional trauma-informed practices for special education students? What are your perceptions of how trauma-informed practices are being implemented throughout the school district and greater community to support special education students?
Research Question 2 - What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?	 5) As a special education teacher, you are one member of a large organization. What do you perceive as your role in realizing, recognizing, responding, and resisting re-traumatization when working with special education students who have been exposed to childhood trauma? 6) How do you critically assess and apply up-to-date trauma-informed practices and interventions in your classroom? 7) What trauma-informed practices have you found to be the most helpful when working with special education students in your classroom? 8) In your role, describe any barriers you face when implementing trauma-informed practices.
Research Question 3 – What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and also qualify for special education services?	 9) How does the district incorporate professional development around policies and practices that are responsive to the cultural needs of all students? 10) As a special education teacher, how are you impacted by your special education students' trauma experiences? 11) What professional development have you received to support your work with students with childhood trauma who qualify for special education services? 12) How could the district enhance its professional development by incorporating trauma-informed practices to support special education students?

Interview Guide to Research Questions Breakdown

special education teachers' perceptions of their role in implementing trauma-informed practices through their unique special education service delivery model. Lastly, questions nine through twelve of the interview guide examined special education teachers' perceptions of the professional development they have received to address childhood trauma and support students who qualify for special education services. By breaking the interview guide down into predetermined themes, the researcher could compare prior themes identified in the pilot study and explore new emergent themes and perceptions. These themes may be generalized for school districts or other educational entities to determine how to best support special education teachers when educating children who have experience trauma are receiving special education services (Clandinin et al., 2007).

Research Design and Description of Procedures

To gain a deeper understanding of participants' perceptions, informed consent was obtained from the Internal Review Board (IRB) at Slippery Rock University (SRU), the school district's superintendent, and each subsequent interview participant. After obtaining superintendent approval, the researcher sent an email (Appendix E) that included an attached informational letter (Appendix F) to all special education teachers in the district. Since participation was voluntary and not anonymous, each special education teacher signed a consent form (Appendix G) agreeing to participate in the study and to have their interview audio recorded. These forms were collected and retained prior to the interviews. With superintendent and IRB approval and to increase the number of participants, ensure credible findings, and assist with feasibility, each participant received a \$25 Amazon gift card upon completing the interview process within a two-week time period. Prior to the interview, each participant completed an electronic demographic questionnaire via a Google survey, providing their name, professional title, race and gender, highest degree of education completed, years as a special education teacher, and prior teaching experiences. The demographic questionnaire was sent to each participant through email. Once completed, the questionnaire was filed in a password-protected Google Drive account accessible only by the researcher. The Google Drive was located on a password- and fingerprint-protected computer.

After each participants' informed consent and demographic questionnaire were received and reviewed using the templates provided by SRU's IRB, the researcher established an agreed upon interview time and location. Each mutually agreed upon interview location was a quiet, distraction-free space with a closed door, providing adequate privacy for the researcher and participant.

Each participant was provided a brief background PowerPoint presentation on childhood trauma, an overview of the New Haven Trauma-Focused Competencies, and SAMHSA's Trauma-Informed Approach: Key Assumptions and Principals. The researcher reviewed the presentation in the same format with each participant using the presentation notes written in advance by the researcher. This information help build and solidify the researcher's rapport have with each participant (Tracy, 2013). In addition, an interview guide of questions was provided to the participants before the interview began to ensure each participant had adequate processing time to respond to each question. Lastly, a semi-structured introduction protocol script (Appendix K) was used to describe the study and interview norm expectations for each participant. The researcher used a 12question interview guide (Table 3) based on the trauma-focused New Haven Competencies and SAMHSA's (2014) four key assumptions in a trauma-informed approach and the six key principals of a trauma informed approach. The semi-structured interview questions took each participant about one hour to answer.

At the end of each interview, a fidelity checklist (Appendix K) was completed by the researcher. The fidelity checklist was created to ensure that each interview started and ended in the same manner and each participant received the same interview protocol. All semi-structured, narrative, pedagogical interviews were audio-recorded with participant approval, as indicated by a signed release form. Within two calendar days of each interview, the researcher took the transcription, using Otter AI, and developed field notes for coding and analysis. Each participant's audio recording was saved and stored in a password protected Google Drive account accessible only by the researcher. This Google Drive was located on a password- and fingerprint-protected computer.

Data Analysis

The purpose of this study was to decisively and homogeneously sample special education teachers' perceptions of the prevalence of childhood trauma, their role in implementing trauma-informed practices, and their views on the professional development they received to support special education students. Qualitative data were analyzed through a single instrumental approach, as the problem and research in this study provided insight to childhood trauma through the perceptions of special education teachers. Through a single instrument approach an interview guide, as a primary tool, was used in the qualitative study to answer the research questions. (Baxter & Jack, 2008).

The demographic questionnaire was analyzed by assigning each participant a substitute code in place of their name as an identifier. Using these letter codes, each participant's professional title, race and gender, highest degree of education completed,

and years as a special education teacher were summarized. After collecting all participant data, the interview questions were manually processed to ensure that each teacher's complex viewpoints were represented. Each participant's interview transcription received the same substitute code used on the demographic questionnaire. The codes assisted the researcher in analyzing and synthesizing data. Since the researcher engaged in purposeful sampling of interview participants in this qualitative study, in order to meet the goals of the research questions, assigning each participant a code, in place of their name as an identifier, enabled the researcher to protect each participants identity (Tracy, 2013). These codes also supported the synthesis of each special education teachers' viewpoints into broader themes through grouping related responses under each participant's identifier (Tracy, 2013). The transcription of each participant's interview was reviewed and approved by the special education teacher, and was saved and stored within a password protected Google Drive account, on a password- and fingerprint-protected computer, only accessible by the researcher.

Given the subjective nature of qualitative research, due to how semi-structured interviews are transcribed, after the transcription process was complete, the researcher sent the transcription notes to each participant. When transcribing an interview, mistakes in transcription can change the meaning of a phrase, sentence, or idea, leading to information being misinterpreted (Easton et al., 2000: Tracy, 2013). To avoid any misinterpreted information, and to establish credibility and provide each participant the opportunity to discuss or clarify the researcher's interpretation, each participant reviewed and approved their semi-structured interview transcription (Baxter & Jack, 2008; Easton et al., 2000; Starman, 2013). After each participant's transcription was approved, the

transcription was printed and coded. The text was manually marked using pens and highlighters in various colors to assist in threading together the data coding of raw record experiences.

Based on participant responses, primary-cycle coding was used to examine and formulate common themes, beliefs, and teacher practices (Starman, 2013). A code book (Table 4) was created with a short description of each code, followed by a more detailed description (Tracy, 2013). Secondary-cycle codes were derived from the primary-cycle to further analyze and interpret the data, while analytic memos were created in a separate document to arrange connections to literature, key findings, limitations, and conclusions (Tracy, 2013).

Through the coding process, constructed vignettes were identified to support the study's essential argument and claims. The results were also used to theorize what school districts should do to support special education teachers working with students who have experienced childhood trauma. The findings of this qualitative case study will inform potential future research on developing professional development tailored to special education teachers. This study could also be adapted and expanded to explore general education teachers' perceptions and compare them to those of special education teachers. The next chapter will discuss the qualitative case study findings.

Summary

The intersection of trauma and special education poses a complex challenge, with an increasing number of special education students experiencing significant trauma. This qualitative study utilizing a refined interview guide developed from the pilot study

Table 4

Research Questions	Со	ode	Description
1 – What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?	1)	The Impact of Childhood Trauma: Perceptions of Special Education Teachers	Special education teachers recognize the influence of childhood trauma on students' cognitive functioning, behavior, and social skills. Students in special education may encounter various forms of trauma, including challenges related to family dynamics, socioeconomic status, abuse, and emotional distress. It is important to acknowledge that each child's experience and response to trauma is unique, and not all children will respond to trauma in the same manner.
	2)	Current Trauma- Informed Practices	The district has implemented collaborative, trauma- informed supports through in-district and external resources, yet faces challenges in providing consistent, comprehensive training to address the needs of all students with a trauma background.
2 – What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?	3)	The Impact Childhood Trauma has on Special Education Teachers	Special education teachers play a critical role in supporting students with childhood trauma by recognizing and understanding the unique challenges these students face and the practical implications this has on their own well-being.
	4)	Trauma- Informed Practices: Perceptions of Special Education Teachers	Special education teachers work to gather relevant trauma background on students and collaborate with colleagues and external support teams to ensure consistent trauma management. They develop practical strategies to address trauma responses in the classroom; however, they face challenges due to limited time, resources, and the complexities of identifying each student's unique trauma triggers.
3 – What are special education teachers' perceptions of the professional development they have	5)	Professional Development for All Students: Perceptions of Special Education Teachers	There are perceived gaps in district-provided professional development for all teachers to understand trauma through a culturally sensitive lens, while respecting each student's diverse background and their unique perspectives.
received to support children who have experienced trauma and also qualify for special education services?	6)	Professional Development for Special Education Teachers: Past and Future Perspectives	There are identified gaps in the professional development provided to special education teachers to effectively support students with trauma-related challenges. The district should offer professional development opportunities specifically designed for special education teachers.

Codebook for Qualitative Data Analysis

findings and frameworks like the New Haven Trauma-Focused Competencies and SAMHSA's trauma-informed principles (Cook & Newman, 2014; SAMHSA, 2014). Through interviews with special education teachers, special education teachers' perceptions were synthesized regarding the prevalence and impact of trauma in the district, their role in implementing trauma-informed practices with special education students, and their perceptions of the professional development they have received to support children who have experienced trauma and also qualify for special education services. Data analysis involved coding and categorizing themes to build an understanding of special education teachers' needs and challenges in supporting special education students affected by trauma. The findings are intended to inform future research and assist schools in designing effective professional development for special education teachers that focus on childhood trauma and trauma-informed practices to support all special education students within the school environment.

CHAPTER FOUR

Restatement of the Problem

The objective of this qualitative study was to ascertain special education teachers' perceptions of childhood trauma and its impact on the provision of special education services. It aimed to identify these educators' views on their roles in implementing trauma-informed practices within special education services and to investigate their perceptions regarding the professional development they have received to assist children who have experienced childhood trauma and also qualify for special education services. A comprehensive understanding of childhood trauma is essential for effectively delivering a free and appropriate public education to students eligible for special education services. To examine how special education teachers and students who have experienced childhood trauma and qualify for special education services, the following research questions were formulated:

- 1. What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?
- 2. What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?
- 3. What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and also qualify for special education services?

Demographics

Twelve special education teachers currently working in a K-12 public school district in central Pennsylvania participated in this study. The researcher sent an email to

all special education teachers in the district, requesting voluntary participation in the qualitative study. Seven interviews were scheduled following the initial email. A second email was sent to request additional voluntary participation, resulting in five more interviews. This met the researcher's required threshold for semi-structured interviews. The gender and race of the participating special education teachers are detailed in Tables 5 and 6.

Table 5

Enrollment by Gender

Gender	Percentage
Female	92%
Male	8%

Table 6

Enrollment by Race/Ethnicity

Race/Ethnicity	Percentage
American Indian/Alaskan Native	0%
Asian	60%
Black	0%
Hispanic	0%
Native American or Pacific Islander	0%
White	100%

Prior to conducting the semi-structured interviews, the researcher asked the special education teachers to complete the interview participation consent form (Appendix G) and the electronic demographic questionnaire (Appendix H). Once these documents were completed, the researcher scheduled a semi-structured interview with each teacher during an agreed upon time that aligned to the special education teacher's schedule. Each interview was conducted in a location chosen by the special education teacher, ensuring it was a quiet, distraction-free space with a closed door for adequate privacy. The researcher reviewed the interview protocol and provided each participant with necessary background information on childhood trauma (Appendix J). Afterward, the researcher asked the twelve interview guide questions (Table 3).

The first four interview guide questions asked about the special education teacher's knowledge of childhood trauma, the types and complexities of childhood trauma they have seen in their special education classroom, the district's current provisions for addressing the needs of all students, and the trauma-informed practices currently used within the district and community. The second set of four interview questions addressed the special education teacher's role in implementing traumainformed practices, the practices they perceived to be the most helpful, how they stay current with these practices, and any barriers they face in implementation. The final set of four interview questions asked special education teachers about their perceptions of past and current professional development in the district to support all students, the professional development they have received to support special education students with a trauma background, and how the district could improve future professional development for special education teachers working with these students (Table 3).

Each special education teachers' interview lasted 15 to 20 minutes and was recorded and transcribed using Otter AI. After the interview, the researcher completed a fidelity checklist with each participant. Within two calendar days, the researcher shared the interview guide transcription with each teacher for their review and approval. Each participant confirmed receipt and approval of their transcript.

Data Collection

The purpose of this quantitative study was to examine special education teachers' perceptions of the impact of childhood trauma on the provision of special education services, their role in implementing trauma-informed practices through the special education service delivery model, and their views on the professional development they have received to support students with trauma who also qualify for special education services. Twelve special education teachers currently working in a K-12 public school district in central Pennsylvania participated in this study. Each special education teacher was a assigned a letter code to assist the researcher in data analysis. Table 7 provides details on the participants' current teaching positions, academic degrees, years of teaching experience in the district, and total years of teaching experience.

Semi-structured interviews were conducted over a three-week period. Each special education teacher's interview transcript was printed, sorted, and manually grouped by research question. The researcher analyzed the transcripts individually to identify initial themes and patterns that emerged from the quantitative data collection. Pertinent information was highlighted to develop a primary coding list. The researcher then analyzed the interview guide answers a second time to calculate the frequency of each code and identify dominant themes or patterns. The results were reviewed a third time to determine which themes were most important or widespread, leading to the development of a secondary-cycle coding list. Finally, the researcher conducted a comprehensive review of each interview transcript to ensure the findings and principal

Table 7

Participant Codes and Teaching Profiles

Code	Current Special Education Teaching Position	Academic Degree	Number of Years Teaching in the District	Years of Professional Teaching Experience
А	Learning Support Teacher	Master's Degree	17 years	17 years
В	Autistic Support Teacher	Master's Degree	3 months	10 years
С	Alternative Special Education Teacher	Master's Degree	8 years	12 years
D	Autistic Support Teacher	Master's Degree	3 months	6 years
Е	Learning Support Teacher	Master's Degree	10 years	10 years
F	Learning Support Teacher	Master's Degree	8 years	8 years
G	Learning Support Teacher	Master's Degree	13 years	13 years
Н	Intensive Learning Support Teacher	Master's Degree	3 years	18 years
Ι	Autistic Support Teacher	Master's Degree	15 years	20 years
J	Intensive Learning Support Teacher	Master's Degree	3 years	9 years
K	Autistic Support Teacher	Master's Degree	18 years	24 years
L	Autistic Support Teacher	Master's Degree	10 years	14 years

themes were aligned with the data. A code book (Table 4) was created in order to complete the data analysis process. Developing a code book helped the researcher cultivate coherence and structure, draw connections within the data, and support thematic analysis (Tracy, 2013). Analytic memos were also developed to organize connections to literature, key findings, implications, and conclusions. Based on the responses to some interview questions, constructed vignettes were identified to support the study's essential argument and claims.

Findings

The qualitative data collected from the semi-structured interviews were analyzed from the perspective of special education teachers. This analysis examined their knowledge of childhood trauma, how they implement trauma-informed practices within their classrooms, and their perceptions of the professional development they have received to support special education students with a history of childhood trauma. The researcher systematically organized the findings according to the six interview guide themes presented in Table 8.

Research Question 1 Findings

The relationship between childhood trauma and special education represents a significant and multifaceted issue within the field of education. The first research question examined special education educators' perceptions regarding the effects of childhood trauma on students in special education. Childhood trauma is "an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life-threatening and has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being" (SAMHSA, 2014, p. 7). Exposure to trauma in childhood can be a fundamental factor contributing to learning disabilities, health issues, and social challenges, which may result in behavioral difficulties in the educational environment (Tuchinda, 2020). The analysis of responses

Table 8

Research Questions, Interview Guide Questions, and Interview Guide Headings

Research Question	Interview Guide Question	Interview Guide Theme
	1) Briefly explain what you know about childhood trauma.	
1 – What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?	2) Describe the types of trauma students in your special education classroom have been exposed to. How do you see the complexities of trauma impacting your students' short-term and long-term?	Perceptions of Special
	3) What is currently happening in your school to promote academic, behavioral, and social-emotional trauma- informed practices for special education students?	Education Teachers 2) Current
	4) What are your perceptions of how trauma-informed practices are being implemented throughout the school district and greater community to support special education students?	Trauma- Informed Practices
2 – what are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?	5) As a special education teacher, you one member of a large organization. What do you perceive as your role in realizing, recognizing, responding, and resisting re- traumatization when working with special education students who have been exposed to childhood trauma?	3) The Impact Childhood Trauma has on Special Education
	6) How do you critically asses and apply up-to-date trauma- informed practices and interventions in your classroom?	Teachers 4) Trauma
	7) What trauma-informed practices have you found to be the most helpful when working with special education students in your classroom?	Informed Practices: Perceptions of Special
	8) In your role, describe any barriers you face when implementing trauma-informed practices.	Education Teachers
3 – What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and also qualify for special education services?	9) How does the district incorporate professional development around policies and practices that are responsive to the cultural needs of all students?	5) Professional Development for All Students: Perceptions of
	10) As a special education teacher, how are you impacted by your special education students' trauma experiences?	Special Education Teachers
	11) What professional development have you received to support your work with students with childhood trauma who qualify for special education services?	6) Professional Development
	12) How could the district enhance its professional development by incorporating trauma-informed practices to support special education students?	for Special Education Teachers: Past and Future Perspectives

from the semi-structured interview guide related to this research question revealed two themes identified by the special education teachers.

The impact of childhood trauma: Perceptions of special education teachers. Children bring their trauma experiences into the school setting and research suggests that adversity, trauma, and stress significantly affect a child's social, emotional, and cognitive development (Fyke, 2018; SAMHSA, 2014). It is imperative for all teachers to understand how to recognize, address, and respond to childhood trauma. The special education teachers observed that childhood trauma impacts a student's functioning, behavior, and social skills. They explained that special education students experience many types of trauma, including family dynamics, socioeconomic factors, abuse, and emotional impacts. Participant C explained,

I have a student right now who is a special education student who has neither parent. Mom died of drug overdose; dad just died of cancer. Grandmother didn't want her. The student found out that the grandmother was taking her social security money. Now she is homeless and living in another district coming to our district.

Sometimes, a student's experience at home can make it difficult for them to want to come to school. Teachers need to have an understanding of what a student is going through to determine how to best support them.

Special education teachers shared how trauma affects children across all ages and genders, influencing a wide range of physical, behavioral, and neurobiological functions. Trauma also affects a student's physical health, sleep patterns, and overall well-being (Kerker et al., 2015). These teachers understand how trauma exposure can make it challenging for children to pay attention in school, think clearly, follow directions, organize priorities, and learn during stressful situations ("Education Brief", n.d.; Nakazawa, 2015; Purser, 2022). Participant B voiced,

I have a student that his parents are separated up until, you know, recently. He resided with his mom and then was taken from mom's custody full-time. Now lives with his dad. When he goes back and forth between the parents, I know that that's very confusing to him. I can see when he comes in on a Monday, after being with the parent that he doesn't see as often, he's a little more disorganized. He's not as put together with his hair slicked back. He has different clothes on, or maybe the same clothes that I saw him in wearing Friday. He's often very hungry, so I don't know what the communication is at home of if he finished eating before he came, or anything like that.

Participant B's observations illustrate how a student's struggles with stability and basic needs due to family dynamics pose challenges in the school environment.

All the special education teachers interviewed emphasized that not every child is experiences trauma in the same way, leading to a wide range of reactions and behaviors. Some children may exhibit increased behavioral issues, while others might mask their experiences. A child's trauma may stem from one or many personal experiences or from witnessing a family member's hardship, adding layers of complexity to how they process and react to their surroundings at school (Pickens & Tschopp, 2017; SAMHSA, 2014).

A significant proportion of special education teachers emphasized the necessity of understanding a child's trauma history to optimize their support within the special education setting. Participant G proclaimed, I don't always get to know, I think, all of the information, but probably not enough to help them. I think sometimes it would be helpful to get a little bit more information. You might know why these behaviors are coming up the way they are...I think too, with me working with the younger kiddos, they're still exploring how to emotionally respond to things and when they don't even understand what's happening in their own world. I think asking them to respond, or even come to school and give us their best, is just really hard for them.

Many special education teachers acknowledged that a child's brain structure changes and certain events or situations in a classroom might trigger a fight-or-flight response, impacting their ability to regulate behavior and communicate in a socially appropriate matter (Hudspeth, 2015). Understanding a student's trauma history is essential for tailoring effective support in special education. This insight is echoed by Participant G, who highlighted the challenges in supporting students without comprehensive background information and noted the difficulty students face in navigating their emotions and behaviors.

The autistic support teachers interviewed, highlighted that trauma can manifest differently in children with educational disabilities, such as intellectual disabilities or autism, due to variations in their cognitive and communication capabilities. A child's level of social communication and motivation may influence their response to adverse experiences, leading to different reactions based on their individual motivators. The polyvagal perspective explains, through neuroception, how children may unconsciously adjust their behavior in response to the regulation of their nervous system and stress responses (Delahooke, 2019; Purser, 2022).

The findings from Felitti and Anda's study on the prevalence of adverse childhood experiences (ACEs) highlight the profound impact that traumatic events can have on children throughout their lives (Felitti et al., 1998). Short-term trauma can manifest as challenges with self-esteem, behavioral dysregulation, depression, and difficulties in academic performance (Brunzell et al.,2015; Hudspeth, 2015; Winder, 2015). Students may struggle to build trust with adults in school, feel that their voices are not heard, and have trouble expressing emotions. For instance, a special education student's childhood trauma may influence their immediate decision-making, social interactions, and educational development, and it may also have long-term effects as the student transitions into adulthood (Burke Harris, 2018; Potter-Efron, 2012; Romero et al., 2018).

Special education teachers reported that when special education students have been exposed to childhood trauma, they may immediately experience behavioral dysregulation, have difficulty maintaining academic performance, and struggle to develop trusting relationships with teachers or other authority figures in a school environment (Anderson-Ketchmark & Alvarez, 2010; Otten & Tuttle, 2011; Stormont et al., 2008; Woods-Jaeger et al., 2018). Trauma impacts their grades, attention, and coping skills, often leaving them distracted and un able to make satisfactory academic progress (Fantuzzo et al., 2013; NCSEA, 2019). Referring to a student's guardian, Participant C explained,

that's why a lot of them fail classes. That's why a lot of them are behind credit wise. Things get too hard, and then they just kind of give up emotionally. They give up physically. They don't come to school. They fail things because they're just trying to get done with it, and they don't want to worry about anything else. These insights highlight how trauma experiences directly affect special education students, influencing both their attendance and academic performance.

One special education teacher reported an incident in which a student was physically attacked by another student. The affected student had not previously encountered trauma or had external support systems in place. The teacher observed immediate effects of this event on the student's well-being. Although the long-term implications of this experience are uncertain, the teacher believes it may influence the student's academic success moving forward.

Long-term effects of trauma may not fully emerge until later in life, affecting an individual's ability to function in society and make sound life choices (Burke Harris, 2018; Potter-Efron, 2012; Romero et al., 2018). Adolescents and adults who experienced trauma in childhood may face academic setbacks, substance abuse issues, and a general lack of resources or support, which can compound feelings of failure and limit their social and professional opportunities. The full impact of trauma may remain uncertain, as its effects can continue to shape an individual's life in unpredictable ways ("Adverse Childhood Experiences," 2014; Duplechain et al., 2008).

Starting as early as birth, the impact of trauma manifests through various physical and emotional experiences, making it a pervasive factor that shapes developmental outcomes in significant ways for special education students. Research shows that childhood trauma has significant neurobiological and psychological effects on children's functioning. Special education teachers emphasized the importance of understanding these trauma-related dynamics to better support their students' educational outcomes. **Current trauma-informed practices.** For children and adolescents exposed to trauma and stress, support from multiple systems is critical, as schools alone cannot address all the issues faced by children and their families. Therefore, collaboration with various professionals in the school setting is essential (Bateman & Cline, 2019; Bateman & Yell, 2019; Center on PBIS, 2022; Goh & Bambara, 2012; Stormont et al., 2008).

All the special education teachers interviewed expressed how trauma-informed practices are integrated in their buildings. They shared that the district's approach to trauma-informed support involves collaboration across various teams and support systems. In-district support includes collaboration and consultation with various school professionals such as school counselors, school psychologists, the school-wide behavior coach, and school social workers. All buildings hold monthly meetings and frequent discussions among teaching partners, administrators, and behavior teams. These teams focus on recognizing trauma in students and coordinating supports and services. During these meetings, teams discuss how to support students in the classroom from academic, social-emotional, and behavioral perspectives. Often, these conversations lead to additional meetings involving the student's family or community partners to determine appropriate supports and accommodations for the individual.

Many special education teachers acknowledge the district's collaborative initiatives aimed at assisting students with a history of trauma; however, they have observed that some educators are not consistently applying the provided support measures. While some teachers may advocate for flexible classroom environments by incorporating various seating options or utilizing softer lighting to cultivate a more trauma-sensitive atmosphere, this approach is not universally adopted by all teachers. Participant F explained,

I think teachers expect students just to be able to deal with things, and I have pushback from teachers sometimes about letting kids take breaks when they need a minute, or maybe they don't agree with the coping strategy. I think there is a stigma or maybe a lack of understanding that the kids just can't turn this off. They can't turn the trauma or the PTSD off during the school day, and it's something that needs to be supported.

The special education teachers shared that they believe some teachers may struggle to understand the depth of a student's trauma and its impact on classroom success. This highlights a deeper need for consistent application and understanding across all educators to better support student well-being and success.

In the district, programmatic supports include Responsive Classroom®, buildinglevel Positive Behavior Intervention Supports (PBIS), community meetings at the K-6 elementary and intermediate buildings, and district professionals providing counseling and social skill lessons to classrooms and small groups of students. Especially at the elementary level, some curricular components support students with a traumabackground, but these practices are not widely implanted in all curricular areas. They should be used across all K-12 buildings to foster a more inclusive and understanding learning environment. In all district buildings, certain students who may benefit from counseling services have the opportunity to access support from a local behavioral health organization (Hudspeth, 2015; Losen et al., 2013). However, the organization has encountered challenges in recruiting sufficient therapists to serve many of these students. Effective interventions for supporting students with multiple adverse childhood experiences (ACEs) encompass trauma-informed practices, social-emotional learning programs, individualized education programs (IEPs) focused on mental health support, and the establishment of a supportive school environment (Brunzell et al., 2015; Cooley, 2018; SAMHSA, 2014). The district provides supportive learning environments, including regular education transition classrooms, located in select buildings across the district. These classrooms are designed with a focus on trauma-informed care and brain science principles. They offer specialized educational and counseling services for students to address behavioral and emotional challenges that may impact academic performance. Additionally, the district has three alternative regular education classrooms in the middle and high school. These classrooms cater to students who thrive in a small-group instructional setting tailored to their individual needs. Both supportive learning environments aim to enhance the academic, behavioral, and social-emotional development of all students, regardless of their eligibility for special education services.

When a student is not attending school, they are present within their local neighborhood community. This community environment plays a crucial role in their overall well-being. Research by Hall et al. (2012) indicates that between 21% and 67% of behavioral and physical health issues prompting individuals to seek social services within the community can be linked to adverse childhood experiences (ACEs).

Special education teachers shared that there is a growing understanding of the impact of trauma, not only within the school district but the greater community, highlighting a shift toward broader awareness and support for trauma-informed practices. However, special education teachers have realized they are not aware of many of the supports available to families in the community or they hear from families that mental health resources are difficult to access due to long waitlists. These barriers prevent parents from getting the help they need for their child.

One special education teacher reported building-level efforts to support parents through after-school training sessions. Theses parent trainings, offered a few times throughout the school year in collaboration with a local mental health community organization, cover various parenting techniques and strategies. While these trainings provide valuable support for families, they are not offered in every building. The lack of timely or consistent community resources accentuates the need for increased awareness and collaboration with community services to ensure comprehensive support for students impacted by childhood trauma within and beyond the school environment. Participant H relayed what they know about mental health services:

I'm not too positive about it, because I think the waitlist is ridiculous. From what I understand, I don't think we have a very good community [of resources], from kids and from adults alike. I'm hearing long wait list, and kids can't get the services that they need. We have two school counselors, but that's not even enough some days.

Creating a system-wide approach to trauma-informed practices involving school and community partners—such as mental health professionals, child advocacy and welfare organizations, law enforcement, and juvenile justice workers—will consistently strengthen support for children impacted by trauma who also qualify for special education services, as emphasized by Participant H (Bateman & Cline, 2019; Bateman & Yell, 2019; Center on PBIS, 2022; Goldenthal et al., 2024; Pernebo & Almqvist, 2016; Stormont et al., 2008).

Despite the supports and resources available for students in the district and in the greater community, the district's special education teachers acknowledged that traumainformed practices are still in the early implementation stages and often lack consistency and depth. Participant A specified,

I feel that the district and the world knows that, that it's [childhood trauma] is a problem, that there is a lot of need for trauma informed practices. But I also feel that mental health is definitely something that, for some reason, we don't put a lot of effort into as much as I would like to see in the district. I know we want to, but I think it's also lack of knowing how to give the individuals the support they need. I guess my perception is I know the goal is we want to be there to support the trauma and the students struggling, but I also think sometimes we don't know how to do it as a district.

While some teachers are aware of childhood trauma and attempt to incorporate traumainformed practices into the curriculum, research-based supports are limited. Teachers and administrators are working to foster a supportive community and involve parents, but gaps exist in addressing mental health needs and providing effective, trauma-informed practices to meet the evolving needs of all students, regardless of their eligibility for special education services. Participant A captured this sentiment: "The district acknowledges the issue but there is [a] gap in the practical knowledge and comprehensive strategies needed to support both students and staff effectively." Overall, the district has implemented some collaborative trauma-informed supports, but challenges remain in delivering consistent and trauma-informed practices in the school setting and greater community.

Research Question 2 Findings

All educators need to understand instructional strategies that effectively support children with trauma histories (NCSEA, 2019; NCTSN, 2012; Romero et al., 2018; SAMHSA, 2014; Thomas et al., 2019). In the U.S., nearly half of all school-aged children have been affected by trauma, with a similar proportion exposed to at least one adverse childhood experience (ACE). Children carry these experiences into school, and research shows that trauma, adversity, and stress significantly impact a child's social, emotional, and cognitive development (Fyke, 2018; SAMHSA, 2014). Research question two identifies a special education teachers' role in implementing trauma-informed practices through the services they provide to students. The analysis of responses from the semi-structured interview questions related to this research question revealed two key themes identified by the teachers.

The impact childhood trauma has on special education teachers. The

Individuals with Disabilities Education Act (IDEA) serves as an important framework for supporting students in developing the skills necessary to address and overcome childhood trauma. Through the implementation of an IEP, special education teachers play a vital role in supporting students affected by childhood trauma. Researchers report that children who have experienced abuse and neglect are four times more likely to receive special education services (Beckman, 2017; Blodgett & Lanigan, 2018; Chudzik et al., 2024). Special education teachers have specific responsibilities when working with special education students who have experienced childhood trauma. Many teachers shared that they embody the roles of realizing, recognizing, responding, and resisting retraumatization, as outlined in SAMHSA's Trauma-Informed Approach: Key Assumptions and Principals (2014) framework.

Special education teachers need to understand and recognize trauma, respect the special education student's diverse background, and avoid re-traumatization (SAMHSA, 2014). Through answering the interview guide questions, all special education teachers perceived their role in supporting students with trauma as that of an advocate. They work closely with school teams to understand and address each student's unique experiences. In their classrooms, they strive to build trust, encourage resilience, and foster a safe environment where their students feel accepted and understood (Cook & Newman, 2014; SAMHSA, 2014). Over half of the teachers discussed the importance of collaborating with all team members to develop plans that support students.

Effective communication with students is essential. Special education teachers reported their efforts to understand each student's history, build strong relationships, and engage parents in the support process. They also articulated that their responsibilities include observing students' atypical behaviors, identifying trauma responses—such as startle reactions and school absences—and noting instances of student withdrawal from assignments or activities (Anderson-Ketchmark & Alvarez, 2010; Crone et al., 2010; Gamache Martin et al., 2010; Lambert et al., 2022; Otten & Tuttle, 2011). Participant D shared that they

assume [special education students] all have trauma, and try to work with them. Be understanding. It's hard. I'm not yelling at students or causing a chaotic environment, trying to have a calm, peaceful space and then offering a sensory corner if they need to calm down. I have other things that can help them, like, reregulate themselves. I feel like sometimes that's the best thing when you can tell they're very dysregulated.

As part of their job requirements, special education teachers are tasked with delivering individualized supports informed by these behavioral observations. They tailor accommodations and encourage students to seek help when needed. Through collaboration with school counselors, school psychologists, school social workers, and other staff, they ensure that trauma-related practices are consistently applied and adapted based on feedback. To effectively address the needs of special education students, the U.S. Department of Education (2021) emphasizes the inclusion of a variety of related services or mental health services in a child's IEP. Special education teachers must routinely share information with the other school team members to provide integrated support and adjust students' IEPs as they evolve (Bateman & Cline, 2019; Rossen, 2020; Rossen & Bateman, 2020). Sharing information and strategies with other educators, counselors, social workers, and support staff creates a unified support system for each student (Slade & Wissow, 2007).

Lastly, special education teachers emphasized their commitment to fostering a safe and supportive learning environment for all students, regardless of their trauma experiences. They prioritize students' basic needs—such as food, clothing, and sleep before academic instruction, recognizing the critical importance of a stable foundation for learning. The teachers shared that they teach self-advocacy and self-awareness skills, encouraging students to approach trusted adults when they feel uncomfortable. While special education students do not want to miss out on instruction or events in a classroom, teachers sometimes have to intervene to support students when they need time to take a break, decompress, eat a snack, or take a short rest. Providing these strategies helps students recognize and express their needs, fostering independence and self-confidence. Teaching these skills aids students during periods of behavioral dysregulation (Williams & Scherrer, 2017). By actively listening to students and striving to connect them with necessary support, the special education teachers demonstrated a commitment to trauma-informed practices, even in the absence of formal guidance from the district.

The New Haven Trauma-Focused Competencies emphasize the need for practitioners to engage in self-reflection regarding intense emotions and content, uphold an ethical responsibility for self-care, and remain aware of their own history, values, and vulnerabilities when working with individuals who have experienced trauma (Cook & Newman, 2014). Through their responses to the interview guide question about how they are impacted by their students' trauma experiences, special education teachers recognize the significance of assisting students impacted by trauma and the practical implications this has on their own well-being.

Special education teachers reported experiencing significant emotional and practical challenges when supporting special education student affected by childhood trauma. Participant L explained,

I think it is hard, especially in my room with all the sorts of disabilities and the lower IQs that I have. They are still capable of a lot of things. I think that has impacted me my first year in this role. You know, you want to coddle them, then you know it's not helping them be successful. There's a fine line. But I think they can do things and be productive members of society with help.

Several other special education teachers stated that balancing high expectations with compassion can be difficult when they have a student who has experienced childhood trauma. While they understand they should not make tasks easier for their students, they need to teach and encourage resiliency and consistency. This balancing act often extends to managing their own emotional responses. Teachers conveyed that they struggle to separate students' trauma experiences from their personal lives, finding it hard to "turn off" their empathy after hearing about students' childhood trauma. A few teachers described how hearing about a student's trauma experience made it difficult to compartmentalize and remain focused on providing instruction to the rest of the students in the classroom.

Other special education teachers explained the importance of understanding a student's background and any prior trauma experiences they might have encountered. It is difficult for teachers to know when and how to react to a situation involving one of their students if they cannot determine whether the problem stems from a traumatic event or another circumstance (Alisic, 2012). All the special education teachers expressed a strong desire to help students, but they are not always provided with the necessary information and are often excluded from collaborative efforts aimed at ensuring student success. They understand the imperative to respect a student's privacy and dignity, as well as that of their families, but they felt that they are not consistently informed with adequate information.

Special education teachers also explained the challenge of knowing when to give a student space and when to encourage them to persevere—a decision that requires sensitivity and understanding of each student's unique needs. A teacher's dedication to creating a stable and nurturing environment often leads to feelings of responsibility and constant availability, even extending to interactions with parents outside of school hours. Furthermore, special education teachers are sometimes confronted by their own triggers when handling situations that mirror personal experiences, making compartmentalization essential, yet challenging. Participant K shared,

I would say, since I've been at the district, [being confronted by my own triggers] was a really big eye opener for me [at the grades] four [through] six, as well as watching my own daughters and the trauma they've experienced in the last three years. It's extremely difficult, and I think that that is one of the barriers that we [special education teachers], will continue to face. How do you step up to the plate to support your learners when maybe it's also a trigger for yourself?

With time constraints and frequent interruptions to provide behavioral support, special education teachers confirm it is difficult to meet the needs of all special education students, while also managing their own emotional and professional boundaries.

A few special education teachers expressed a desire to relate to their students with childhood trauma but find it difficult due to their lack of similar childhood experiences. They struggle to understand exactly what the student has gone through or how to help them work through situations, especially when personal experience is lacking. Additionally, special education teachers find it challenging to have limited authority in effecting change within the school environment, as they aspire to have a broader impact. In summary, children who have experienced abuse and neglect are significantly more likely to require special education services, placing special education teachers in a vital advocacy role to recognize trauma, respect diverse backgrounds, and prevent re-traumatization (Cook & Newman, 2014). Special education teachers prioritize creating safe and trusting classroom environments, observing students for atypical behaviors and trauma responses, and adapting individualized support based on these observations (SAMHSA, 2014). They also foster open communication with students, build relationships with families, and collaborate with school staff to ensure trauma-informed practices and accommodations are consistently applied and updated to address each student's needs (American Psychological Association, 2021; Anderson et al., 2015; Pickens & Tschopp, 2017).

Trauma-informed practices: Perceptions of special education teachers. Students who have experienced many adversities may require additional support within the school setting (Dykes, 2008; "Education Brief", n.d.; Losen et al., 2013; Shippen et al., 2009). Little is known about special education teachers' role in implementing traumainformed practices through special education services; however, research has identified the impact ACEs have on the later identification of students qualifying for special education services (Dykes, 2008; "Education Brief", n.d.; Felitti, 1998; Losen et al., 2013; Rogers, 2003; Shippen et al, 2009; Tuchinda, 2020).

When special education teachers were questioned about their implementation of current trauma-informed practices and interventions in the classroom, as well as the strategies they find most effective, many expressed uncertainties about whether the approaches they are utilizing are aligned with research or best practices. The teachers recognize the importance of using trauma-informed best-practices and explained that they have utilized a variety of such practices in their classrooms. One practice all special education teachers mentioned was creating a supportive, safe, and predictable environment for their students. When children have experienced a traumatic event, they are often on guard and cannot trust anyone but themselves for safety (Delahooke, 2019; Romero et al., 2018; Purser, 2022). Participant E discussed her approach:

Sometimes I provide them with a space where they are able to take a break. For some students, that honestly might be like even under a table, where it's a little quieter. I think even sometimes loud voices that can be triggering for students. So sometimes it's giving them, like a heads up, like, 'Hey, we're going to be having a fire drill.' So that way they are not in high alert in those type of situations

Participant L confirmed,

I think just giving them a place to feel safe, I think letting them know that here we're safe. We can, you know, use safe words. We have safe actions. We're here to support them, providing them even as much as food and a coat and those little things that they might not even have in the home, providing them a calm environment that's predictable for them so they know what they're coming into each day. Kind of giving them that soft landing.

One consistent practice highlighted by both of these participants was fostering a predictable and calm space for students, which is essential for helping children who have experienced trauma feel secure.

The special education teachers also shared that they focus on accepting students for who they are and acknowledging their unique experiences, while providing them with unconditional support and care. It was evident from their responses that they value building strong relationships with students. The teachers also identified the significance of developing and maintaining firm yet compassionate expectations, offering students time and space to decompress, and guiding them through potentially unsettling changes, such as schedule shifts or loud noises.

Special education teachers expanded upon how creating an empathetic classroom environment—with structured support and accessible resources—helps cultivate a nurturing environment for students affected by trauma. A majority of these teachers discussed how their special education classrooms are designed to be calming spaces equipped with tools, like sensory corners and various self-regulation strategies, to help students manage stress. Meeting students' basic needs is prioritized, with regular breaks to reset their nervous systems through activities such as getting a drink, taking a walk, or checking in with a school counselor. Teachers also draw on external resources, including school and community mental health supports. One teacher mentioned attending Ukeru Training when working in another school district. Ukeru is a cutting-edge program based on the core philosophy of Comfort vs. Control® and trauma-informed care.

On the other hand, several special education teachers mentioned the QBS Safety-Care training they have attended in the district. Safety-Care offers a comprehensive approach to managing behavioral challenges that prioritizes respect, safety, and positive outcomes. Safety-Care is designed for individuals with various disabilities and those affected by psychological or sexual trauma, ensuring a safe, adaptable framework for support. Despite these efforts, special education teachers face considerable challenges in delivering trauma-informed practices. Constraints such as limited time and resources, and the complex nature of each student's unique trauma triggers, complicate their work. Participant A shared,

Time. There's just never enough time. Sometimes I feel like the students do just need more time wherever they may feel safe. You know, I've had times where they are in my calming corner and they're just having a rough day, but I may have to leave to go to another group or to go get another group. I think that's a barrier for sure. I think when they're having maybe an outburst or behavior, knowing how to calm them down and what we're allowed to do versus not allowed to do can get tricky, like sometimes a kid just needs a hug, but when they're in that moment, you know our goal is to stay away. So just trying to balance all of that, I think it's a barrier.

These barriers are intensified by the inherent limitations of the school environment. Navigating the delicate balance between professional boundaries and compassionate support, special education teachers recognize when a student may benefit from physical reassurance.

The uncertainty surrounding potential trauma triggers can complicate interactions, especially for special education teachers who may not share similar trauma experiences. Staffing limitations and the need to balance emotional support with academic instruction further add to the complexity, as trauma responses can disrupt classroom dynamics.

Although special education teachers prioritize emotional well-being, they are mindful of the impact on instructional time. Communication challenges also arise due to limited opportunities for teachers to discuss trauma-sensitive strategies with colleagues, which can affect the consistency of trauma-informed care across teams.

Special education teachers are also tasked with understanding how trauma interacts with other disabilities, such as autism or intellectual disabilities, and providing individualized support accordingly. The district's lack of comprehensive traumainformed professional development has left special education teachers feeling uncertain. As a result, some teachers have actively researched evidence-based trauma-informed practices to effectively support their students and avoid re-traumatization. Participant K illuminated,

My belief from a special education professional role [is that] I need to be able to respond [to trauma] in the best way possible, and without the knowledge to move forward, I can't respond. Then, of course, the re-traumatization, I think, is one of the hard pieces, too. Because of the children's disability, it kind of blocks a little bit of our ability to really know, well, actually, really to know all four of those components [realize, recognize, respond, and resist re-traumatization], and truly learn about our learners to prevent the re-traumatization. But I think those are the pieces that we might not always realize we are doing, and it's not, of course, intentional by any stretch to believe that some special education teachers don't feel that they have the knowledge to be able to do these things right, implement these things, or analyze it from the perspective that we need to.

Overall, the lack of comprehensive trauma-informed professional development leaves special education teachers uncertain and reliant on independent research to avoid retraumatization and provide effective trauma-informed practices to support their students. As trauma-informed practices and strategies continue to evolve, special education teachers must adapt to support each student's dignity and unique needs. Special education teachers unanimously confirmed that they encounter difficulties due to limited professional development on trauma-informed practices. This impacts their capacity to effectively support students who have experienced childhood trauma and require special education services. Additional training and professional development are essential to address the diverse needs of the varied student populations they serve (Hunter et al., 2021).

Research Question 3 Findings

Research has highlighted the necessity for regular education teachers to recognize the effects of childhood trauma on students within their classrooms (Alisic et al., 2012; National Council of State Education Associations [NCSEA], 2019). However, the exploration of methods to effectively enhance special education teachers' understanding of childhood trauma remains insufficiently addressed (Chudzik et al., 2024; Goldenthal et al., 2024; Gill et al., 2015; Hunter et al., 2015; Miller & Santos, 2020). Consequently, despite possessing some knowledge of childhood trauma, special education teachers exhibit a fragmented understanding of how to effectively implement trauma-informed practices (Kumar, 2020; Markelz & Bateman, 2022; Tuchinda, 2020; Winder, 2015).

It is essential for all educators to know how to identify, address, and respond to childhood trauma. Research question three addresses special education teachers' perceptions of the professional development they have received to support children who have experienced childhood trauma and also qualify for special education services. It also explores how future professional development should be implemented to support them in their roles as special education teachers. The analysis of responses from the semistructured interview guide questions related to this research question disclosed the following two themes identified by special education teachers.

Professional development for all students: Perceptions of special education teachers. Teachers face the challenge of balancing their educational mission with the need to support students affected by trauma (Alisic, 2012). Through a survey of over 700 teachers, it was found that 89% had worked with one or more children who had been exposed to childhood trauma, yet only 9% indicated they had received relevant trauma training (Alisic, 2012).

A trauma-informed approach in the classroom enables teachers to identify and understand triggers that may elicit stress responses in students (NCSEA, 2019; Pickens & Tschopp, 2017). Recognizing trauma allows teachers to provide better support and create a safer classroom environment (NCSEA, 2019; SAMHSA, 2014). Additionally, understanding the cultural context of a student's traumatic experience is crucial in selecting effective interventions (Rossen & Cowen, 2013; Thomas et al., 2019). Participant B emphasized,

having a [trauma-informed approach] can help with staff interactions with students. I think sometimes you could hear something [about a student and their trauma experience], and it could change the whole way that you just interact with the student" (Participant B, personal communication, October 11, 2024).

When students feel safe and connected at school, they are more prepared to learn. Schools can reinforce this by implementing trauma-informed practices and interventions that offer a supportive framework for students. Recently, the 2019 amendment to the Public School Code of 1949 mandated the use of school-wide trauma-informed approaches, requiring public school professional education plans to include at least one hour of training on trauma-informed practices (P.L. 146, No 18 Cl. 24). The special education teachers interviewed reported a significant lapse in district-wide trauma-focused professional development. Many explained that there has not been any comprehensive training in trauma-informed practices for at least six years. These same teachers reported perceived gaps in the district-provided professional development aimed at helping all teachers understand trauma through a culturally sensitive lens.

The district has implemented some professional development for teachers, including Cultural Diversity training, Responsive Classroom Approach® methods, and de-escalation strategies through QBS Safety-Care Training®. Two years ago, all teachers and support staff received de-escalation training to assist them in managing interactions with students who may exhibit elevated behavioral concerns, but nothing further has been addressed. Additional trainings have touched on topics like homelessness and cultural awareness, yet most of the professional development tailored to meet the cultural needs of all students has been sporadic. Recently, professional development has solely focused on developing a strong classroom culture, enhancing building-wide culture and climate, and improving academic instruction.

Discussing childhood trauma and any explicit trauma-informed practices has been limited. Although over half of the special education teachers participated in the traumainformed professional development sessions in 2019, the district has not provided any further sessions. The special education teachers explained that there seems to be a lack of understanding in how to address trauma and mental health effectively, especially as these issues vary across students and their individual cultural backgrounds. Participant F elaborated,

But I think it really comes down to most teachers don't understand the brain, a trauma brain, and how to teach and nurture that trauma brain. I think it's also hard, because you want to, you don't want to coddle the kids. You want to teach them the skills. It's kind of finding that balance between supporting them without teaching them learned helplessness. You want to provide supports, while also teaching them how to develop their own positive coping strategies.

Many teachers struggle to understand how to effectively teach and support students with childhood trauma. They find it challenging to balance providing necessary support while encouraging the development of positive coping strategies without fostering learned helplessness.

In addition to providing professional development sessions that address policies and practices responsive to the cultural needs of all students, special education teachers expressed the need for ongoing, updated professional development that goes beyond onetime sessions. While polices and behavioral expectations are shared at the building level, all teachers need clear guidance on the purpose and implementation of trauma-informed practices to ensure their practical application in daily interactions with students (Fyke, 2018; Rossen & Bateman, 2020).

For example, behavioral de-escalation strategies have been offered, showing an initial step in trauma-informed practices for behavior management. Nevertheless, there is a need to expand these strategies within a trauma-informed context to support all teachers

in addressing a wide-range of behaviors in their classrooms. Special education teachers also emphasized the importance of recognizing that new staff join each year. There is a need for recurring and updated professional development to ensure all staff, including recent hires, have a shared foundation in culturally responsive and trauma-informed practices.

In PDE's 2021 published research agenda, it was acknowledged that Pennsylvania teachers need to recognize and respond to childhood trauma, but one in two educators did not feel prepared to recognize signs of childhood trauma within their classrooms. It was also reported that three out of four educators believed they needed better preparation to implement trauma-informed practices in their teaching (McDowell Institute, 2022). Teachers are tasked with the dual responsibility of fulfilling their educational duties while also supporting students who have experienced trauma. This responsibility is further complicated by the necessity to identify and understand trauma triggers within a culturally sensitive context. Trauma-informed practices enable educators to recognize stress responses, foster safer learning environments, and implement interventions that are respectful of students' cultural backgrounds (Anderson et al., 2015; Knoster et al., 2021).

Professional development for special education teachers: Past and future perspectives. Special education teachers play a vital role in identifying signs of trauma, abuse, and neglect in children during the school day. Research is limited on special education teachers' perceptions of the professional development they have received for responding to children who have experienced trauma and qualify for special education services (Chudzik et al., Goldenthal et al., 2024; Hunter et al., Miller & Santos, 2020). However, recent developments in legislation and trauma research highlight the need for enhanced support and training to equip these educators to effectively address childhood trauma (Tuchinda, 2020; Winder, 2015). An integrated approach to professional development on trauma, combining comprehensive academic, social-emotional, and behavioral support for special education students, necessitates a revision of current prevention and intervention strategies within the district. Understanding special education teachers' perspectives on the prevalence and impact of childhood trauma is essential for this transition. These teachers require a clear understanding of their roles in implementing trauma-informed practices and access to sufficient professional development to support students affected by trauma who qualify for special education services (Hunter et al., 2021).

Feedback from special education teachers indicates significant gaps in the district's current professional development training to incorporate trauma-informed practices. They recommend developing professional development opportunities specifically designed for special education teachers, as the existing training on trauma-informed practices has been limited.

Special educations teachers have expressed that professional development should be purposeful and practical. Trauma-informed training must be relevant and tailored to the specific roles of special education teachers. Comprehensive trauma education should cover the effects of trauma on brain functioning and student behavior. By examining student behavior through a trauma-informed lens, special education teachers can gain insights into the underlying causes of dysregulation to foster empathy (Knotek, 2003; Tuchina, 2020). They believe that providing toolkits and resources from both the district and the community could enhance their ability to support students affected by childhood trauma.

Additionally, there is consensus that all educators would benefit from training focused on effective coping strategies to promote emotional resilience in students experiencing trauma responses. Participant I described the need for the district to be

very judicious by what that professional development looks like, and being very specific and systematic in terms of what that looks like. We have a lot of people who come in to talk about things, and if that doesn't align with the larger sort of global organization of what our district is moving towards ... it doesn't quite fix the problem, but simply, again, is another two and a half hours of telling us it's a problem. You will get a lot more resistance with people's ability to adopt techniques and terminology if they feel like we've had the same conversation so many times ... I would just be specific about it and what that looks like in a very purposeful way.

Professional development should also address behavior management for students impacted by trauma, particularly those with disabilities that have limited cognitive and communication skills (Gamache Martin et al., 2013). Teachers need to understand how district initiatives are designed to support students affected by trauma, thereby creating a cohesive support system. Furthermore, the professional development should include training on how to engage effectively with parents who are dealing with their own trauma and mental health issues.

In contrast, while some special education teachers reported that other school districts have made progress in establishing foundational trauma training on topics such

as ACEs and trauma-informed practices, they acknowledge that there is always room for more professional development (Felitti, 1998). Educators have expressed a desire for trauma-informed training that not only provides general overviews but also offers targeted strategies to meet the diverse needs of all students, particularly those in special education (Chudzik et al., 2024; Karoliina et al., 2007; Miller & Santos, 2020). Participant A suggested,

I think getting more professionals that are qualified in trauma informed practices would be really helpful. I think for something like [trauma training], we really need to bring in someone that's more qualified and can help us with what to do. You know, we know there's trauma. What I think we need to know as a staff is know what can we do to support the student and also to help regular education and special education teachers have a better understanding of why some of the behaviors happen. I think then there's more compassion when there is a behavior, and more of an understanding of like, this isn't just a bad kid. This is a kid that's had a lot and doesn't know how to deal with it. I think it needs to not just be one day. It needs to be an ongoing topic throughout the school year.

Special education teachers believe that having more qualified professionals to provide ongoing trauma-informed training would greatly enhance staff understanding and response to student behaviors, supporting both regular education and special education teachers. These teachers play a crucial role in identifying signs of childhood trauma. Transitioning to an integrated approach that offers comprehensive academic, socialemotional, and behavioral support for special education students requires revising current prevention and intervention methods within the district. Teachers' perspectives on the prevalence and impact of childhood trauma are essential for this shift, as is equipping them with a clear understanding of their roles and providing targeted professional development. Feedback from teachers reveals significant gaps in the current training. While some districts have made progress in foundational trauma training, special education teachers feel there is still a need for targeted, comprehensive training to support the diverse needs of all students, especially those in special education.

Summary

Special education teachers recognize the profound impact of trauma on students, noting its effects on social, emotional, and cognitive development. They observe that trauma manifests differently across students, influenced by various personal and environmental factors, and often requires tailored support. In classrooms, teachers implement trauma-informed practices, like creating calm environments and offering flexible support options, although they face challenges such as limited time, resources, and comprehensive training. Collaborative support systems within schools, including counselors and social workers, help address trauma, but teachers report inconsistency in applying these practices across all staff members.

Special education teachers emphasize the importance of understanding students' trauma histories and call for more targeted professional development. They value training that provides practical strategies for managing trauma-affected behaviors and fostering resilience, but express concerns over current gaps in trauma-informed training. Teachers suggest that ongoing, specific professional development—aligned with broader district goals—would enhance their ability to support trauma-impacted students effectively.

CHAPTER FIVE

The purpose of this qualitative case study was to investigate the perceptions of special education teachers regarding the influence of childhood trauma on the delivery of special education services, to delineate their understanding of their roles in the implementation of trauma-informed practices within these services, and to examine their perceptions of the professional development they have received in responding to children who have experienced trauma and are eligible for special education services. Special education teachers answered semi-structured interview guide questions. Themes and patterns were identified, aligning with the literature. The qualitative data provided valuable insights into the perceptions of special education teachers regarding childhood trauma, their application of trauma-informed practices, and their perspectives on existing and future professional development to support special education students. To fulfill the purpose of this study, the following research questions were addressed:

- What are special education teachers' perceptions of the prevalence and impact of childhood trauma on the provision of special education services in the district?
- 2. What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?
- 3. What are special education teachers' perceptions of the professional development they have received to support children who have experienced trauma and also qualify for special education services?

Summary of Findings

The relationship between childhood trauma and special education presents a significant challenge in education. Adverse childhood experiences (ACEs) and childhood trauma can profoundly impact a student's learning abilities, social interactions, and overall development (Anda et al., 2006; Felitti et al., 1998). Special education teachers work with a variety of students with disabilities and spend extensive time with children during the school day, making them vital in identifying signs of trauma, child abuse, and neglect (Alisic et al., 2012; SAMHSA, 2014). Consequently, special education teachers need a clear understanding of their role in implementing trauma-informed practices through the services they provide, and they require sufficient professional development to support children who have experienced trauma (Chudzik et al., 2024; SAMHSA, 2014).

The district reportedly implements various trauma-informed practices to support special education students through collaboration with school counselors, school psychologists, school social workers, and community agencies (Rossen & Cowan, 2013). Nevertheless, special education teachers navigate the dual responsibility of instructing while addressing the trauma-related needs of their students, necessitating an understanding of trauma triggers in a culturally sensitive context (Pickens & Tschopp, 2017). While they actively engage in supporting special education students impacted by childhood trauma, they also carry an emotional burden, finding it challenging to separate students' trauma from their personal experiences (Hudspeth, 2015). Special education teachers strive to balance high expectations with empathy, working to create stable environments that foster trust while managing their emotional responses (Cook & Newman, 2014). Despite their efforts, many special education teachers report a lack of comprehensive and consistent trauma-informed training, which limits their ability to adequately support special education students. They need targeted professional development that is intentional and practical, providing insights into how childhood trauma affects brain functioning and behavior, as well as behavior management strategies tailored to students with trauma and disabilities impacting communication and cognitive skills (Kerker et al., 2015; Delahooke, 2019). Such professional development should support educators in adopting a trauma-informed perspective, analyzing the root causes of student behavior, and cultivating empathy to prevent dysregulation (Purser, 2022).

Implications

The findings of this qualitative study on childhood trauma in special education present several important considerations. First, there is a clear necessity for ongoing, targeted professional development aimed at equipping special education teachers with trauma-informed practices. Comprehensive trauma-informed training and professional development for special education teachers are necessary to enhance their understanding of how childhood trauma affects students' cognitive, emotional, and social functioning. This, in turn, fosters positive teacher-student interactions and leads to better educational and behavioral outcomes (Blodgett & Lanigan, 2018; Chudzik et al., 2024; Goldenthal et al., 2024; SAMHSA, 2014).

Furthermore, the study suggests that implementing trauma-informed frameworks across entire schools, not just within special education, can create a more supportive environment for all students affected by trauma (Cook & Newman, 2014; SAMHSA, 2024). Implementing a school-wide trauma framework would ensure that all staff members are knowledgeable about the complexities of childhood trauma and can effectively collaborate to provide supportive strategies for special education students with childhood trauma (Rossen & Cowan, 2013).

Additionally, partnerships with community mental health organizations are recommended to provide a broader network of support (Bateman & Yell, 2019; Rossen & Cowen, 2013). Establishing partnerships with community mental health organizations can create a more comprehensive support network. This network can address the wider needs of students with traumatic experiences and nurture improved academic engagement and resilience within the special education setting (Anda et al., 2006; Woods-Jaeger et al., 2018).

These implications emphasize the critical role of coordinated efforts and initiatives between the school and community to effectively supporting students impacted by childhood trauma (Cook & Newman, 2014; Delahooke, 2019).

Conclusions

This quantitative study aimed to examine special education teachers' perceptions regarding the impact of childhood trauma on the provision of special education services (Chudzik et al., 2024; SAMHSA, 2014). It also explored special education teachers' roles in implementing trauma-informed practices and their views on the professional development they have received for supporting students with childhood trauma who also qualify for special education (Goldenthal et al., 2024; Miller & Santos, 2020). Twelve special education teachers from a K-12 public school district in central Pennsylvania participated in the study. Each teacher was assigned a letter code for data analysis, and semi-structured interviews were conducted over a three-week period. The interview transcripts were printed, organized by research question, and analyzed through multiple stages.

In the initial review, themes and patterns were identified, followed by a second review to assess code frequencies and establish dominant themes. A third review prioritized key themes, culminating in a secondary-cycle coding list. A final review confirmed that the findings aligned with the data, resulting in a comprehensive codebook connecting literature, findings, and implications. The qualitative data provided valuable insights into the perceptions of special education teachers regarding childhood trauma, their application of trauma-informed practices, and their perspectives on the existing and future professional development to support special education students (Cook & Newman, 2014).

Analysis of the qualitative data revealed six distinct themes from the special education teachers' responses. The findings highlighted the vital role that special education teachers play in supporting students affected by childhood trauma within the special education classroom (Alisic et al., 2012; Rossen & Cowen, 2013). Special education teachers' insights illuminate the various ways that trauma influences students' behavior, cognitive functioning, and social interactions. This underscores the urgent need for trauma-informed practices tailored to the unique challenges these special education students encounter (Blodgett & Lanigan, 2018; NCTSN, 2012).

While special education teachers are dedicated to implementing trauma-informed practices, they frequently express feelings of inadequate preparation due to the limited and inconsistent professional development provided by the district. The teachers voiced a strong preference for ongoing, practical training that addresses both the foundational effects of trauma on student behavior and specific strategies for managing complex trauma-related challenges within the special education classroom (Markelz & Bateman, 2022).

This study also highlights the necessity for school districts to adopt a comprehensive and consistent approach to trauma-informed education, which includes culturally sensitive and recurring training opportunities to equip all staff, particularly those in special education, with the necessary tools to effectively support special education students (Bateman & Yell, 2019; Kumar, 2020). By addressing the gap in trauma-focused professional development and fostering a collaborative environment that involves all stakeholders, school districts can enhance the academic, social-emotional, and behavioral development of special education students impacted by ACEs and childhood trauma (Cook & Newman, 2014; SAMHSA, 2014).

Recommendations for Further Research

Recommendations for future research, informed by the findings of this study, should consider the sample size and the generalizability of the results. With only twelve special education teachers from a single K-12 public school district in central Pennsylvania participating in the study, the findings may not be generalizable to other districts or regions (Chudzik et al., 2024). Additionally, the study does not capture potential differences in trauma-informed practices, training, or resources that might exist in other school districts, especially those with differing socioeconomic and demographic characteristics (Goldenthal et al., 2024).

This study concentrates specifically on the perspectives of special education teachers. While previous research has focused on the perceptions of general education

teachers, it would be beneficial to broaden the sample size to include school administrators, school counselors, school psychologists, school social workers, and support staff who interact with special education students facing childhood trauma (Cook & Newman, 2014). Incorporating insights from these additional roles could offer a more holistic understanding of trauma-informed practices within the school environment. It could also identify further opportunities for district-level support in professional development aimed at working with students affected by childhood trauma who also qualify for special education services (Hunter et al., 2015).

The qualitative nature of this study constrains the ability to quantify the direct impact of trauma-informed practices on the outcomes of special education students. Implementing a mixed methods approach could provide a more comprehensive insight into the effects of trauma-informed practices for special education students and emphasize the necessity for professional development to support special education teachers (Kumar, 2020; Miller & Santos, 2020).

To address the emotional challenges faced by special education teachers, further research into effective strategies and resources for promoting teacher resilience and wellbeing is warranted. Special education teachers working with students with childhood trauma may experience secondary trauma. Moreover, districts could consider offering professional development opportunities focused on self-care practices and stress management (Anderson et al., 2015). Promoting resilience is crucial not only for the mental health of teachers but also for sustaining a stable and supportive atmosphere for students (NCSEA, 2019). Given the number of autistic support teachers who participated in this study, further research on how trauma intersects with various disabilities, particularly autism and intellectual disabilities, is essential (Hudspeth, 2015). Students with autism and intellectual disabilities may process trauma differently due to differences in communication abilities, social understanding, and sensory processing. Specialized trauma-informed practices tailored to these unique needs could support emotional regulation, enhance coping skills, and improve classroom engagement. For example, understanding how sensory sensitivities in students with autism may be exacerbated by trauma is crucial (Delahooke, 2019). Additionally, trauma-informed training for educators could address specific strategies for working with students who have limited verbal communication, enabling teachers to better recognize and respond to traumarelated behaviors (Purser, 2022).

Lastly, expanding research on the culturally sensitive trauma-informed practices could provide valuable insights into how special education students' cultural backgrounds shape their trauma responses, thereby allowing educators to offer more personalized and effective support (Rossen & Cowan, 2013). By understanding cultural influences on coping mechanisms and behavioral adaptations, all educators can better address the unique needs of students from diverse backgrounds (Thomas et al., 2019). Furthermore, integrating culturally relevant strategies into trauma-informed practices can improve student engagement, trust, and feelings of safety to foster a more inclusive learning environment. A culturally sensitive approach may also reduce misunderstandings or misinterpretations of behavior that might arise from cultural differences, ultimately

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leading to improved academic and emotional outcomes for special education student with childhood trauma (SAMHSA, 2014).

The findings from this qualitative study indicate the profound impact adverse childhood experiences and childhood trauma have on students receiving special education services. The special education teachers' perceptions uncover the challenges they face in supporting these students, as well as the gaps in training and resources that hinder effective intervention. Their insights also highlight the critical need for trauma-informed practices district-wide. Implementing a comprehensive trauma-informed framework can transform educational environments for all students. Such a framework can equip all teachers with the essential tools and strategies to foster resilience and enrich academic success among students affected by childhood trauma. Addressing these needs is crucial to creating inclusive and supportive learning environments where every child, regardless of their trauma history, has the opportunity to meet their full potential.

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APPENDIX A – SIGNATORY PAGE OF DISSERTATION TOPIC APPROVAL

Name of Doctoral Candidate: Elizabeth Mason

We, the dissertation committee, authorize the student above to proceed with the proposal topic of: Childhood Trauma, Trauma-informed Practices, and Special Education.

Signatures: et meo Candidate Date 7/24/2024 Date 6 nmittee Chair 7 24 2024 Date **Committee Member** hudula 29/2024 Date **Committee Member** Station March 1 1

APPENDIX B – APPROVAL OF WRITTEN AND ORAL COMPREHENSIVE

EXAMINATION

Date of completion of my written/oral comprehensive examination:

August 30, 2024

I successfully passed my written/oral comprehensive examination during (check one)

_____SPRING X FALL Semester 2024.

The proposed title of my dissertation study is:

The Intersection of Childhood Irauma, Trauma-informed Practices, and Special Education: Perceptions of Special Education Teachers

Below are my signature and the names and signatures of my committee members reflecting the date(s) specified above as the date my dissertation proposal was approved by my committee through written and oral presentation.

Elizabeth Mason Student Signature Student Name Jessica Hall-Wirth, Ed.D Committee Chair Name Chair Signature Ashlea Rineer-Hershey, Ph.D Member Signature **Committee Member Name** Michelle Ludwig, Ed.D **Committee Member Name** Member Signature

APPENDIX C – PILOT STUDY INTERIVEW GUIDE QUESTIONS

- Is your districts special education referral and evaluation process, through the discrepancy or Multi-Tiered System of Support (MTSS) model, effective in providing students with ACEs support?
 - a. If your district's evaluation process is effective, how does your district provide students with ACEs adequate support?
 - b. If your district's evaluation process is ineffective, what levels of support is your district missing? Where do improvements need to be made?
- 2. How do you see how ACEs significantly affecting students who are already receiving special education services?
- 3. How do administrators, teachers, and other staff members build relationships, create positive interactions, nurture, and make connections with children who have been exposed to ACEs?
- 4. How do you see the socio demographic factors of your school community contributing to ACEs?
- 5. What role does your district play in being a trauma-responsive school?
- 6. Does your district embrace the role of teachers partnering with parents to develop a child who is socially and emotionally aware?
 - a. If your district is embracing the role of teachers partnering with families to develop a child who is socially and emotionally aware, how is this being accomplished?

- b. If your district is not embracing the role of teachers partnering with families to develop a child who is socially and emotionally aware, how can this philosophy be changed?
- 7. How do the disciplinary procedures and/or policies, such as zero tolerance, positively or negatively impact students with ACEs?

APPENDIX D – REQUEST FOR PERMISSION TO CONDUCT RESEARCH

WITH FACULTY

Name Title School District District Address

REQUEST FOR PERMISSION TO CONDUCT RESEARCH WITH FACULTY

Dear _____,

My name is Elizabeth Mason, and I am a Doctoral student at Slippery Rock University in Slippery Rock, PA. I am reaching out to you to request that I be allowed to conduct research with your special education teaching faculty for my Doctoral dissertation on special education teachers' perceptions of childhood trauma, their perspectives of the professional development they have received, and their role in supporting students with a history of childhood trauma. This research will be conducted under the direct supervision of Dr. Jessica Hall-Wirth, Associate Professor of Special Education at Slippery Rock University.

Special education teachers offer a unique perspective of childhood trauma in its natural and real-life context. I seek your consent to conduct semi-structured interviews with your special education teaching faculty. Each special education teacher can engage honestly and express their complex viewpoints and experiences through face-to-face interviews. Using narrative and naturalistic inquiry, each interview guide question directly relates to the special education teachers' perceptions regarding childhood trauma, trauma-informed practices, and the intersection of special education.

Upon completing the qualitative case study, I will provide Slippery Rock University with a copy of the entire research report. If you require any further information, please do not hesitate to contact me at 724-679-0628 or at eak8905@sru.edu. Thank you for your time and consideration in this matter.

Sincerely,

Elizabeth Mason Slippery Rock University

APPENDIX E – PARTICIPANT EMAIL

September, 2024

Dear Participant,

I am currently enrolled in the Doctorate in Special Education program at Slippery Rock University in Slippery Rock, PA, and am writing my Doctoral dissertation. I invite you to participate in a research study entitled "The Intersection of Childhood Trauma, Traumainformed Practices, and Special Education: Perceptions of Special Education Teachers."

For the purpose of this study, the research aims to determine your perceptions as a special education teacher working with students with childhood trauma, your role in supporting students with a history of childhood trauma, and the perspectives of professional development you have received. Participation in this project will include completing the required consent forms, answering a demographic questionnaire, and participating in an hour-long semi-structured interview.

Your participation in this research study is completely voluntary. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential. Data from this research will be kept in a password-protected file. No one other than the researchers will know your answers to the interview questions.

An informational letter for participants in this study, as far as the reasoning behind it and any potential risks/benefits, can be found here: <u>informational letter</u>.

If you agree to participate in this study, complete the consent form. Once your consent form is received, complete the demographic questionnaire. It can be found by following this link - <u>demographic questionnaire</u>. Once the consent form and demographic questionnaire is complete, the semi-structured interview will be scheduled. After you complete the semi-structured interview, you will be sent a transcription of your interview to review and approve. After you approve your interview transcription, you will receive a \$25 Amazon gift card in appreciation for your participation in the research study.

If you have any questions about this project, feel free to contact me at 724-679-0628 or at eak8905@sru.edu.

Thank you for your assistance in this important endeavor.

Sincerely,

Elizabeth Mason Principal Investigator Slippery Rock University

APPENDIX F – RESEARCH PARTICIPANT INFORMED CONSENT LETTER

RESEARCH PARTICIPANT INFORMED CONSENT LETTER

THE INTERSECTION OF CHILDHOOD TRAUMA, TRAUMA-INFORMED PRACTICES, AND SPECIAL EDUCATION: PERCEPTIONS OF SPECIAL EDUCATION TEACHERS

Elizabeth Mason, eak8905@sru.edu, 724-679-0628

Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be [eligibility criteria; e.g., age, gender, language, etc.]. Taking part in this research project is voluntary.

Important Information about the Research Study

Things you should know:

- The purpose of this study is to decisively and homogeneously sample special education teachers' perceptions and prevalence of childhood trauma, their role in implementing trauma-informed practices, and their perceptions of the professional development services received to support special education students. Case study data will be analyzed through a single instrumental approach since the problem and research in this study provided insight to childhood trauma through the perceptions of special education teachers.
- If you choose to participate, you will be asked to participate in an hour-long semistructured interview that will be audio-recorded.
- Once the consent form and demographic questionnaire are completed, the participant and researcher will establish an agreed upon interview time and location. The interview location will be in a quiet space free of distractions and provide the researcher and participant adequate privacy, including a closed door, or a mutually agreed upon space.
- Risks or discomforts from this research are minimal, but include taking the time to complete the demographic questionnaire and participate in the interview process. Answering the interview questions will also not cause no more than minimal invasion of privacy or breach of confidentiality.
- The results of this study will be used in a dissertation for the College of Graduate and Professional Studies within the Department of Special Education. Also, the results of this study will be used to theorize how school districts can support special education teachers who work with students with childhood trauma and receive special education services.
- Taking part in this research project is voluntary. You do not have to participate and you can stop at any time.

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

What is the Study About and Why are We Doing it?

The purpose of the study is to determine your perceptions as a special education teacher working with students with childhood trauma, your role in supporting students with a history of childhood trauma, and the perspectives of professional development you have received. If you choose to participate, you will be asked to participate in an hourlong semi-structured interview.

What Will Happen if You Take Part in This Study?

If you agree to take part in this study, you will be asked to participate in an hour-long semi-structured interview that will be audio-recorded. Your responses will remain confidential.

Within two calendar days of the interview, we will email you the transcribed audio recording and my field notes. Please review the field notes within 24-hours and confirm their credibility. If there is any aspect of the transcribed field notes that is not accurate, please contact us immediately.

How Could You Benefit From This Study?

Although you will not directly benefit from being in this study, others might benefit because the study could help determine future research in developing professional development tailored to special education teachers within the district they are working in or it could be generalized to apply to other districts in the county or state.

What Risks Might Result From Being in This Study?

You might experience some risks from being in this study. There are The 12, semi-structured, narrative, and pedagogical interview questions are non-invasive and are based on each special education teacher's perceptions and experiences, which would not put a participant at risk damaging to their employability, reputation, or cause stigmatization. Answering the interview questions will also not cause no more than minimal invasion of privacy or breach of confidentiality. Based on each special education teacher's experiences and perceptions, discussing childhood trauma may cause some psychological discomfort for the participant. Special education teachers, as with any educator, take their position seriously and demonstrate a level of care for their students' academic, behavioral, and social well-being.

How Will We Protect Your Information?

I/We plan to publish the results of this study. To protect your privacy, I/we will/will not include information that could directly identify you.

I/We will protect the confidentiality of your research records by keeping all questionnaires and interview responses in a password protected Google Drive account

only accessed by the researcher. Your name and any other information that can directly identify you will be stored separately from the data collected as part of the project.

What Will Happen to the Information We Collect About You After the Study is Over?

I/We will not keep your research data to use for future research or other purposes. Your name and other information that can directly identify you will be kept secure and stored separately from the research data collected as part of the project.

How Will We Compensate You for Being Part of the Study?

If you complete the consent form, demographic questionnaire, interview, and transcription approval within the two-week period, you will receive a \$25 Amazon gift card.

What Other Choices do I Have if I Don't Take Part in this Study?

If you choose not to participate, there are no alternatives.

Your Participation in this Research is Voluntary

It is totally up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. If you decide to withdraw before this study is completed, you can contact any of the researchers and we will remove your information from the data collection.

Contact Information for the Study Team and Questions about the Research

If you have questions about this research, you may contact **Dr. Jessica Hall-Wirth**, principal investigator at jessica.hall-wirth@sru.edu, or Elizabeth Mason, co-investigator, at eak8905@sru.edu or 724-679-0628.

Contact Information for Questions about Your Rights as a Research

Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the following:

Institutional Review Board Slippery Rock University 104 Maltby, Suite 302 Slippery Rock, PA 16057 Phone: (724)738-4846 Email: irb@sru.edu

APPENDIX G – INTERVIEW PARTICICPATION CONSENT FORM

Interview Consent Form

By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. I/We will give you a copy of this document for your records. I/We will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study. I understand that I can withdraw at any time. A copy of this signed Consent Form has been given to me.

Printed Participant NameSignature of ParticipantDate

By signing below, I indicate that the participant has read and to the best of my knowledge understands the details contained in this document and have been given a copy.

Printed Name of Investigator	Signature of	Investigator
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Date

Audiotape Release Form:

We request the use of audiotape material of you as part of our study. We specifically ask your consent to use this material, as we deem proper for professional publications to our study. Regarding the use of your likeness in audiotape, please check one of the following boxes below:

> I do... I do not...

Give unconditional permission for the investigators to utilize audiotapes of me.

Print Name

Participant Signature

Date

PLEASE NOTE: Should you choose not to allow your image or voice to be used, we can still benefit from your inclusion as a research study participant.

APPENDIX H – PARTICIPANT DEMOGRAPHIC QUESTIONNAIRE

Participant ID _____

- 1. Your Name
- 2. What is your professional title?
- 3. What gender do you identify with?
 - a. Male
 - b. Female
 - c. Other
- 4. What racial/ethnic group do you identify with?
 - a. Hispanic
 - b. White
 - c. African American or Black
 - d. Asian
 - e. American Indian or Alaska Native
 - f. Native Hawaiian or Other Pacific Islander
 - g. Other
- 5. What is the highest degree you have earned?
 - a. Bachelor's Degree
 - b. Master's Degree
 - c. Doctorate Degree
- 6. How many years have you been a special education teacher in the district?
- 7. Have you held other teaching positions? What was your role and how long did you hold the position?

APPENDIX I – INTERVIEW PROTOCOL SCRIPT

Co-Investigator – Step 1: Thank for voluntarily agreeing to participate in this research study. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. If you decide to withdraw before this study is completed, you can contact any of the researchers and we will remove your information from the data collection.

The objectives of this qualitative study are:

 Obtain special education teachers' perceptions of the impact trauma has concerning the provision of special education services they provide students.
 Explore special education teachers' perceptions of their role when implementing trauma-informed practices through special education services.
 Examine special education teachers' perceptions of the professional development they have received to support children who have childhood trauma and qualify for special education services.

Co-Investigor – Step 2: Review the slides from the PowerPoint Presentation.

Each slide of the PowerPoint Presentation will be presented in the same mannor to each participant. The co-investigator will read the presentor notes prepared by the co-investigator.

Slide 1: Before you answer the 12, semi-structured, narrative, and pedagogical interview questions, I will review with you information about childhood trauma and the two frameworks used to develop the research questions and interview guide questions. While I review information about childhood trauma, I want you to reflect how the information relates to your current practices as a special education teacher and your service delivery.

Slide 2: Read points on the slide.

Slide 3: Read points on the slide, then state: Since the inception of the ACE's study and the longitudinal impact, additional research has been developed to expand upon the influence other adverse experiences have on children of all ages, such as poor academic achievement, incarceration, unemployment, poverty, and the diagnosis of a disability.

Slide 4: Read the points on the slide.

Slide 5: Read the points on the slide.

Slide 6 Read the Trauma-Focused Competencies.

Slide 7: Read the Trauma-Informed Key Assumptions and Principals, then state: These two frameworks were used to develop the research questions and interview guide questions. We will move into the interview portion at this time.

Co-Investigor – Step 3: Present the 12, semi-structured interview guide to research questions breakdown to the participant.

Research Questions	Interview Guide Question/Topic
Research Question 1 – What are special education teachers' perceptions regarding the prevalence and impact of trauma in relation to the provision of special education services in the district?	 5) Briefly explain what you know about childhood trauma. 6) Describe the types of trauma students in your special education classroom have been exposed to. How do you see the complexities of trauma impacting your students' short-term and long-term? 7) What is currently happening in your school to promote academic, behavioral, and social-emotional trauma-informed practices for special education students? 8) What are your perceptions of how trauma-informed practices are being implemented throughout the school district and greater community to support special education students?
Research Question 2 - What are special education teachers' perceptions of their role in implementing trauma-informed practices through special education services?	 13) As a special education teacher, you are one member of a large organization. What do you perceive as your role in realizing, recognizing, responding, and resisting re-traumatization when working with special education students who have been exposed to childhood trauma? 14) How do you critically assess and apply up-to-date trauma-informed practices and interventions in your classroom? 15) What trauma-informed practices have you found to be the most helpful when working with special education students in your classroom? 16) In your role, describe any barriers you face when implementing trauma-informed practices.

Interview Guide to Research Questions Breakdown

	17) How does the district incorporate professional
	development around policies and practices that are
Research Question 3 – What are	responsive to the cultural needs of all students?
special education teachers'	18) As a special education teacher, how are you impacted
perceptions of the professional	by your special education students' trauma
development they have received to	experiences?
support children who have	19) What professional development have you received to
experienced trauma and also qualify	support your work with students with childhood
for special education services?	trauma who qualify for special education services?
	20) How could the district enhance its professional
	development by incorporating trauma-informed
	practices to support special education students?

This part of the interview will be audio recorded to be used for transcription and analysis purposes. Once I start the audio recording, I will read each question to you and give you adequate time to respond to the questions. At any point during the interview, you may reference the interview guide questions. Also, at any point during the interview, if you do not feel confortable answering the question, let me know. While you are answering the questions, I will be documenting notes on your responses.

Co-Investigator – Step 4: Completion of the interview questions.

Now that you have answered the interview questions, I will complete a fidelity checklist to ensure each interview started and ended in the same manner. Once the fidelity checklist is complete, this will conclude the semi-structured interview. Within two calendar days of the interview, I will email you the transcribed audio recording and my field notes. Please review the field notes within 24-hours and confirm their credibility. If there is any aspect of the transcribed field notes that is not accurate, please contact me immediately.

APPENDIX J – BACKGROUND INFORMATION ON CHILDHOOD TRAUMA

The Intersection of Childhood Trauma, Traumainformed Practices, and Special Education: Perceptions of Special Education Teachers

Intersection of Childhood Trauma, Trauma-informed Practices, and Special Education: Perceptions of Special Education Teachers

Background Information on Childhood Trauma

Elizabeth Mason Slippery Rock University

Problem to be Studied

- Childhood trauma affects approximately half of school-age youth in U.S. schools. Nearly half of the youth report exposure to at least one adverse childhood experience. Nearly one-third of students experience two more ACEs by age 17.
- Childhood trauma can be the root cause of learning disabilities, health problems, and social challenges that can lead to behavioral problems in school.
- Special education teachers play a vital role in identifying signs of childhood trauma, child abuse, and neglect.
- This qualitative case study will seek to understand special education teachers ' perceptions of childhood trauma, their role in providing trauma-informed practices, and the professional development they have received to support students who receive special education services.

Adverse Childhood Experiences

- The Center for Disease Control and Prevention and Kaiser Permanente conducted the first adverse childhood experiences (ACEs) study from 1995-1997.
- Dr. Vincent Felitti and Dr. Robert Anda surveyed over 13,000 white, well-educated adults from upper and middle - class communities enrolled in the Kaiser Health Maintenance Organization (HMO) in San Diego, CA.
- The survey asked questions about childhood incidences of abuse, dysfunctional home lives, neglect, and current adult behaviors like smoking, alcohol use, and food consumption within the first 18 years of their lives.
- ACE questionnaire included a range from 0-10. A score of zero meant no ACEs, while a score of one or greater was attributed to the number of ACEs an adult experienced during their childhood.
- Results concluded an adult's number of ACEs was strongly associated with high-risk health behaviors and correlated with mental and physical health concerns.
- The prevalence of ACEs Felitti and Anda found in the adults they surveyed through their study explains the significance of how a child is affected by traumatic events in their lives.

Childhood Trauma and the Intersection of Special Education

- Childhood trauma and special education is a critical and complex area of concern within education. A child's
 early life exposure to a traumatic event has a neurobiological impact that may have long-lasting aversive
 effects. Research states that approximately 80% of children in special education have been exposed to
 trauma.
- Research and governmental reports have identified approximately 20% of children in the U.S. have behavioral difficulties and meet the criteria to receive mental health services. Three out of four children who have mental, emotional, or behavioral problems have an ACE score.
- In 2017, over 331,000 children received special education services under the disability category of
 emotional disturbance (ED), representing about 0.5% of the school-age population). Only some of these
 children receive mental health services, and even a smaller number of children receive special education
 services.
- Significant research has been conducted on the importance of understanding adverse experiences and childhood trauma in medicine, psychology, and education. For many years, researchers have arrived at the same conclusion: Teachers are not adequately prepared to support students with childhood trauma. To move forward, research needs to be expanded, and special education teachers' perceptions of how to support students who receive special education services must be further examined.

Teachers' Perceptions of Childhood Trauma

- Childhood trauma affects approximately half of school-age youth in U.S. schools, with close to the same number of youth reporting exposure to at least one adverse childhood experience (ACEs).
- Nearly one-third of students experience two or more ACEs by the time they are 17 years of age. This means that 12 out of 25 students in a typical classroom may have been affected by trauma, with close to 8 of those 25 students having experienced two or more ACEs by the time they are seniors in high school.
- Many nationally recognized organizations have established trauma-informed frameworks to support behavioral health sectors that work with individuals with traumatic experiences.

New Haven Trauma-Focused Competencies	Substance Abuse and Mental Health Services Administration National Center for Trauma-Informed Care
Eight trauma-focused competencies	 Four R's: Key Assumptions in a Trauma-Informed Approach Six Key Principals of a Trauma-Informed Approach

New Haven Trauma-Focused Competencies

- (1) Demonstrate understanding about trauma reactions and tailor trauma interventions and assessments in ways that honor and account for individual, cultural, community, and organizational diversity.
- (2) Demonstrate understanding and ability to tailor assessment and interventions to account for developmental lifespan factors.
- (3) Demonstrate the ability to understand, assess, and tailor interventions and assessments that address the complexities of trauma-related exposure, including any resultant long- and short-term effects.
- (4) Demonstrate the ability to appropriately appreciate, assess. and incorporate trauma survivors' strengths, resilience. and potential for growth in all domains.
- (5) Demonstrate understanding about how trauma impacts a survivor's and organization's sense of safety and trust.
- (6) Demonstrate the ability to recognize the practitioners': (1) capacity for self-reflection and tolerance for intense affect and content, (2) ethical responsibility for self-care, and (3) self-awareness of how one's own history, values, and vulnerabilities impact trauma treatment deliveries.
- (7) Demonstrate ability to critically evaluate and apply up-to-date existing science on research-supported therapies and assessment strategies for trauma- related disorders/difficulties.
- (8) Demonstrate the ability to understand and appreciate the value and purpose of the various professional and paraprofessional responders in trauma work and work collaboratively and cross systems to enhance positive outcomes.

PERCEPTIONS OF CHILDHOOD TRAUMA

SAMHSA's Trauma-Informed Approach: Key Assumptions and Principals

The Four R's: Key Assumptions in a Trauma-Informed Approach	Six Key Principals of a Trauma-Informed Approach
Realization about trauma and understand how trauma can affect families, groups, organizations, and communications as well as individuals. Recognize the signs of trauma. These signed may be gender, age, or setting- specific and may be manifest by individuals seeking or providing services in these settings. Respond by applying the principals of a trauma-informed approach to all area of functioning. Resist re-traumatization by recognizing how organizational practices may trigger painful memories and re-traumatize clients with trauma histories.	 Safety: Children or adults feel physically and psychologically safe. Trustworthiness and Transparency: Organizational operations and decisions are conducted with transparency. Peer Support: Individuals with lived experiences of trauma, or in the case of children this may be family members of children who have experienced traumatic events and are key caregivers in their recovery. Collaboration and Mutuality: The organization recognizes that everyone has a role to play in a trauma-informed approach. Empowerment, Voice and Choice: Throughout the organization and among the clients serviced, individuals' strengths and experiences are recognized and built upon. Cultural, Historical, and Gender Issues: The organization actively moves past cultural stereotypes and biases; offers, access to gender responsive services; leverages the healing value of traditional cultural connections; incorporates policies, protocols, and processes that are responsible to the racial, ethnic, and cultural needs of individuals serviced; and recognizes and addressed historical
	trauma.

Participant ID	Signed Interview & Audio Consent	Demographic Questionnaire	Reviewed Interview Protocol	Reviewed Trauma Background Presentation
	Participant ID	Participant Interview & ID Audio	ParticipantInterview &DemographicIDAudioQuestionnaire	ParticipantInterview &DemographicReviewedIDAudioQuestionnaireInterview

APPENDIX K – FIDELITY CHECKLIST

APPENDIX L – SIGNATORY PAGE FOR DISSERTATION

Slippery Rock University of Pennsylvania Department of Special Education

> A Dissertation Written By Elizabeth Mason

Bachelor of Science in Education, Slippery Rock University, May, 2010 Master of Education in Literacy Education, Penn State University, August, 2014 Doctorate of Education in Special Education, Slippery Rock University of Pennsylvania, December 14, 2024

Approved by

Jessica Hall-Wirth

Dr. Jessica Wirth-Hall, Dissertation Committee Chair November 15, 2024

ARHershen

Dr. Ashlea Rineer-Hershey, Committee Member November 15, 2024

michelle

Dr. Michelle Ludwig, Committee Member November 15, 2024

Accepted by

Dr. Keith Dils, Dean, College of Education, Slippery Rock University of Pennsylvania Date