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The Need for Trauma-Informed Training to Build Teacher Efficacy in Managing Externalizing Student Behavior

by

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Chapter 1: Introduction

Background

As a special education teacher responsible for providing support to students who struggle with managing their behaviors and self-regulating their emotions, I notice a continuing trend of traumatic events within their histories. As a result, these students struggle academically and socially as they exhibit externalizing behaviors that include physical aggression, verbal aggression, running away and hiding, lying, stealing, and property damage. According to the Substance Abuse and Mental Health Services Agency (SAMHSA), trauma is defined as:

An event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual wellbeing. (*Trauma and Violence*, 2019)

Felitti et al. (1998) identified three abuse markers (psychological, physical, sexual) and four home-life dysfunction markers (caregiver substance abuse, caregiver mental illness, violence toward mother, and parent incarceration) they termed adverse childhood experiences (ACEs) incurred from birth through 18 years of age. These criteria were evaluated through a questionnaire they created to measure the trauma histories of over 17,000 participants surveyed. Monnat and Chandler (2015) added parental divorce to this list through their own examination of ACEs and long-term health consequences, with over 52,000 participants in their study.

The 1998 ACEs study became the foundation of branches of studies linking ACEs markers to chronic adult health issues, childhood neurological development, chronic chemical

dependency studies, and a list of other current social issues in this country today (*Adverse Childhood Experiences*, 2018).

Dr. Bruce Perry, the founder and senior fellow of The Child Trauma Academy in Houston and an adjunct professor of psychiatry at the Feinberg School of Medicine at Northwestern University is a leading expert on toxic stress created and perpetuated by childhood complex trauma. Through his extensive work evaluating the effects of trauma exposure on childhood neurocognitive development, he and his colleagues explained the scientifically confirmed relationship between abnormalities in neural development that decrease or shut down the interplay between parts of the brain responsible for moderating physiological stress response in developing children creating a positive feedback loop in the ability to cope with life stressors, which is directly related to externalizing problem behaviors and learning deficits (Perry, Blakely, Baker, & Vigilante, 1995). Perry (2016) advocated for trauma-informed school policies and programs.

Further establishing and validating the connection between toxic stress, child development, and negative childhood academic and behavioral outcomes, the American Academy of Pediatrics published a technical report written by lead authors Shonkoff and Garner (2012) that provided explanation for toxic stress being the repeated or "prolonged activation of the body's stress response in the absence of the buffering protection of supportive, adult relationship" (p. e236).

The authors explained how repeated and prolonged exposure to environmental stressors, such as abuse, neglect, and poverty in the absence of caring and loving attachments directly impair or reduce a developing child's brain growth, particularly the parts of the brain responsible

for emotion and self-regulation, memory, language, and how these deficits lead to clinically significant problems with lifelong health, learning, and behavior. They concluded that more is required of the pediatric community in collaboration with professionals across multiple scientific and social disciplines to become proactive in meeting the social and emotional needs of children in early development by using an eco-bio-developmental approach to reduce toxic stress and its intergenerational cycle, with an emphasis on preemptively improving health care and socioeconomic supports, while teaching and supporting positive caregiver attachments to children.

Importance of the Topic

I work with a relatively high number of students who have trauma histories or are exposed to trauma recurrently. Fourteen out of 20, or 70% of the students I currently work with have two or more ACEs markers, according to the diagnostics used by Felitti et al. (1998). This percentage is solely based on known student background information and parent reports gathered throughout my time working with the families. This percentage does not include any events that are not reported. It would seem that the inability to overcome the effects of trauma make it difficult for some of my students to complete one class period without engaging in aggressive and destructive behaviors triggered by toxic stress, created by trauma exposure. Sadly, my students range in age from only 6-10 years old.

Through my own experience in working with traumatized students, I have formed two very important tenets for supporting students' emotional and behavioral needs: build safe, trusting, and caring relationships with students and their caregivers, and provide tailored support to each student by increasing my own understanding of their needs. I have found that by

investing time into truly understanding my students and their caregivers through a traumasensitive perspective, I have become strongly efficacious in supporting their needs. It is my belief that teachers who believe they are able to create and build positive relationships with traumatized students can act as a protective barrier to complex trauma and increase opportunities for learning.

There is a pathway created by complex trauma that leads to toxic stress, deficits in brain development, and externalizing behaviors (Center on the Developing Child, 2007; Perry et al., 1995). Through understanding the relationship between childhood adversity and toxic stress, we are made more aware of the negative impact that unmediated complex trauma has on a child's neuro-cognitive development by way of toxic stress, leading to struggles with learning and prosocial behavior (Perry et al., 1995).

The prevalence of childhood trauma makes this topic important. National prevalence rates for traumatic childhood events are difficult to accurately obtain. Saunders and Adams (2014) discussed this topic directly by examining the existence of obstacles in the nature of identifying and reporting childhood traumatic events. Through their examination of prevalence reporting, they found that even the main data banks used for identifying crime and child abuse in this nation, including institutions such as the Federal Bureau of Investigation, rely solely on data collected from child protection agencies and law enforcement only, leading to the publication of prevalence rates by these entities to be underestimated (Saunders & Adams, 2014).

Saunders and Adams (2014) analyzed and compared four nationally conducted surveys and studies designed to allow children and adolescents (ages 0-17 years cumulatively) to self-report: the National Survey of Children's Exposure to Violence (NatSCEV); the National Survey

of Children's Exposure to Violence II; the National Survey of Adolescents (NSA); the National Survey of Adolescents-Replication (NSA-R), and the National Comorbidity Study-Adolescent Supplement (NCS-A). To include very young children, parent reporting was used.

The research indicated that trauma prevalence rates are high through self-report data and the implications endure and compound as children continue to age:

At any point in time approximately 1 out of 6 American girls and 1 out of 25 boys have experienced a sexual assault involving some sort of physical contact. The rates increase to 1 out of 5 girls and 1 out of 20 boys when using data from a 17-year-old age cohort, the best estimate of the full risk during childhood. (Saunders & Adams, 2014, p. 7)

Findings for physical abuse illustrated a 19% lifetime prevalence rate through NatSCEV, 18% through NatSCEV II, 9% through NSA, and 4% through NCS-A, with how abuse was defined being a factor in the discrepancy in scores between surveys (Saunders & Adams, 2014).

Through their analysis of the NSA-R, Saunders and Adams (2014) found that "2 out of 5 adolescents (38%) reported witnessing one or more serious incidents of community violence, and 9% had witnessed violence between parents or caregivers" (p. 10). Additionally, the NatSCEV analysis showed "70% of adolescents aged 14-17 endorsed a history of any witnessed violence, with approximately one-third witnessing family violence" (p. 11). Additionally, adolescence was identified as being a developmental stage within which traumatic events themselves and their effects can compound.

Due to high prevalence rates and lasting effects of childhood trauma found during their comparisons, Saunders and Adams (2014) used the findings to express the empirically-substantiated need for physicians to screen for childhood trauma as part of comprehensive

patient care. Neglect, emotional abuse, and psychological abuse were not included in Saunders and Adams review. The Administration of Children and Families office of the U.S. Department of Health and Human Services reported the prevalence of childhood neglect to be over 400,000 children nationally in 2017 (U.S. Department of Health and Human Services, 2019).

Teachers are often the first point of contact for a traumatized child, with the means to make a positive difference in their circumstances (National Association of School Psychologists [NASP], 2015). Farmer, Burns, Phillips, Angold, and Costello (2003) and Ko et al. (2008) agreed, stating "Schools have a significant impact on youth well-being, being the most common institutional entry point to mental health services" (as cited by Crosby, 2015, p. 224).

In addition to providing students with a fair and appropriate education, teachers are legally obligated to provide reasonable protection from suspected maltreatment, in their role as mandated reporters (Bell & Singh, 2017, p. 7). A mandated reporter is defined as anyone required by state law to report maltreatment to the designated state agency (Crosson-Tower, 2003, as cited in Bell & Singh, 2017)

Bell and Singh (2017) cited the Fourth National Incidence Study of Child Abuse and Neglect to identify that school staff made more reports of child maltreatment than any other group of mandated reporters, a total of 52% of all reports made by all groups responsible. Bell and Singh also cited the Child Welfare Information Gateway report which stated that across the nation in 2013, 3.9 million children were reported for possible maltreatment, with 17.5% of those reports made by school staff, a total of 682,500 reports.

In their review of mandated reporting by educators, Bell and Singh (2017) noted that all 50 states have some form of mandatory reporting laws set for reasonable suspicion of child

maltreatment. However, underreporting by educators continues, largely due to a lack of annual training on how to determine when, what, and how to report. Bell and Singh found that many school districts do not provide any training in mandated reporting, nor do they have a school-wide system that sets and adheres to protocols for the determination, action, and follow through of a mandated reporting process. Teachers are required to report suspected maltreatment and can benefit from trauma-informed training to identify trauma and abuse risk factors in order to provide intervention (Trauma and Learning Policy Initiative, 2019).

Parents or other caregivers close to the child may not be equipped to recognize or identify trauma-inducing events. They may be unable to appropriately intervene in continued exposure to trauma in a child's life; they may be perpetrating the traumatic events themselves. In approximately 80% of child maltreatment cases that lead to child death, at least one of the parents was identified as the perpetrator (*Child Abuse Statistics & Facts*, n.d.).

Teachers are in a prime position to make a positive and lasting difference in the lives of these children not only as a first line of defense and prevention through mandatory reporting, but also by building secure relationships with students, modeling positive and healthy behaviors related to coping skills, conflict resolution, and self-perceptions (Crosby et al., 2017).

Conversely, the absence of positive relationships between teachers and students can have negative effects on a student's self-esteem (Crosby et al., 2017).

Teaching children with externalizing problem behaviors can be difficult and emotionally draining for educators to manage (Alisic, 2012) and can lead to secondary, or vicarious, trauma response in teachers (Minero, 2017; Perry, 2014). Given trauma-informed training and continued professional development that addresses the effects of trauma on children, teachers

can increase their ability to build and maintain positive relationships with students who have challenging externalizing behaviors, with positive effects on both teacher and student experiences (Dorado, Martinez, McArthur, & Leibovitz, 2016; Longhi, 2015). Additionally, trauma-informed training may decrease the negative impact that a teacher's own trauma history has on their ability to reach students and lessen symptoms related to secondary trauma created through working daily through the difficult behaviors and the high needs of affected students (National Child Traumatic Stress Network, 2018; Perry, 2014;).

Trauma-informed training is not traditionally included in school staff training (Crosby et al., 2017) and implementation requires multiple components such as: administrative support, restructuring punitive discipline programs, staff professional development, and collaboration between school staff and mental health professionals (Crosby, 2015).

I propose that when educators receive evidence-based, trauma-informed training and continued professional development, more children will be effectively supported at the core of their needs. Only then can true student focus be put toward learning. Additionally, I propose that educators will feel more efficacious in teaching without the fear of doubt in how to manage challenging behaviors that stem from trauma, and their efforts will have lasting positive effects on student outcomes.

Research Question

When given comprehensive school-wide trauma informed training and continued professional development within a trauma-informed system, will educators view themselves as more efficacious managing externalizing student behaviors (e.g., physical aggression, verbal aggression, property damage, arguing, refusal, elopement), while maintaining and sustaining

truly caring relationships with students who engage in those behaviors? What are the effects of a trauma-informed school system on externalizing student behavior, grades, and attendance?

Focus of the Paper

The review of literature in Chapter 2 defines externalizing behavior as it relates to school settings and its relationship to student behavioral and academic outcomes. Literature highlighting teacher self-efficacy in managing externalizing behaviors while building positive relationships is presented. Additionally, the impact of research-based, whole-systems approaches to creating trauma-informed schools will be examined. The following is a list of defined terms found within the literature review.

Definition of Terms

- ACEs: Adverse Childhood Experiences: an acronym created by Felitti et al. (1998)
 that represents defined adverse childhood experiences or significant life stressors that
 research has statistically correlated to negative adult health outcomes. The initial
 ACEs study continues to be the foundation of many proceeding studies, including
 those examining childhood toxic stress and its impact on neurologic and physiologic
 childhood development.
- Complex Trauma. Complex trauma is sometimes referred to as Post Traumatic Stress Disorder (PTSD). The most relevant definition I found during my research was provided within a publication written specifically for children who have or currently are experiencing complex trauma (Spinizzola, et al., 2017). I have added it as Appendix A due to its length, but its importance and relevance should not be

dismissed from this paper. Alternately, The National Child Traumatic Stress Network (2019) defines complex trauma as:

Children's exposure to multiple traumatic events—often of an invasive, interpersonal nature—and the wide-ranging, long-term effects of this exposure. These events are severe and pervasive, such as abuse or profound neglect. They usually occur early in life and can disrupt many aspects of the child's development and the formation of a sense of self. Since these events often occur with a caregiver, they interfere with the child's ability to form a secure attachment. Many aspects of a child's healthy physical and mental development rely on this primary source of safety and stability

Individualized Education Program Plan (IEP). The following definition is provided by Pacer Center, Inc. in their 2018 guide to parents:

The Individualized Education Program (IEP) is the document that outlines the special education and related services that your school district will provide for your child at no cost to you. It is developed for children who have been evaluated and are in need of special education. This includes children who are homeless or incarcerated. IEP services will be based on information gathered from evaluations, state and district assessments, and current levels of achievement on IEP goals and in the general education curriculum. The IEP provides a written record of decisions made at IEP meetings. The development of the IEP is required as part of the federal Individuals with Disabilities Education Improvement Act (IDEA 2004), its regulations (known

- as 34 Code of Federal Regulations [CFR] Parts 300 and 301), and state special education rules and statutes in Minnesota. The federal regulations, which have the force of law, explain how the law will be carried out.
- Resilience. According to the National Child Traumatic Stress Network (2019), "Resilience is the ability of a child to recover and show early and effective adaptation following a potentially traumatic event." Also noted are factors that enhance resilience that include community-wide support to build and instill hope and encouragement, focus on student strengths, support empowerment and self-esteem, and teaching and modeling coping skills, and practical problem solving for presenting issues.
- **Secondary Trauma:** Also known as "vicarious trauma," physiological and emotional response to caring for people who are directly exposed to trauma. Teachers who work with children exposed to trauma may experience similar fight, flight, or freeze responses from "hearing [people's] trauma stories and becoming witnesses to the pain, fear and terror that trauma survivors have endured" (Minero, 2017).
- Teacher's Self-Efficacy (TSE) is the belief in the capability to "organize and execute the courses of action required to produce given attainments" (Bandura, 1997, p. 3, as cited by Zee, deJong, & Koomen, 2017). Zee et al. (2017) noted that contemporary TSE is largely based on a 3-factor educational model that includes: instructional strategy, classroom management, and student engagement.
- **Toxic Stress:** To understand toxic stress, a definition of positive stress response and tolerable stress response are required. As defined by the Center on the Developing

Child (2007) at Harvard University, positive stress response (brief and mild) and tolerable stress response (serious but temporary) are a person's physiological coping reaction to the perception of being harmed or threatened. The body activates a protective response to prepare for fight or flight or freeze or faint. Stress hormones are released, blood pressure and heart rate increase. In these two stress responses, the individual who has an environment of supportive relationships is better able to manage bio-social-psycho systems to cope with the stress and bring their body back to a baseline sense of calm. Those who experience toxic stress encounter recurring traumatic events that prolong the activation of the stress response. In developing children, prolonged stress response in absence of an environment of supportive relationships can lead to deficits in the systematic development of the brain, the interplay between related regions of the brain due to these deficits, which can ultimately lead to cognitive impairments, stress-related disease, and the cyclical, systemic problems that result from inability to manage the stress response.

Chapter 2: Review of the Literature

Chapter 1 established the continued cultural situation that exists for children: complex trauma, which begins as childhood trauma exposure, the developmental consequences of toxic stress, and the cyclical relationship of these concepts as a system of complex trauma. I discussed child protection by mandated teacher reporting, highlighting the need for improved support and training on how to report with integrity and what symptomology to look for. I introduced the need for trauma-informed training in school districts that could address deficits in mandated reporting, decrease externalizing behaviors related to complex trauma, but to also strengthen educators' own perceptions and feelings of their own professional ability to care for these students and feel efficacious in managing student behaviors and meeting student needs.

Chapter 2 examines externalizing behaviors as they relate to school settings. Even though not all externalizing behaviors observed in children within the school setting originate from or are motivated by trauma exposure or complex trauma, there is a substantiated relationship between these behaviors and trauma, which will be discussed in this chapter. Regardless of the relationship to trauma, information in Chapter 2 attests to the qualities and characteristics of educators and school systems that benefit children who struggle with externalizing behaviors while creating the supportive network to catch and care for any student whose behaviors may stem from traumatic experience, while also supporting teachers and staff to feel more confident and able to meet student needs.

Externalizing Behavior Defined

Children who experience complex trauma related to exposure to ACEs (e.g., violence, abuse, and neglect) engage in externalizing behaviors related to their trauma exposure (Flotz

et al., 2013; Liu, 2004; McKelvey, Edge, Mesman, Whiteside-Mansell, & Bradley, 2018; Yoon, 2018). Externalizing behaviors related to trauma exposure are often only observed at face value and considered representative of a student's lack of effort, care, concern, or willful maliciousness. These misunderstandings can lead to mishandling of behavior situations by school staff, who may respond in relation to their own stress in dealing with the behavior in the moment, or who struggle with secondary trauma in relation to managing student behaviors stemming from complex trauma (Minero, 2017).

Ineffective behavior management can create a positive feedback loop between the child's behavior, the teacher's response, the child's self-esteem, and the teacher's self-efficacy.

Conversely, teachers who are able to build structured, caring emotional bonds with students who exhibit externalizing behaviors can support those students in learning and using pro-social, self-regulatory, and emotion regulatory skills, and decrease externalizing behaviors in the classroom (Baker et al., 2008, as cited by Williford et al., 2017). The relationship between teacher efficacy in managing externalizing behaviors related to trauma and ACEs stressors is largely understudied (Alisic, 2012).

Literature review of externalizing behavior produced variability in how the term is defined. According to the online American Psychological Association (APA) Dictionary of Psychology, in response to stressors, "externalizing behaviors and disorders are characterized primarily by actions in the external world, such as acting out, antisocial behavior, hostility, and aggression" (American Psychological Association [APA], 2018). In the publication, Children and Trauma: Update for Mental Health Professionals (2008), externalizing behavior also includes anger, irritability, and somatic complaints in a list of reactions that care professionals

will observe in children who have experienced one or many traumatic events (APA, 2018).

Other authors (Krueger & South, 2009; Liu, 2004; Williford et al., 2017; Yoon, 2018) cited the following behaviors to fit within the externalizing behaviors category:

- Impulsivity
- Hyperactivity
- Non-compliance
- Aggression (physical or verbal behaviors that harm or threaten to harm others, including children, adults, and animals (APA, 1994, as cited in Liu, 2004).
- Rule-breaking
- Disruptive behavior
- Delinquency, as measured by Achenbach's Child Behavior Checklist (Achenbach, 1991, as cited in Liu, 2004).

The Diagnostic and Statistical Manual of Mental Health (DSM-V) includes Oppositional Defiant Disorder (ODD), Conduct Disorder (CD), Intermittent Explosive Disorder (IED), Attention-Deficit Hyperactivity Disorder (ADHD), and Antisocial Personality Disorder as some of the externalizing behavior disorders classified within the diagnostic manual (American Psychological Association, 2013).

From an educational perspective, the Minnesota Department of Education (MDE) website provides a checklist of criteria for meeting special education criteria under the category of Emotional or Behavioral Disorders (EBD). The criteria covers both internalizing and externalizing behaviors, labeling them "significantly different behaviors" and goes on to define externalizing behaviors as "aggressive, hyperactive, impulsive behaviors that are

developmentally inappropriate, occurring across settings for at least 6 months, and significantly impede academic and/or social progress. These behaviors include:

- Physically or verbally abusive behaviors
- Impulsive or violent, destructive, or intimidating behavior
- Behaviors that are threatening to others or excessively antagonistic (Minnesota Department of Education, 2018).

Meeting special education criteria for EBD and other special education categories leads to the creation of an Individualized Education Program (IEP) plan, a legal document that outlines student strengths, needs, goals, services and accommodations necessary to support student progress in academics and social functioning within the school setting.

Externalizing behaviors should not be considered at face value but must be considered in more depth and with more care by school staff and educators. Krueger and South (2009) reviewed criteria presented by a task force created to examine classification of externalizing disorders within the then newly written DSM-V. They confirmed the theory that an externalizing disorder cluster exists, based largely on the shared characteristics of disinhibition in distress, comorbidity with other mental health disorders, relationship to substance use, and biomarkers still being explored within the scientific community. Their research included a review of an earlier study by Krueger, Markon, Patrick, Benning and Kramer (2007) of the etiologies of manifest symptoms that characterized externalizing behaviors within the previous DSM-IV. Krueger et al. found that manifest, or observed externalizing behaviors resulted from a number of sources, both individual and combined, and that more focus should be placed on

source, or etiology of the behavior for determination of clinical diagnosis, versus sole reliance on the presented behaviors themselves.

Flotz et al. (2013) further argued that use of clinical diagnosis based on observed behaviors alone leads to clinical pharmacological treatment that does not address histories of abuse, neglect, loss, or other ACEs in exposed children's lives. Ultimately, focus on relational, trauma-focused interventions is lost.

Externalizing Behaviors and Educational Impact

McKelvey et al. (2018) identified a need for further research linking early childhood exposure (infancy through toddlerhood) to ACEs with behavioral and academic problems in middle childhood. Although they identified research regarding ACEs exposure throughout childhood and related to negative health and life outcomes, they found little to no research measuring the relationship between early trauma exposure (before entering school age) and its impact on negative behaviors (externalizing, internalizing and attention) and academic outcomes (grade retention and Individualized Education Plan status). They hypothesized that childhood exposure to ACEs during infancy and toddlerhood were stronger predictors of negative externalizing behavior and academic outcomes in later childhood due to timing and influence on crucial cognitive development.

The researchers conducted a qualitative study using data collected for the Early Head Start Research and Evaluation Project (EHSRE). Participants in the project were low-income pregnant women and families with children birth to age three who met eligibility requirements for Early Head Start (EHS) programming. The data used for the study were collected at ages

1-3, and 11, a sample total of 1469 children. To measure ACEs exposure, an EHS-ACE Index was created for the study to match ACEs constructs, using responses at each age based on hypothetical discipline situations, checklist of stressful life events, and other standardized instruments. Observations were conducted in participant homes longitudinally, using the Home Observation for Measurement of Environment (HOME), resulting in a high level of interrater reliability, 80-85%. Physical abuse, emotional abuse, and neglect markers were measured. Parental mental health was measured using both the Center for Epidemiological Studies Depression Scale-Short Form (CESD-SF) and the Composite International Diagnostic Interview-Short Form (CIDI-SF) as measures of depression, in association with the stressful life events checklist to measure ACEs exposure. In all measures, the highest 10% were rated as highest risk.

The impact on academic outcomes was measured at the age 11 stage of the study, using the constructs of "ever or currently using an Individualized Education Program plan (IEP)," and "having ever had repeated any grades" (McKelvey et al., p. 171).

Lastly, the researchers used the Child Behavior Checklist for Ages 6-18 (CBCL/6-18) at the age 11 stage, to measure externalizing and internalizing problem behaviors, attention problems. Scores used were at the recommended levels to indicate borderline to clinically significant ranges of problem issues.

Logistic regression analysis was the statistical test used to measure associations with EHS-ACEs with problem behavior and academic outcomes, as compared to children rated with zero ACEs exposure. Researchers controlled for covariate influence related to EHS

programming, parent variables (race, education, age and income at age 11), and school (using free and reduced lunch), as well as child variables of intelligence and temperament.

The results of the study indicated that early childhood exposure to ACEs were significantly associated with academic outcomes. Parental report of children having an IEP since starting school were significant with just one ACEs at the p<.05 level, and even greater given exposure to three or more ACEs, at the p<.01 level of significance. Current IEPs were significant at the p<.01 level with three or more ACEs as well, but not in the categories of one or two ACEs exposure. This may indicate a child's initial inability to cope when entering school, but then acquiring coping skills or a reduction of ACE exposure over time. This may also illustrate the greater academic support need that remains ongoing for children who continue to be exposed to trauma and toxic stress.

Regression analysis also indicated statistically significant associations between EHS-ACEs and problem behaviors and attention. Analysis showed odds of having clinically elevated externalizing behavior problems to be "nearly three times higher for children with two, and over five times higher for children with three or more average ACEs" at the p<.001 level" (McKelvey et al., 2018, p. 173). ACEs were significantly associated with ADD/ADHD diagnoses during schooling, again with the aggregate influence of two times greater odds with two ACEs and three times greater odds with three or more ACEs. See Table 1, recreated from the original table found on page 173 of the study, for further examination of construct outcomes.

Table 1

Adjusted Odds Ratios for Academic Status and Adaptive Behavior by Adverse Childhood Experiences Scores

	Number of ACEs				
Construct	1	2	3 or More	Wald	
Academic Status					
Child ever had IEP	1.84 (1.04-3.25)*	1.62 (.88-2.97)	2.65 (1.42-4.95)**	10.62*	
Child has current IEP	1.49 (0.76-2.9)	1.51 (0.75-3.03)	2.48 (1.22-5.08)**	7.82*	
Grade Retention since First Grade	1.60 (0.79-3.28)	2.06 (0.98-4.34)†	2.58 (1.2-5.55)**	6.5†	
Adaptive Behavior					
Externalizing Problems	1.42 (0.83-2.44)	2.67 (1.54-4.64)***	5.36 (3.02-9.53)***	48.14***	
Internalizing Problems	1.34 (0.78-2.3)	1.99 (1.14-3.48)*	3.92 (2.19-7.01)***	29.84***	
Attention Problems	0.91 (0.45-1.83)	1.57 (0.78-3.14)	2.73 (1.34-5.55)**	17.08**	
ADD/ADHD since First Grade	1.56 (0.79-3.08)	2.08 (1.04-4.18)*	3.15 (1.53-6.48)**	11.66**	

Notes: Odds Ratios (90% CIs) represent comparisons to a zero ACEs score. Adjustments included EHS random assignment and location, parental race, education, age at enrollment, family income at age 11, percent free and reduced lunch of the school at age 11, child gender, temperament at age 1, and cognitive abilities at ages 1, 2, 3, and 11. †p<.10; *p<.05; **p<.01; ***p<.001.

This study concluded that early childhood exposure to adversity has a significant relationship to externalizing behavior and the need for greater academic support at middle childhood, with more exposure leading to more negative effects in both domains. The researchers also identified a continued need to examine cause and effect relationships between early exposure to ACEs, parental/child interaction and attachment, toxic stress, and early child physiological development in the impact of toxic stress on self-regulatory systems that impact behavior outcomes. The researchers stated in their conclusion that their study was the first in their review of studies that showed clinical elevation in attention problems using standardized tools; attention deficit hyperactivity disorder being comorbid with externalizing problem behavior trajectories (Ahmad & Hinshaw, 2017, as cited in McKelvey et al., 2018).

Another recent study examined the behavioral trajectories and protective factors of maltreated children over the course of 8 years. Yoon (2018) used data from the National Survey

of Child and Adolescent Well-Being (NSCAW-I) to conduct secondary research. The initial survey consisted of 5501 children who were identified as subjects of abuse or neglect investigations by Child Protective Services (CPS) between 1999-2000. Waves of data were collected over an 8-year span from children, caregivers, teachers, and case workers. Yoon's analysis sample focused on 449 of those children who remained in the home after investigation and were between the ages of 4 to 5 years at the baseline of her investigation. Given the data collected, Yoon investigated patterns of externalizing behavior problems over time in relation to earlier onset child maltreatment. Additionally, Yoon set out to determine what, if any, protective factors exist to produce more positive behavioral adjustment in light of earlier onset of maltreatment.

Yoon (2018) identified three externalizing behavior trajectory groups: High-decreasing (10%), moderate-increasing (13%), and low-stable (77%). To define externalizing problem behaviors, Yoon used the externalizing behavior subscale of the Child Behavior Checklist for children age 4-18 (CBCL 4-18), which highlights delinquent and aggressive behavior syndromes, completed by primary caregivers. Other measures examined included: maltreatment type and timing, child's prosocial skills within the first wave (approximately 1.3 years after baseline), and caregiver well-being (based on major depression, heavy drinking, and drug dependence) within the first wave. To measure this construct, the Composite International Diagnostic Interview-Short Form (CIDI-SF) was used. Yoon controlled for child's gender, race, and caregiver's current employment status.

Using Latent Class Growth Analysis (LCGA), Yoon (2018) found that the subjects of her study best fit within a 3-class model of *high-decreasing*, *moderate-increasing*, *and low-stable*.

High-decreasing class membership was indicative of clinically significant externalizing behaviors at each data wave period, gradually decreasing over time. Moderate-increasing class identified children in the sample with borderline externalizing behaviors that increased to clinical levels over the school age years. Low-stable membership included children who consistently showed normal levels of externalizing behaviors.

Yoon (2018) also examined predictive factors in those trajectory groups using logistic regression analysis and found that prosocial skills and caregiver well-being both significantly decrease the probability of child classification within the high-decreasing class as compared to the low-stable class.

A significant relationship was found between physical and sexual abuse and membership within the high-decreasing class, suggesting that clearly identified abuse at baseline may be related to clinical levels of externalizing behaviors throughout the school years. Yoon (2018) attributed the gradual decrease over time to interventions that may have decreased or eliminated direct abuse, along with the protective factors examined. Yoon also stated that a gradual reduction of externalizing behaviors over time is normative within the general population.

The moderate-increasing class was not identified directly by specific maltreatment at baseline and behavior was not significantly moderated by child's prosocial skills or caregiver well-being. Covariates of gender (male) and race (black, non-Hispanic) were found to have clinically significant bearing on membership within that classification. Yoon's (2018) analysis suggested that the absence of clear markers of maltreatment being related to increasingly significant externalizing behaviors within this group is attributed to those markers only being

rated at baseline, without examination of level of maltreatment at baseline, and measures of continued or chronic maltreatment exposure at each data wave.

Protective factors of prosocial skills and caregiver well-being were found to be significant in decreased membership within the high-decreasing class, indicating that a child's ability to manage behavior in prosocial ways in collaboration with a caregiver's ability to consistently provide care to self and to the child, is optimal for normal childhood behavior trajectories.

Behavior trajectories can be early indicators of negative academic outcomes, as identified in a study conducted by Vaughn, Wexler, Beaver, Perron, Roberts, and Fu (2011). The researchers set out to examine the relationship between school disengagement and its impact on psychopathology. Two hypotheses were introduced: (1) a positive correlation between school disengagement and psychiatric disorders, and (2) that school disengagement is related to externalizing behavior disorders. School disengagement was identified as absenteeism and cutting class, ultimately leading to adult social and life impairments, including not graduating high school and psychiatric diagnoses.

Data was taken from the 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), which is a nationally representative sample of 43,093 non-institutionalized U.S. residents aged 18 years or older that identified background information that included behaviors related to a range of psychiatric disorders. Additional behavior data were collected through psychiatric interviews, using the Alcohol Use Disorder and Associated Disabilities Interview Schedule--DSM IV version (AUDADIS-IV), with adequate test-retest reliability for antisocial personality disorder, and good internal consistency reliability for the

entire antisocial personality disorder criterion. To measure school disengagement, answers to embedded questions within the conduct disorder and antisocial behavior disorder sections were assessed: 1) "In your entire life, did you ever often cut class, not go to class or go to school and leave without permission;" 2) "In your entire life, did you ever have a time when you were often absent from school, other than when caring for someone who was sick;" and 3) "In your entire life, did you ever more than once quit a school program without knowing what you would do next?" (Vaughn et al., 2011, p. 194)

The researchers identified two levels of school disengagement based on the answers to those questions, labeled *Moderate* and *Severe*, with *Moderate* identified as answering yes to one of the three questions, and *Severe* identified as answering yes to two or three of the items. The moderately disengaged and severely disengaged groups were compared to a control group identified as *Engaged*, of which the respondents answered no to all three items. Adjusted odds ratios within 95% confidence intervals were used to reflect relationship strength when comparing lifetime school disengagement with specific psychiatric disorders, after controlling for: lifetime chemical abuse (alcohol, drugs, and nicotine), pathological gambling, and lifetime DSM-IV mood and anxiety disorders, and socio-demographics.

Findings showed that engaged respondents showed the lowest levels of antisocial behaviors. Severely disengaged respondents were shown to have five to ten times greater prevalence of antisocial behaviors compared to the engaged group and were six times more likely to receive an antisocial personality disorder diagnosis. Aggression and violent behavior that included bullying, pushing others around, hitting someone so hard to injure, and getting into fights using physical aggression were found to be highly correlated to the severely disengaged

group. Within both the Moderate and Severe groups, school disengagement was significantly associated with additional antisocial behaviors of animal cruelty, property destruction, lying, stealing, and harassment.

Findings also indicated significantly increased odds of not finishing high school or going to college within the group demographic found to make-up the severely disengaged group: white, U.S. born males within urban, midwest and southern states. Researchers stated that this could indicate something within the American culture that increases school disengagement. The research suggested that school disengagement is part of a process of conduct disordered behavior that culminates in school dropout.

In light of their findings, Vaughn et al. (2011) found a deficit in evidenced-based intervention programs designed to increase school engagement. A noted limitation to their study that bears significance to this topic was the causal structure of school disengagement and the lack to non-existence of longitudinal studies that examine environmental stress earlier in life that may affect genetic and phenotypic expression that could lead to the behavioral presentations within their own study of later life outcomes. The need for more research into the relationship between toxic stress, brain development, behavior, and academic outcomes was also identified in the other studies previously presented. Although the Vaughn et al. study did not link ACEs to participant history, the researchers amplified the significant role that school engagement has in later life outcomes as they relate to conduct issues and behavioral disorders, regardless of the initial source of participant behavior problems.

Blodgett and Lanigan (2018) further acknowledged the need and explored the opportunity for school personnel to identify student ACEs markers while conducting records

review of academic risk factors (absence, failure to meet grade level standards, and behavior concerns) to facilitate needed interventions in order to change negative outcome trajectories for troubled students. They reinforced the need for research into present-day ACEs identification versus previous studies conducted that relied upon caregiver and adult retrospective reporting on ACEs and later adult outcomes. As in previously examined studies, Blodgett and Lanigan explained the substantiated link between cumulative risk factors identified as ACEs markers and resulting chronic stress response that leads to atypical neural development due to the continued activation of physiological stress responses.

In their study, Blodgett and Lanigan (2018) used a representative sample of 2,101 K-6 public elementary school students from ten elementary schools across four school districts. To determine student risk, they used a 10-item questionnaire adapted from the original ACEs survey (Felitti et al., 1998), with replacement questions that were consistent with previous research recommendations as appropriate determinants of child maltreatment risk. Staff were trained on proper identification of ACEs risk factors using known, not supposed, information provided to them or to the school, by parent/caregivers, social service and child protection agencies. Data were collected as a measure of "during the previous 12 months, and since the child's birth" (p. 10) and covered the 10 questions adapted by the researchers. Affirmative answers were scored as "1" and no exposure was scored "0," with the sum of scores the child's ACE score.

Academic concerns were rated as "true" or "not true" in three domains: failure to meet grade level academic expectations, absence that interfered with student learning, and patterns of behavior problems (both internalizing and externalizing) that disrupted student learning and classroom environments.

Using binary logistic regression analysis and Generalized Estimating Equations were used to determine the impact of ACEs scores on the trajectory of school concerns after controlling for differences in school programming (varying school districts, personnel, and programs) and demographics (race, gender, socio-economic status, special education enrollment, grade level). Odds ratios were used to reflect the predictive strength of ACEs on academic success, attendance, and behavior while controlling for the other demographic and school program variables.

Researchers found that based on known ACEs and school functioning data, half of the students were reported to have no school concerns (51%). Of the population with school concerns (attendance, failure to meet grade level academic expectations, and problem behavior), 27% of the students had one area of concern, 17% had two areas of concern, and 5% had concerns with all three areas. Of the students with no known ACEs, 12% had at least two areas of school concerns. However, 52% of students identified as having concerns in at least two areas of school also had ACEs scores of three or greater, with 34% failing to meet grade level standards. Mean ACEs scores increased two to three times with an increase in school concerns. For example, the mean ACEs score for "no reported concerns" was 0.5. The mean ACEs score for "One Concern" was 1.1, and "Two or Three Concerns" was 1.9. This pattern existed for each individual concern reported.

Academic failure was moderately correlated to attendance, r (2101)=0.24, p<.001. Significant attendance problems were identified for 13% this population. Means comparisons showed students with significant attendance problems having mean ACEs score of 1.8, while students with no attendance issues having mean ACEs score of 0.8.

Problem school behavior was significantly related to ACEs scores, with increases in ACEs scores (mean ACE score range of 1.7-1.9) identified with externalizing behavior (16% of students), internalizing behavior (6%), and both externalizing and internalizing behaviors (6%). The mixture of both externalizing and internalizing behaviors was identified with the highest mean ACEs score (1.9). Academic failure was moderately correlated to school behavior, r (2101) =0.34, p<.001. While attendance and school behavior were only weakly correlated, each area of school concern significantly increased with an increase in ACEs scores, F (1, 2,098) = 169.9, p<.0001. Through ANOVA analysis, researchers also concluded ACEs risk was significantly related to income, race, and special education enrollment.

Blodgett and Lanigan (2018) concluded that schools can improve in their ability to identify students in need of trauma-informed practices by way of understanding and interpreting current and known information about their students. Their study demonstrated that school personnel are reliable assessors of ACEs risk, given known information about a student and when provided training in how to record and use the information to guide intervention and adjust school system approaches to student trauma. This non-clinical identification of risk can be used to drive programming interventions with school-wide sensitivity and support by understanding ACEs impact on the trajectory of school success outcomes.

Trauma-Informed Practice and Teacher Efficacy

Very little research exists that identifies teachers' own feelings and thoughts about working with students with externalizing behaviors (whether or not related to ACEs/trauma) and their own ability to meet student needs in relation to those issues. In a 2012 qualitative study, Alisic examined teachers' perspectives on working with traumatized children. Alisic stated that

'research on teachers' perspectives regarding child trauma is virtually non-existent' (p. 52). She aimed to use semi-structured teacher interviews to provide qualitative data analysis to better understand teacher perspectives in relation to supporting school children who have experienced trauma.

Twenty-one teachers from 13 schools participated in interviews conducted by two-person interview teams. The interviews were put through summative analysis and a summary process that illustrated themes in interview responses, while limiting subjectivity in responses. Current and former students of the teachers interviewed who had experienced a significant trauma demonstrated a variety of behaviors in the classroom, from internalizing (withdrawing), and externalizing ("acting out").

Results of Alisic's (2012) study indicated themes of teacher concern and self-doubts in four areas: (1) role of the teacher, (2) finding a balance in answering different needs, (3) need for more professional knowledge and know-how, and (4) emotional burden of working with children after trauma. Overall findings indicated that the teachers who participated in this study felt ineffective in their knowledge base and skills for management of student needs, specifically related to trauma exposure, and largely identified by student behaviors in the classroom and other school settings. Alisic made note of quantitative evidence from Kos, Richdale, and Hay (2006) that showed a relationship between teacher attitudes toward the perceived additional role of providing psychosocial support to students in need and their feelings of competency in doing so.

Teachers in this study also identified a lack of knowledge and competency in knowing when problem behaviors are related to trauma, when to refer troubled students to receive services

that the teachers themselves do not feel capable of providing, and where and how to refer those students. This study exposed the need for more research regarding teacher efficacy in managing student behaviors and classroom needs, potentially stemming from trauma history or continued trauma exposure.

Through her study, Alisic (2012) confirmed that teachers question the etiology of problem student behaviors that they are tasked to mediate daily--are they due to trauma or not, and does it matter? Blodgett and Lanigan (2018) argued that because school systems are in a position to meet the developmental needs of young children, a systemic, trauma-informed school approach is necessary, not only to address the needs of known and diagnosed student needs, but to reach those students who demonstrate both externalizing and internalizing behaviors of which underlying cause may never be confirmed. More research is needed to evaluate the outcomes of trauma-informed whole school approaches and how such approaches impact teacher efficacy and school outcomes (Alisic, 2012; Blodgett & Lanigan, 2018).

An article written by Delale-O'Connor, Alvarez, Murray, and Milner (2017) examined the relationships between teacher self-efficacy beliefs and how those beliefs impact their ability to manage behaviors in the classroom. The authors based their discussion on the impact of race, poverty, and trauma as sources of childhood adversity that, in many urban areas, leads to what they referred to as the "Cradle-to-Prison Pipeline (CTTP)" and they argued that the way in which teachers manage relationships with students can change the course down that path for many students, but that changes need to occur to affect teacher's own beliefs in their ability to reach troubled students.

Delale-O'Connor et al. (2017) that three domains exist that are essential to increasing teachers' own feelings about their abilities to manage behavior in the classroom: (1) learning about, building and sustaining powerful relationships with students; (2) learning about and developing an understanding of student experiences outside of school; and (3) recognizing and responding to students' traumatic experiences. Through their own literature review, the authors outline 10 themes that contribute to the CTTP, and they include traditional exclusionary school practices that focus on discipline and control reactions to behaviors, lack of understanding by educators, and unaddressed trauma.

To build teacher self-efficacy in working with students who deal with adversity, the authors stressed that educators must learn deeply about their students in order to build strong, supportive relationships that express earnest care for students, their strengths, and their needs. They cited previously conducted research by Milner (2010), who outlined relationship-building practices focused on learning about student interests, connecting and collaborating with students to build student-driven assignments and sharing, student-centered discussions that allow for students to share their experiences, and attending student events outside of the classroom to demonstrate a teacher commitment to students lives holistically (Delale-O'Connor et al., 2017). The authors proposed that by building this connectedness, teacher self-efficacy increases due to teachers' increased ownership of student success.

Further, Delale-O'Connor et al. (2017) stressed that the context of care must go beyond the classroom by teachers truly learning and understanding the societal context that surrounds their students by engaging in "community immersion" (p. 182). Through community immersion, teachers are provided the opportunity to learn about and participate within the communities that

they teach, again increasing their knowledge about strength and adversity that surrounds and shapes students outside of the school. The authors argued that this contextual knowledge can be taken back into the classroom and reinforce building strong relationships based on better understanding of the societal and cultural components that work to shape student behaviors within the classroom.

Lastly, Delale-O'Connor et al. (2017) explored increasing teacher self-efficacy by learning about and appropriately responding to students' traumatic experiences. They shared that when teachers increase their understanding of students' cultural and societal surroundings, teachers will also better understand the strain and stress that shapes student behavior--that adversity comes not only from witnessing and experiencing violence, but is also derived from deeper, historical, and structural deficits within the society itself that bleed into students' daily lives that can include poverty, racial bias, and crime.

Again, Delale-O'Connor et al. (2017) stressed that increased understanding of family and societal context and building strong relationships with students will enable teachers to change their mindset from seeing only the behaviors, to acknowledging the source of behaviors and then promoting resilience and positive change for students within a caring, trauma-sensitive learning environment. They recommended that teachers use resources such as open communication with students, families, and media to stay informed about their students' neighborhoods, allowing for proactive sensitivity and support for student needs. Additional resources recommended include: collaboration with trauma-informed professionals, such as social workers and psychologists to learn more about how to identify and respond appropriately to student trauma, and to be leaders in building school-wide trauma-informed practices. The authors stated that increased teacher

understanding of the relationship between behaviors and trauma will increase their own ability to support, rather than oppose, students in need.

Brunzell, Stokes, and Waters (2018) examined "meaningful work" in relation to teacher perceptions on working with students affected by trauma. Teacher self-efficacy emerged as a condition related to meaningful work in dealing with students with trauma backgrounds.

Brunzell et al. used a qualitative study design focused on thematic identification through interviews, journal entries, and audio-taped, fully transcribed discussions with 18 teachers from two Australian government schools that were identified as having traumatized students by way of low-income, transience, refugee and minority status. Researchers examined teacher responses to questions posed through two sessions during a 2-month period. Qualitative analysis was conducted and Brunzell et al. identified two major sources of meaningful work within the context of working with traumatized children: practice pedagogy and teacher well-being.

Practice pedagogy centered on student achievement and student well-being. Teacher well-being focused on workplace coping, self-regulation, relationships (with students and staff), and professional identity (including self-efficacy in terms of professional ability). Having a sense of power and control in order to make a difference in student behavior and achievement were identified as "individuation." "When teachers feel they have the power and ability to make a difference, effect change, and exercise control through their efforts...when an individual feels their self-esteem is bolstered because they believe they are valuable and worthy at work" (Baumeister & Vohs, 2002, as cited by Brunzell et al., 2018).

Teachers' reflections exposed the fortification of individuation when they felt supported in managing complex student behaviors, and when having autonomy and control to create

lessons that mattered. Alternatively, decreased individuation stemmed from feelings that their own individual deficits in pedagogy were responsible for deficits in student achievement, behavior management, and ultimately meaningful work. Participating teachers identified a need to realize and understand the impact of social context on student behavior and learning in order to increase their own motivation to thoroughly engage within and understand the community and social structure that surrounds their students, but to also increase the teacher's own feelings of integration and purpose to affect change. Teachers identified the need for strategies to work with trauma-affected students to better manage and support self-regulatory needs in the classroom with trauma-sensitivity.

Additional findings supported the need for teachers to feel effective in contributing to a greater good as a part of teacher well-being, this component also requiring integration within the community and understanding the social context of students' lives. More importantly, teacher well-being was connected to teacher self-efficacy in managing their own emotions, thoughts, and self-regulation when dealing with students' behavioral needs in the classroom. Secondary trauma was cited as a challenge to teacher well-being, buffered by building and maintaining deeper relationships with students and with coworkers. Given stronger relationships, teachers reported stronger ability to apply and to model appropriate responses to adversity for and to their students.

Findings to the study ultimately concluded that the teachers felt they did not receive trauma-informed training, nor did their schools receive resources necessary to counter social and cultural influences related to student trauma. Additionally, they confirmed the need for more focus on teacher well-being to increase teacher self-regulation and emotional positivity in order

to continuously manage difficult student behaviors with true compassion and empathy, and to continue to model and support overcoming adversity.

Identification and recognition of ACEs impact on student outcomes led to assertive action to change the trajectories of traumatized students, addressed through a community-wide initiative in Washington State. The community initiative opened dialogue and exploration into empirical research regarding ACEs and complex trauma, and how both create the toxic stress that negatively impacts behavior, neurodevelopment and brain function, and how these effects lead to poor social outcomes within their own communities. Given the background research on ACEs, the initiative's focus became the concept of resilience as a protective factor for coping with and managing toxic stress from ACEs. Lincoln High School became an important part of this initiative, as described and analyzed within the 2015 research report, "Higher Resilience and School Performance Among Students with Disproportionately High Adverse Childhood Experiences (ACEs) at Lincoln High, in Walla Walla, Washington, 2009 to 2013." The 2015 report written by Longhi, in collaboration with other professionals, provided statistical analysis of the process and outcomes employed by Lincoln High School in response to ACEs and the need to improve resilience.

Beginning in 2009 at Lincoln High School, an alternative school in Walla Walla, Washington, a paradigm shift in school-wide acknowledgement of ACEs and the identification of the need to build resilience, safety, and secure and caring relationships was instituted. School-wide, trauma-informed "virtuous cycles" began, with staff and administration focused on four interrelated cycles of care: The Safety Cycle, Value Cycle, Conversations-Normative Cycle, and Learning Cycle (Longhi, 2015, pp. 8-10). What they employed was not a specific curriculum.

Instead, the cycles were a systemic, continuous loop of action-response created through a shift in mindset and values for educators, administrators, and students, focusing on support, safety, and sensitivity to ACEs and ongoing student trauma. Lincoln High School personnel met and in focus group discussions identified the virtuous cycle concepts they deemed necessary to the creation of a trauma-informed system based on building student resilience:

- Greater learning (academic achievement) will occur due to fewer trauma triggers, generated by more sense of safety, different values and teacher-student relations, sustained by students' own reinforcement of different skills and norms.
- It is not a matter of just changing curriculum or training teachers to implement different school practices. It involves changing values and mind-sets (often difficult for some teachers and school staff). It involves engaging in 'conversations that matter' and supportive relationships, not only modifying 'ways we teach.' It involves supporting ways in which students themselves set and enforce new behavioral norms that lead to more safety, resilience, learning and academic achievements. (Longhi, 2015, p. 10)

The concepts of focus established by school personnel aligned with factors that students identified as being important experiences in school and life:

- learning to trust, confide, be liked and loved
- learning to respect themselves, to respect and help others, have healthy role models
- learning to be responsible for their actions, control themselves when upset or angry,
 ask for help and solve problems, have clear expectations

• learning that others were proud of their academic achievements (grades), becoming themselves proud of their grades, doing work on time and expecting that everything will be OK. (Longhi, 2015, p. 11)

Students within the program, although scoring disproportionately high ACEs scores (mean average score = 4) as compared to national averages, demonstrated significant growth in resilience which was statistically correlated to increased student reading and math achievement, grade point average (GPA), and attendance. Lincoln High School experienced an 85% decrease in school suspensions after implementing trauma-informed practice (Stevens, 2014, as cited by Blodgett & Lanigan, 2018).

Outcomes were measured by the Longhi (2015) study which was conducted between 2013-2014, 4 years after the implementation of Lincoln High's virtuous cycles program. The study was both quantitative and qualitative. Data were collected through student surveys on their ACEs and resilience factors prior to attending Lincoln High School and after. Students were also asked open-ended questions, with patterns in their response-type and language used as qualitative data to perform factor analysis to identify categories of meaningful life and school experiences. Staff surveys were also conducted to measure students' ACEs exposures and scores, and record reviews were completed to analyze the impact on achievement and student retention rates.

ANOVA results indicated significant mean average differences in resilience scores of 111 participants from pre to post experience at Lincoln High. Three subscales for resilience were measured: optimism, problem-solving, and supportive relationships. All three subscales resiliency scores significantly increased from pre to post experience. Additionally, this change

in resilience was not significantly correlated to level of ACEs exposure. Those who initially scored low in resilience at the start of Lincoln High programming (35%) increased to membership within the Average grouping (26%) and the High grouping (46%), a 72% improvement. Those who initially scored within the Average group increased from 28% to 52%, with 42% scored as highly resilient post-program. Participants who initially scored within the High Resilience Group maintained membership within that group (Longhi, 2015).

The effect of increased resilience on school outcomes was also significant. Using multivariate regression analysis, Longhi (2015) reported a significant and large correlation between lower rates of absenteeism *after* program involvement for 10th graders (beta = -.225, p<.07), and even higher significance in effect for 12th graders (beta = -.638, p<.003). Additionally, when comparing change in resilience to standardized test scores, data indicated that the increase in resilience was significantly correlated to increased reading performance gain from 8th grade (pre-Lincoln programming) through 10th grade, not due to significance in resilience growth alone, but due to the statistically significant relationship between increased resilience and decreased absenteeism; greater commitment to the program led to improvement in reading and math performance (Longhi, 2015). This same condition applied to overall GPA. A cyclical relationship was identified: greater resilience = lower absence = higher school performance.

Ultimately, Longhi (2015) determined that improved resilience was a moderator for the impact of ACEs on school performance. Regression analysis was used to compare the eighth grade GPAs of the Low to High resilience groups by ACEs level to the current GPAs of the current resilience level groups. Longhi found that high resilience attained and sustained through programming led to significantly increased GPAs, regardless of ACEs score level: "For students

with high resilience (70% of post-program participants), the regression line is almost flat, indicating no statistically significant relationship between ACEs and grades (r= -.118 p= .168)" (Longhi, 2015). The post-program Low resilience group (30%), who had not reached a high level of resilience eighth grade GPA scores based on low resilience and ACEs level: Low levels of resilience impacted by high level ACEs scores led to lower GPA consistently over time.

The administration and school personnel at Lincoln High School demonstrated initiative, innovation, and solidarity to form a trauma-informed system focused on building resilience. They worked to establish a cycle of trust, safety, care, and learning that created a positively reinforcing feedback system that led to increased student outcomes of attendance and reading and math achievement. The systemic, trauma-informed focus at Lincoln High School led to quantifying the statistically significant impact of high levels of resilience in moderating the damaging effects of ACEs on student school outcomes.

One school-wide program, Healthy Environments and Response to Trauma in Schools (HEARTS) addressed all components discussed throughout Chapter 2: the need for trauma-informed practices to build teacher self-efficacy, decrease problem behaviors, and increase student success outcomes.

Dorado et al. (2016), working through the University of California, San Francisco (UCSF), created the HEARTS program in 2008 as a response to the identified need for schools to address chronic stress created and sustained through poverty, community violence, and both implicit and explicit societal bias. The authors noted the nation-wide awareness of the link between traditional punitive and exclusionary school discipline procedures affecting a disproportionately high number of students of color and students with disabilities that leads to

the "school to prison pipeline" as a result of increased school drop-out rates. The authors also recognized the impact of poverty, violence, and bias as foundational concerns that create and sustain toxic stress for students within those communities, thus fueling the need to change traditional school culture from only seeing students by their disruptive behavior, to identifying students' emotional and physical needs and supporting their growth in adapting to adversity, through a trauma-informed perspective.

The mission of the HEARTS program was to provide an approach to trauma-informed school practices that would increase wellness for students and staff, increase students' school success-outcomes, increase the knowledge and aptitude of school personnel in providing trauma-informed support, and decrease disciplinary actions, specifically those targeting minority students.

Dorado et al. (2016), in collaboration with the San Francisco Unified School District (SFUSD), constructed a program that drew upon other research-based techniques. Their whole-school approach was formed through the use of the Trauma and Learning Policy Initiative's (TLPI) "flexible framework" (addressed in Chapter 3). HEARTS levels of services aligned with the Response to Intervention (RtI), multi-tiered levels of intervention: Tier 1 (universal supports), Tier 2 (secondary interventions when universal supports are not effective, and Tier 3 (targeted and intensive supports when secondary interventions are not effective). Each tier was guided by principles formed through participation in the Trauma Informed Systems (TIS) Initiative workgroup held by the San Francisco Department of Public Health (SFDPH):

- Understand trauma and stress
- Establish safety and predictability

- Foster compassionate and dependable relationships
- Promote resilience and social emotional learning
- Practice cultural humility and responsiveness
- Facilitate empowerment and collaboration

Within each tier, the program used the Attachment, Self-Regulation, and Competency (ARC) framework, which centers on building resilience by fostering secure caregiver/child attachment, regulating a child's body/thoughts/feelings and behavioral expressions, and developing a child's competency through building and supporting a sense of agency and realistic self-identify (Blaustein & Kinniburgh, 2010). Dorado et al. (2016) chose The ARC framework because it was created specifically to provide practical, yet flexible application of principles and methods for treating childhood traumatic stress in environments outside of clinical settings, such as homes, group homes, and schools.

For Tier 1, staff was trained on the interrelated complexities of trauma, chronic toxic stress, and how adversity affects student learning, physiology, behavior, and development. Staff learned common language and strategies that could be used by anyone, anytime across their school settings. After initial training, the team provided follow-up training on secondary trauma (to increase staff understanding of their own response to child behavior and trauma), and real-time consultation with mental health clinicians to model, then build and support staff member ability to provide "in-the-moment" interventions.

Within Tier 2, HEARTS clinicians worked with pre-existing coordinated care teams comprised of school staff members to identify at-risk students within a collaborative, discussion-based format, evaluating through a trauma-informed lens. The team also created trauma-

informed behavior plans and developed discipline systems that were supportive of student growth and understanding of student trauma.

Tier 3 provisions included direct therapy with students by HEARTS clinicians, guided by the ARC framework. Within this level, clinicians worked directly with students on skill-building, and collaborated with caregivers, focusing on attunement of the caregiver to the efforts of the child in therapy, but also to address the cyclical nature of familial trauma. Clinicians consulted with and advised teachers and other school staff during this stage of intense intervention, further demonstrating the effectiveness of community collaboration in addressing childhood trauma.

Dorado et al. (2016) evaluated the HEARTS program to answer four questions:

- 1. Was there an increase in HEARTS school personnel's knowledge about addressing trauma and in their use of trauma-sensitive practices?
- 2. Was there an improvement in students' school engagement?
- 3. Was there a decrease in behavioral problems associated with the loss of students' instructional time due to disciplinary measures taken?
- 4. Was there a decrease in trauma-related symptoms in students who received HEARTS therapy?

Three of the schools evaluated were elementary schools (K-5) and the fourth school was kindergarten through eighth grade. The schools received HEARTS programming over a varied number of years, with a range of 5 consecutive years at School A, to 1.5 years at School D.

There was a total of 1,243 students across the four HEARTS programmed schools. A total of 175 staff members who were trained throughout the five years of responded to the HEARTS

Program Evaluation Survey, and 46 of the 88 students who received Tier 3 therapy interventions were evaluated based on analysis of the Child and Adolescent Needs and Strengths (CANS) scale.

Using a within-subjects paired T-Test, Dorado et al. (2016) found significant increases in each measure of staff self-efficacy in relation to understanding trauma and supporting trauma-impacted students, identified by the following:

- 1. their knowledge about trauma (57% increase),
- 2. trauma-sensitive practices (68% increase),
- 3. their understanding about how to help traumatized children (61% increase),
- 4. their knowledge about secondary trauma (65% increase), and
- 5. their actual use of trauma-sensitive practices (49% increase)

Findings indicated statistically significant change in each measure of student engagement:

- 1. students' ability to learn (t=11.06, p<.001),
- 2. students' time on task (t=10.57, p<.001),
- 3. students' time spent in the classroom (t=12.43, p<.001),
- 4. students' school attendance (t=6.67, p<.001)

Next, findings of change in number of disciplinary referrals by chi square analysis indicated a 32% decrease in total incidents and a 43% decrease in incidents involving physical aggression only one year after program implementation, when compared to pre-program data. After 5 years of program implementation, behaviors decreased substantially: 87% decrease in

total discipline referral incidents, with an 86% decrease in physically aggressive incidents, and a 95% decrease in out-of-school suspensions, when compared to pre-program data.

Lastly, findings established using within subjects paired T-tests on CANS scores pre and post therapy, indicated significant decreases in trauma-related symptoms in all five items used to determine trauma-treatment effects:

- a. Adjustment to trauma (t=3.97, p<.001),
- b. Affect regulation (t=4.95, p<.001),
- c. Intrusions (t=2.30, p<.001),
- d. Attachment (t=4.15, p<.001), and
- e. Dissociation (t=2.20, p=.033)

Dorado et al. (2016) identified limitations to their study but expressed the preliminary evidence of the effectiveness of the HEARTS program within the populations examined, and that the program's outcomes presented evidence to support future research on the generalization of the HEARTS program.

Table 2
Summary of Chapter 2 Research Studies Examined

SOURCE	TYPE OF STUDY	PARTICIPANTS	PROCEDURE	FINDINGS
Alisic (2012)	Qualitative study to investigate largely under-studied issue of teacher perspectives on working with traumatized children	21 elementary school teachers	Summative analysis of semi- structured interviews	Prominent themes outlined uncertainty about providing optimal support to traumatized children - themes of importance: role of teacher, finding balance in meeting different needs, need for more professional knowledge, emotional burden
Blodgett & Lanigan (2018)	Qualitative study to measure association and odds ratios for school success markers in relation to ACE identification by school staff	2101 k-6 students, 179 classroom teachers, 100 additional staff members; all participants across 4 school districts and 10 participating schools	ACEs markers identified by teachers through already known information - cross analyzed with student success markers of attendance, meeting grade level academic expectations, and behavior issues.	Direct relationship between ACEs scores identified through current known data provided by teaching staff and school concerns. Trajectories indicated by predictive odds ratios show dose-response between ACEs scores and school concerns.
Brunzell, Stokes & Waters (2018)	Qualitative analysis	18 classroom teachers from two government schools in Australia	Interview, journal and discussion data analyzed through thematic interpretation	Teacher's perception of meaningful work influenced by self-efficacy in practice pedagogy and teacher well-being when working within traumaimpacted classrooms.
Dorado, Martinez, McArthur, & Leibovitz (2016)	Quantitative study designed to measure effectiveness of HEARTS programming on staff perceptions of change due to trauma-informed practice, and student outcome effects	1243 students from 4 schools that implemented HEARTS programming. 175 school personnel across the four schools completed surveys for analysis	HEARTS Program Evaluation Survey used as 1- time, pre/post ratings of staff perceptions of programming outcomes. SPSS analysis.	Significant increases in teacher self-efficacy in trauma-informed practice, increased student engagement, decreased discipline reports and suspensions, and decreased trauma symptoms related to trauma-informed schoolwide approach

Table 2 (continued)

SOURCE	TYPE OF STUDY	PARTICIPANTS	PROCEDURE	FINDINGS
Longhi (2015)	Mixed methods	111 students who attended Lincoln High School from 2009-2013	Statistical analysis of pre- post levels of resilience and relation to achievement and attendance	Statistically significant increase in resilience, statistically significant impact on school attendance. Increased academic achievement correlated to increased attendance. Resilience determined to be a moderator in the damaging effects of ACEs on school success outcomes.
McKelvey, Edge, Mesman, Whiteside- Mansell, & Bradley (2018)	Qualitative study conducted to determine impact of ACEs on behavior and academics into middle childhood by parent/caregiver rating analysis	1469 participants, with data gathered at ages 1, 2, 3, and 11 through the Early Head Start Research and Evaluation Project	Determination of # of ACEs over course of early childhood, and analysis of adaptive behavior and academic outcomes in relation to early ACE exposure	ACEs exposure significantly associated with school outcomes, and significantly associated with children's behavior, with children having clinically significant externalizing behavior problems of nearly three times higher for two ACEs, five times higher for 3 or more ACEs
Vaughn, Wexler, Beaver, Perron, Roberts, & Fu (2011)	Quantitative study used to measure indicators of school disengagement in relation to psychiatric disorders	Data from nationally representative sample of US adults (N=43,093)		Significant correlations and odd ratios found between severely disengaged students and later adult diagnosis of antisocial psychopathology and externalizing, aggressive behaviors

Table 2 (continued)

SOURCE	TYPE OF STUDY	PARTICIPANTS	PROCEDURE	FINDINGS
Yoon (2018)	Quantitative study of CPS child populations over 8 years and applied to analysis, to determine if protective factors alter trajectories of externalizing behavior	449 children involved in the child welfare system from ages 4-5 through preadolescence ages of 9-13	Four data collection waves using CPS reports and caregiver reports of maltreatment. Use of rating scales for caregivers to measure child externalizing behaviors, prosocial skills, and caregiver well-being.	Pro-social skill-building and caregiver well-being significantly related to improving externalizing behavior trajectories in maltreated children.

Chapter3: Summary and Interpretation

Chapter 3 is organized into three subsections based on literature review from Chapter 2:
Review of findings, Limitations, and Recommendations for Future Practice. Review of findings summarizes literature reviews that link relationships between trauma, development, behavior, and student outcomes. Teacher self-efficacy is addressed in managing resulting behaviors within and without the supportive network of trauma-informed systems. The limitations subsection discusses the areas identified within the literature that need call for further research.

Recommendations for future practice includes recommendations proposed within the literature reviewed as well as researched strategies and resources available to educators to pioneer efforts in creating school-wide trauma-informed practices while building teacher self-efficacy in managing externalizing behaviors, regardless of etiology.

Review of Findings

Articles and studies reviewed established the cause-effect relationship between childhood trauma to toxic stress and neurodevelopment (McKelvey, et al., 2017; Perry, 2016; Shonkoff & Garner, 2012) and the impact of such adversity on behavior, academic and other student outcomes (Blodgett & Lanigan, 2018; McKelvey et al., 2018; Vaughn, et al., 2011; Yoon, 2018).

Externalizing behaviors were shown to be an expression of emotional and physiological response to adverse childhood experiences. The literature explained the prevalence of ACEs (Saunders & Adams, 2014) and illustrated the need for more research into the impact that ACEs has on the educational field in terms of dealing with the emotional and behavioral needs of affected students (McKelvey et al., 2018; Yoon, 2018). Vaughn et al. (2011) established the relationship between a lack of school engagement for troubled youth leading to later adult

psychosis. Yoon (2018) and McKelvey et al. (2018) discussed student trajectories related to adversity, highlighting greater need for school supports to manage clinically significant levels of problem behaviors throughout childhood when the mediating effects of caring and supportive attachments have not been present. Research reviewed indicated that teachers do not feel efficacious in responding to trauma-affected students and find it difficult to manage problem behaviors in the classroom.

Teacher self-efficacy was found to be a highly important component to managing externalizing behaviors (Alisic, 2012; Brunzell et al., 2018; Delale-O'Connor et al., 2018), but was also hindered by lack of trauma-informed training and teachers' own experiences of secondary, or vicarious trauma (Brunzell et al., 2018; Minero, 2017). Teachers reported to need more professional development in the area of trauma-informed practice to build confidence in addressing emotional and behavioral needs of their students (Alisic, 2012; Brunzell et al., 2018). The qualitative studies that examined teacher self-efficacy through teacher reflection and interviews shined a light on the growing need for teachers to become engaged not only with the student and the curriculum, but with the community, families, and social context within which they teach. By doing so, teachers gain confidence in understanding student behaviors, realizing and interpreting the cause of student behaviors, and ownership in supporting students in managing adversity by modeling appropriate responses (Delale-O'Connor et al., 2018).

Blodgett and Lanigan (2018) examined how classroom teachers can be effective in identifying student ACEs by way of using existing knowledge of students, families, and social context in collaboration with school success information to inform school-wide practices to mediate the effects of trauma on school success. Many of the studies reviewed, most notably

Longhi (2015) and Dorado et al. (2016), highlighted the importance of creating a traumainformed environment that supports building quality relationships with students; that secure and trusted relationships between educators and students builds resilience in students, moderating the negative impact of adversity on student achievement and behavior.

Clearly, it stands to reason that a shift in education must occur. In order for teachers to feel impactful and effective within their profession, they are required to put forth more time and energy to connect with students in more than superficial, teach-only ways. Teachers must build relationships with students in earnest, and to do so, must take on a mindset that is sensitive to the student's world beyond the classroom.

For teachers to engage in this paradigm shift requires the support of administrators to encourage and produce a school environment conducive to changing the focus from controlling discipline and zero-tolerance policies to trusting relationships and meaningful, caring responses to student needs. School administrators can support this shift in school culture by providing professional development, pre-service, and in-service trainings on trauma, ACEs, toxic stress, and secondary trauma. The research within this literature review identifies the need for further research, specifically quantitative studies, that examine the effects of trauma-informed practices on both student outcomes and teacher self-efficacy.

Limitations

There was limited research found to establish teacher ratings of self-efficacy in managing externalizing behaviors in the classroom. Review of studies within this paper also illustrated the need for further research into the effects of trauma-informed training on teaching and the teaching experience. Additionally, I found only one study that rated teacher feelings of self-

efficacy *after* a specific behavioral intervention or trauma-informed practice implementation (Dorado et al., 2016).

Another limitation to the findings discussed in literature reviewed is the fact that not all externalizing behaviors are driven by trauma exposure, trauma history, or ACEs. My argument is such that as educators, we may never know the cause of problem student behaviors in the classroom. However, if we are trained to understand trauma and adversity and its effects on childhood development, cognition, behavior, and learning, we can push ourselves to better understand the circumstances that surround the child when any behaviors are observed and experienced, regardless of cause.

The research within this paper supports the idea that to be more efficacious in our duties as teachers, we must be willing to take on the challenge of building deeper relationships with our toughest students, and by doing so, build our own resilience in times of adversity within and outside of the classroom. Dorado et al. (2016) demonstrated that a whole-systems school approach to providing trauma-informed practices within a tiered level of service that included universal, school-wide trauma-informed procedures was effective in increasing teacher self-efficacy in managing behavior, increasing student success outcomes, decreasing problem behavior, suspensions, and trauma-based symptoms.

Authors of some studies included limitations based on their need to collect historical and reflective data. Most studies reviewed, quantitative and qualitative, relied on caregiver, student, or adult reporting, oftentimes retrospectively. Recall of information may be inaccurate due to many factors. Additionally, statistics for ACEs, abuse, and neglect were not consistently reliable across reporting agencies, as highlighted by Saunders and Adams (2014).

Recommendations for Future Practice

I recommend that school systems provide trauma-informed care and support by changing the school climate from punitive to protective. This cannot be done by following a singular manual, protocol, or procedure, but by examining multiple research-based studies and programs available in order to create and implement a cumulative trauma-informed program designed to fit their needs.

Many organizations provide information on the effects of trauma on children and their development. The Child Trauma Academy was created by Dr. Bruce Perry, a leader in childhood trauma research and how it relates to neurodevelopment and allostatic load in children. Its website offers webinars, research-based interventions, and studies that support individuals, families, and society as a whole in becoming more trauma-informed.

Another source for educators is the Trauma and Learning Policy Initiative (TLPI), a collaboration of Massachusetts Advocates for Children (MAC) and Harvard Law School. TLPI supports schools and educators in building trauma-sensitive schools and is responsible for the distribution of the publication created by MAC in 2005 titled, Helping Traumatized Children Learn, which has distributed over 95,000 copies and includes the Flexible Framework (tailored and adjusted to fit site needs) as a systems approach to creating trauma-sensitive school practice ("About TLPI" traumasensitiveschools.org). Dorado et al. (2016) used the TLPI flexible framework in creating the HEARTS program discussed in Chapter 2.

The National Child Traumatic Stress Network (NCTSN) is funded by the Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services, and jointly coordinated by UCLA

and Duke University and contains a vast amount of information about childhood trauma. Its website has links to an entire area dedicated to schools as trauma-informed systems with a link to resources specifically for schools.

Review of the literature identified trauma-informed interventions and strategies.

Cognitive-Behavioral Intervention for Trauma in Schools (CBITS) and Support for Students

Exposed to Trauma (SSET) were mentioned by Blodgett and Lanigan (2018) as evidence-based programs designed for schools. The HEARTS program (Dorado et al., 2016) and the virtuous cycles used at Lincoln High School (Longhi, 2015) are examples of trauma-informed flexible framework application, whole-systems approaches used to increase resilience to moderate the impact of ACEs on student behavior and academic outcomes.

The ARC framework, created by Blaustein and Kinniburgh (2010) and explained in their book, Treating Traumatic Stress in Children and Adolescents: How to Foster Resilience through Attachment, Self-Regulation, and Competency, is resource for caregivers and educators that teaches and guides trauma-informed principles, strategies, and skills centered around improving relationships, self-control, and self-identity for trauma-impacted children.

The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2013) is an organization that researches and evaluates evidence-based social and emotional learning (SEL) programs. Their 2013 CASEL Guide: Effective Social and Emotional Learning Programs is available free online and includes ratings and recommendations for SEL programs, as well as guidelines for schools in selecting appropriate programs to meet student needs.

Summary

Through this literature review, I realized that there is no singular answer, curriculum, or strategy that will ameliorate the trend of students dealing with adversity and schools ill-equipped to support them. The literature reviewed identified core concepts that are important for school administrators and educators to consider when evaluating and implementing school-wide traumainformed practices and environmental shifts from punishment to support.

First, administrators must lead the way into school-wide trauma-informed practice. The priority must be placed on trauma-informed training, to support the needs of students, but to also support the emotional and professional needs of staff. Training cannot stop at pre-service, but should be an on-going, systems-based approach that includes focus groups and consultation with mental health professionals, with the focus being on building relationships with students and understanding their current events, then collaborating on how to build student resilience and coping skills. All systems and participants within the function of an educational setting must be compelled by leadership to be "on-board" with the shift in mindset to affect change in everything from disciplinary practices (i.e., from punitive and controlling to supportive and guiding) to academia (i.e., teacher-led to student-guided learning).

Becoming trauma-sensitive includes building a school climate where students feel safe to express feelings and emotions and staff feels comfortable to approach behaviors in a responsive way without fear of acting counter to the school culture. Protocols and procedures for discipline should be created with student sensitivity in mind, where behavior is examined as a possible signal of distress and appropriate supports provided, case by case. Teachers should evaluate their own goals in teaching and determine to what level they are willing to commit. Today, in

light of trauma research, teachers are tasked with far more than lesson-planning; they must be willing to truly learn about their students--their strengths, the nature of their struggles, and the adversity they deal with, maybe on a minute-to-minute basis.

Community support is necessary in building trauma-informed school practices. School administrators and educators can communicate openly and often with families and community members about student needs outside of school. They should engage within the community to effect social change that can positively impact students' lives, while making it known within the community that trauma exists in all different forms and that the school is sensitive to it.

This movement begins with the courage of educators to move away from the acceptance of traditional views about childhood problem behavior into embracing new approaches to meeting students' deeper emotional, behavioral, and physiological needs--through leadership in and the provision of trauma-informed practices.

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APPENDIX

The following excerpt was taken directly from, "What is Complex Trauma? A Resource Guide for Youth and Those Who Care About Them." (Spinazzola et al., 2017)

Complex Trauma

Sometimes, young people grow up with a lot of bad things or hardly any good things, or both. And sometimes the same bad things happen so often, youth might think that this is just how life is. There could be trouble at home, like grown-ups fighting all the time or not giving children things they need like enough to eat, warm clothes, hugs, words of encouragement, or praise. Sometimes, things are bad in a way that hurts young people on the inside, where no one can see, like when grown-ups, older siblings, or peers are constantly saying terrible things about them, threatening them, or getting mad and blaming them for things that are not their fault. Some youth live in scary neighborhoods where it never feels safe outside their home. It can be really hard when bad stuff starts to pile up. Many children and adolescents feel like there's no one around to fix things, and no one in their corner. They can feel afraid, sad, or mad a lot of the time, or blame themselves for what's going wrong. It can also be hard to trust people when you never know if someone is going to let you down, disappear, or attack you all of a sudden. If you feel like people don't care about you, you might start thinking you deserve the bad things that happen. Instead of feeling loved and special, you might not feel good about yourself. You might feel like you're really different from other people and like you don't fit in, especially if you see others having good times with their families and having grown-ups they can count on. It might feel like you'll never be good at anything no matter how hard you try, and you want to just give

up. It can feel really hopeless. When youth feel like this, it usually doesn't get better on its own.

Sound complicated? You bet. That's why it's called Complex Trauma.