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EXAMINING THE IMPACT OF TRAUMA-INFORMED CARE TRAINING ON EDUCATORS' KNOWLEDGE, ATTITUDES, AND BEHAVIOR: A QUALITATIVE STUDY

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
International Family and Community Studies

by Emily Smith Schafer August 2019

Accepted by:
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ABSTRACT

According to the National Survey of Children's Health (NSCH), nearly 35 million children in the United States have experienced one or more types of significant childhood trauma. In the average public school, this statistic translates to as many as half of the students in a given teacher's classroom. Children exposed to the toxic stress of trauma often experience negative consequences that affect their academic, psychological, socialemotional, and behavioral health. To aid educators in addressing this reality, traumainformed care practices have increasingly begun to be translated into professional development opportunities for educators. One such training, Compassionate Schools, has been recently evaluated using the Attitudes Related to Trauma-Informed Care (ARTIC) scale. Comparing pre and post-test scores in a previous study on the ARTIC, researchers found a significant change in the attitudes of participating educators of a standard deviation. In an effort to clarify and contextualize these results, the current qualitative study involved conducting follow-up semi-structured interviews with ten participants of the Compassionate Schools training who were public school teachers in a southeastern school district in the United States. Findings added to the nascent literature evaluating the impact of trauma-informed care training, by exploring perceptions of changes in knowledge, attitudes, and behavior of educators who attended the Compassionate Schools training, and by providing recommendations for improvement and additional needed resources to support implementation of the trauma-informed care practices.

This dissertation is dedicated to survivors of childhood trauma.

To the dozens I've known intimately:
your courage, resilience, and bravery
to fight for the life you deserve
inspires my work.

May we create a gentler world.

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CHAPTER ONE

INTRODUCTION TO THE STUDY

Childhood trauma is both common and profoundly detrimental to developmental outcomes (Bethell, Newacheck, Hawes, & Halfon, 2014; Feletti & Anda, 2010; Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2016; Perry, 2001). In a nationally representative survey conducted by Finkelhor and colleagues (2005) from December 2002 to February 2003, more than half of children and youth ages 2 to 17 years had experienced a physical assault during the previous year. One out of three had been a witness to violence; one out of eight had experienced abuse or neglect from caregivers; and one out of twelve had been sexually victimized. Only 29% of children and youth had no direct or indirect victimization. In a follow-up study conducted from August 2013 to April 2014, estimates of youth exposure rates to trauma ranged from 57% to 75% depending on the type of trauma (Finkelhor, Turner, Shattuck, & Hamby, 2015). Perfect and colleagues (2016) found similar prevalence rates, estimating that two out of three students had experienced at least one traumatic event before the age of 18.

Extensive research on adverse childhood experiences (ACEs) has also confirmed the pervasiveness of childhood trauma. Recent surveys indicate 45% of all children nationally have experienced at least one ACE, with significantly higher rates among black (61%) and Hispanic (51%) children (Sacks & Murphey, 2018). ACEs are experiences such as physical or sexual abuse, physical or emotional neglect, loss of a parent to death or divorce, or living in a household with an addict or mentally ill caregiver. Blaustein (2013) likens childhood trauma to a prevalent, complex virus that

has the potential to negatively impact brain development and functioning, well-being, nutrition, risk for other illnesses, and ultimately mortality (Felitti & Anda, 2010; Perry, 2001). In an effort to combat these negative effects, trauma-informed care approaches are being increasingly employed, and recently are being implemented and evaluated as potential school-wide interventions (Craig, 2016).

Background

Compassionate Schools (Hertel, Frausto, & Harrington, 2009) is a traumainformed care framework aimed at moving educators in public schools toward more
empathetic, informed, and evidence-based practices in the way they engage with students.
The Compassionate Schools initiative was launched in Washington State in 2008 (Hertel,
Frausto, & Harrington, 2009). The theoretical underpinnings of the training are based on
evidence accumulated from various fields of study, such as trauma theory, neuroscience,
and resilience, and significant convergent research about the impact of trauma on
children. Compassionate Schools training incorporates knowledge from socio-emotional
curricula, such as mindfulness, meditation, and self-care; from the vast research on
ACEs, such as how trauma manifests in 'negative' classroom behaviors (Blaustein,
2013); from neuroscience, such as the impact of trauma on brain development and
function (Perry, 2001); and from research on resilience (Bethell et al., 2014), such as
effective emotional regulation strategies, the importance of physical activity, and
connection.

Compassionate Schools training, used for more than 10 years now, continues to be a statewide program in Washington supported by the Office of Superintendent of Public Instruction (Hertel et al., 2009). Another project based in Louisville, Kentucky is currently being conducted in partnership between the University of Virginia and Jefferson County Public Schools. It has received millions of dollars in grant funding from the Sonima and Hemera Foundations for a seven-year project in Louisville schools (see www.compassionschools.org). According to Overstreet (2016), this movement is present in at least 17 states, ranging from small clusters of schools in Louisiana to district-wide programs in California and statewide implementation in Massachusetts and Wisconsin. Compassionate Schools Spartanburg (SC) is a local version of this same national program that is aimed at transforming the way public school faculty, staff, and administration in South Carolina interact with students (Parker, Olson, & Bunde, under review).

Federal legislation is also influencing the growth of the Compassionate Schools movement. In December 2016, President Obama signed The Every Student Succeeds Act (ESSA; Pub.L. 114–95), which outlines funding to support students in high needs districts with trauma-informed, evidence-based practices. ESSA also authorizes grants for in-service training for effective trauma-informed practices in classroom management and to recognize when trauma-affected students need to be referred for additional services (Prewitt, 2016).

Even though trauma-informed care trainings have existed for a decade within public schools and are based on solid theoretical foundations (e.g., neuroscience, ACEs, and meditation), published research on the impact of the training are needed. A team of

scholars and practitioners at the University of South Carolina Upstate, in the Child Protection Training Center (CPTC), is addressing this need. The CPTC has recently received more than \$500,000 in grant funding (from the Duke Endowment, Fullerton Foundation, Spartanburg County Schools, Mary Black Foundation, and Spartanburg Regional Foundation) to expand and increase their capacity to conduct trainings and evaluation research. With this funding, the CPTC will be able to offer more frequent Compassionate Schools trainings to educate more participants from a larger geographical region, and to conduct more rigorous evaluations of the training in order to improve practices and outcomes in schools. Faculty in the CPTC are in the process of publishing the results from a quantitative study of the effectiveness of trainings conducted in the summer of 2018 (Parker et al., under review). The 35-item Attitudes Related to Trauma-Informed Care (ARTIC; Baker, Brown, Wilcox, Overstreet, & Arora, 2016) measure for school settings was used to examine the changes that occurred in the attitudes of teachers, administrators, and staff after attending a three-day Compassionate Schools seminar. The ARTIC is currently the only measure available to assess changes in trauma-informed care attitudes that has shown psychometric reliability (a=.91; test-retest r=.84) and has been published in a peer-reviewed journal (Baker et al., 2016).

This dissertation presents the results from the study conducted by the CPTC as background to look at longer-term impact of the training. The CPTC team found a significant change of nearly one standard deviation overall and in each subscale of the ARTIC (Baker et al., 2016; Parker et al., under review). The changes were measured from the ARTIC scores obtained before the training and immediately following the three-

day training. The five main ARTIC subscales include educators' perceptions of: (a) underlying causes of problem behavior and symptoms, (b) responses to problem behavior and symptoms, (c) on-the-job behavior, (d) self-efficacy at work, and (e) reactions to the work. The two supplementary subscales include (f) personal support of Trauma-Informed Care (TIC) and (g) system-wide support for TIC. These were a notably large changes, especially when considering the rather high start points of the pre-test scores.

Statement of the Problem and Purpose of the Study

According to a survey by the National Survey of Children's Health (NSCH; Child and Adolescent Health Measures, 2013), nearly 35 million children in the United States have experienced one or more types of significant childhood trauma. In the average public school, this translates to nearly half of the students in a given teacher's classroom. Children exposed to the toxic stress of complex trauma often experience negative consequences that affect their academic, psychological, social-emotional, and behavioral health (Bethell et al., 2014; Child Welfare Information Gateway, 2015; Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards, et al., 1998; Felitti & Anda, 2010; Garrett, 2014; Pefect et al., 2016; Perry, 2001; Shern, Blanch, & Steverman, 2016). To aid educators in addressing this reality, trauma-informed care practices have increasingly begun to be translated into professional development opportunities for educators. One such training, Compassionate Schools, has been recently evaluated using the Attitudes Related to Trauma-Informed Care (ARTIC) scale. Comparing pre and post-test scores on the ARTIC, researchers found a significant change in the attitudes of participating

educators of a standard deviation. In an effort to clarify and contextualize these results, the current qualitative study conducted semi-structured, follow-up interviews with participants of the Compassionate Schools training.

The purpose of this study was to evaluate the impact of the Compassionate Schools training through a qualitative study of participants six to nine months after the training. The study will examine participants' perspectives of: (1) their experiences of the training six to nine months post-training and their recommendations for improvements in the training; (2) pre- and post-training knowledge, attitudes, and behaviors of teachers regarding students' experiences with trauma; (3) the impact trauma-informed care has had on students; (4) the extent to which trauma-informed practices are being implemented or are planned at their school as a result of the training; and (5) additional resources or supports that may be needed to implement trauma-informed practices at school. Barriers to implementation will also be assessed.

Definitions

Several terms or phrases used in the current study require definition. The terms for childhood trauma, in particular, are varied in the literature. The following section provides explanations for what is meant by each term in this study.

Adverse childhood experiences (ACEs): abuse, neglect, dysfunctions in the home,
 and exposure to other traumatic stressors, like witnessing violence, experiencing
 bullying or racism, or being separated from family, before the age of 18 (Center

- for Disease Control and Prevention [CDC], 2018). ACEs are commonly experienced as traumatic, but in some instances may not be.
- Childhood trauma: an event that is emotionally painful or distressing to someone under 18, which often results in lasting (immediate or delayed) psychological and physical effects (National Child Traumatic Stress Network, 2018).
- Compassionate Schools: a training to provide resources to schools aspiring to
 become trauma-informed environments for students; intended to provide teachers
 with a basic understanding of ACEs, brain development and function,
 interpretation of classroom behaviors, compassionate management of said
 behaviors, resilience, and the mandate for self-care (Hertel et al., 2009; Parker et
 al., under review).
- Complex trauma: chronic, usually early, exposure to multiple traumatizing experiences, often at the hands of caregivers (National Child Traumatic Stress Network, 2018).
- Educator/teacher: For the purposes of this study, these terms are used interchangeably to refer to public school personnel who are the primary teachers in a K-12 classroom.
- Executive function and self-regulation: the mental processes that enable
 individuals to plan, focus attention, remember instructions, and navigate/prioritize
 multiple tasks; involving working memory, mental flexibility, and self-control;
 crucial for learning and healthy development (Center on the Developing Child,
 2018; Zelazo & Müller, 2002).

- Mindfulness: the intentional cultivation of moment-by-moment, calm, non-judgmental focused attention and awareness on the present (Meiklejohn, 2012).
- Neuroplasticity: the brain's ability to prune, modify, or reorganize neurons in response to stimulation, or lack thereof, in the environment; malleability is dependent on the stage of development and the area of the brain (Perry, 2001).
- Resilience: the ability to overcome serious hardship; doing well despite adversity;
 more likely to be developed in children who have at least one caring, committed
 adult relationship (Goldstein & Brooks, 2005).
- Toxic stress: prolonged activation of the stress response in the absence of protective relationships; the result of chronic adversity without adult support. Toxic stress disrupts the development of brain architecture and other organ systems, and increases the risk for stress-related disease and cognitive impairment, well into the adult years (Shonkoff, Garner, Siegel, Dobbins, Earls., McGuinn, ... & Committee on Early Childhood, Adoption, and Dependent Care, 2012). Toxic stress can be caused by ACEs but also any other situation that is experienced as traumatic by the child.
- Trauma-informed care: a strengths-based framework based on the awareness of
 the impact of trauma that takes a universal precautions approach, emphasizing
 safety and reestablishing control; intended to be both preventative and
 rehabilitative (Huckshorn & LeBel, 2013).

Research Questions

The proposed study seeks to answer the following questions through a qualitative analysis of semi-structured interviews of educators who participated in the Compassionate Schools Summer Training:

- To what extent were the core features of effective professional development—
 content focus, active learning, coherence, duration, and collective participation
 (Desimone, 2009) present/experienced by participants in the Compassionate
 Schools training?
- 2. What changes do teachers perceive in their knowledge about the impact of trauma on the students in their classroom six to nine months after receiving Compassionate Schools training?
- 3. What changes do teachers report in their attitudes about trauma-informed care six to nine months after receiving Compassionate Schools training?
- 4. What changes do teachers perceive in their behavior/interactions with students six to nine months after receiving Compassionate Schools training?
- 5. To what extent do teachers report trauma-informed care impacting academic or social-emotional student outcomes?
- 6. To what extent have trauma-informed practices been planned or implemented at their schools, as a result of staff participation in the Compassionate Schools training?

- 7. What suggestions for improvement do teachers recommend six to nine months after participating in the Compassionate Schools training?
- 8. What additional training, resources, or supports do teachers report needing in order to more effectively implement what they learned in the Compassionate Schools training?

Theoretical Frameworks

Three theoretical frameworks provided the foundation for this study: trauma theory, transformational learning theory, and Desimone's theory of professional development. Trauma theory provides the foundational understanding of the need for TIC training; transformational learning theory explains how professional development can change teachers' perceptions of trauma-impacted students and, in turn, their interactions with students; and Desimone's theory presents a conceptual framework that specifies how transformational learning can occur for teachers via professional development in a way that positively impacts student outcomes.

Trauma Theory

Trauma theory is based on the preponderance of evidence in scientific research demonstrating the negative effects of adverse experiences and the resulting toxic stress in childhood (Anda et al., 2006; Cook et al., 2017; Van der Kolk, 2014). The body's response to this traumatic stress affects a child's brain development, influencing her ability to self-regulate, form healthy attachments, control impulses, and focus attention (Cook et al., 2005; Perry, 2001; Perry, 2007). These negative outcomes directly affect a

child's ability to perform in an academic setting, as classroom behavior and learning are impacted by the brain's hyperarousal (Perry. 2007). When an uninformed educator interacts with a child who is unable to prioritize appropriate behavior, has difficulty with authority, is unable to sustain attention, is impulsive, and is therefore unconcerned with academic performance, that educator may mistake trauma for negative attributes or a lack of morality (Craig, 2016; Plumb, Bush, & Kersevich, 2016).

Transformational Learning Theory

In order for educators to have the skills to accurately assess a child impacted by trauma, they must not only be informed about the impact of trauma on students, but also have a subsequent change in mindset. This necessary shift in perspective can be explained by transformational learning theory (Mezirow; 1978, 1991). Transformational learning is more than a simple acquisition of knowledge or change in a point of view or belief. It is the kind of learning that fundamentally shifts a prior mindless acceptance of available information, resulting in a reflection and a conscious change in worldview (Merriam, Caffarella, & Baumgartner, 2007; Mezirow, 1991).

Transformational learning often leads to significant changes in thoughts, feelings, beliefs, and behaviors (Simsek, 2012). A foundational understanding of trauma theory gives educators the essential context required to examine their previous assessments of and interactions with trauma-impacted students. When, upon reflection, educators acknowledge the need for a new perspective, their beliefs about and attitudes toward trauma-impacted students shift. Adopting this new trauma-informed lens through which to view students' 'negative' classroom behavior is an example of adult transformational

learning (Mezirow, 1978). It has the potential to positively impact student-teacher interactions, classroom management, and discipline policy. Historically, teachers' professional development has not been evaluated rigorously enough to determine whether transformational learning is occurring (Guskey, 2002).

Desimone's Framework of Effective Professional Development

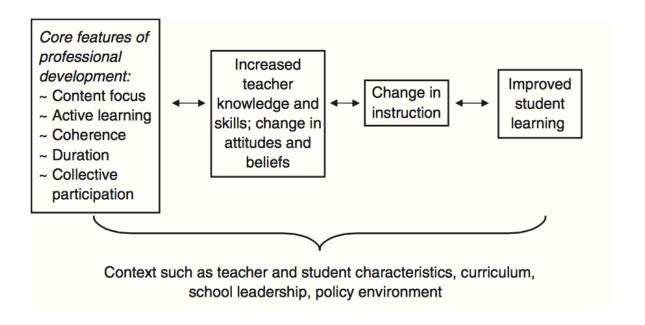
Desimone (2009) proposed a model for evaluating the effects of teachers' professional development (see Figure 1, below) on teachers and students. Based on an examination of the research, a general preliminary consensus has been reached regarding the core features that must be present in order for professional development to be effective (Garet, Porter, Desimone, Birman, & Yoon, 2001; Wayne, Yoon, Zhu, Cronen, & Garet, 2008). Desimone (2009) incorporates these five core features into the model. These core features are, (a) content focus, (b) active learning, (c) coherence, (d) duration, and (e) collective participation.

Content focus is the core feature that assures that each activity, lecture, or discussion in the professional development focuses on the intended subject matter—trauma-informed care in the case of Compassionate Schools training. Active learning entails opportunities for teachers to engage in hands-on experiences that relate to the content of the professional development. Coherence refers to consistency of the training content, and the teachers' ability to integrate the new content with their beliefs. Duration refers both to the span of time over which the activity is spread (longer is better) and the number of hours spent in it (at least 20 hours). The three-day Compassionate Schools training conducted by the CPTC was 21.5 hours in duration. The final feature, collective

participation, is accomplished through teachers from the same school, grade, or department attending together. Desimone (2009) argues that the presence of these components leads to increased teacher knowledge and skills as well as changes in attitudes and beliefs (i.e. transformational learning; Mezirow, 1978), which in turn lead to a change in teacher behavior, ultimately culminating in an improvement in student outcomes.

Figure 1.

Proposed core conceptual framework for studying the effects of professional development on teachers and students (Desimone, 2009, p. 185)



Desimone (2009) granted permission to the researcher to use her framework in guiding this study. Research questions were articulated in a manner that reflects a progression through the framework, as are the questions in the interview protocol. The

first step was confirming that the core features of professional development were present in the Compassionate Schools training. Second was assessing teachers' reported increase in knowledge and change in attitudes/beliefs, which was previously accomplished in the short-term by the pre- and post-ARTIC (Parker et al., under review). The third step was assessing whether this learning was transformational by asking whether it translated to a change in behavior. The final step in Desimone's framework is measuring whether there is improved student learning. This final step was assessed by asking teachers what impact they have seen trauma-informed care have on students. The context of leadership and/or policy environment was evaluated by asking whether school or district level plans have been made or implemented.

Organization

The second chapter provides a review of the literature relevant to the proposed dissertation. This includes a brief overview of trauma theory, the short- and long-term effects on children, the mechanisms involved in how trauma affects developmental outcomes, and the relevance of trauma in an educational setting. It also reviews the implementation of trauma-informed care as professional development in educational settings, examines research on educators' awareness of beliefs and attitudes, and reviews how/whether knowledge and change in attitudes affect behavioral change. This chapter also includes a review of the findings from the CPTC's study of Compassionate Schools Spartanburg using the ARTIC (Baker et al., 2016; Parker et al., under review). Chapter three outlines the research methods, including an overview of the sampling and

participants, procedures, analysis, measures, and limitations. Chapter four presents the findings from the qualitative analysis of the interview data, and chapter five provides interpretation of these findings as well as implications and suggestions for future research.

CHAPTER TWO

REVIEW OF THE LITERATURE

"Our brains are sculpted by our early experiences. Maltreatment is a chisel that shapes the brain to contend with strife, but at the cost of deep, enduring wounds" (Teicher, 2002).

Overview of Trauma Theory

Manageable stress can have a positive effect on a developing child, leading to the development of resilience (Perry, 2007). However, when stress becomes intense, persistent, and unpredictable, in the absence of a safe and supportive adult, it surpasses a child's coping ability and begins to have negative developmental effects (Anda et al., 2006; Center on the Developing Child, 2016; Cook et al., 2005). This chronic stress response can result in trauma. The Diagnostic and Statistics Manual of Mental Disorders (5th ed.: DSM-5; American Psychiatric Association, 2013) defines a traumatic event as exposure to actual or threatened death, serious injury, or sexual violation. The exposure results from one of the following: (1) direct experience of the traumatic event, (2) witnessing the traumatic event, (3) learning that the traumatic event happened to a close friend or family member, or (4) experiencing repeated, extreme exposure to aversive details of the traumatic event.

Research on adverse childhood experiences (ACEs) spanning two decades confirms the negative effects toxic stress has on a child in multiple developmental domains: psychological, physical, social, behavioral, cognitive, and emotional (Anda et

al., 2006; Cook et al., 2005; Felitti et al., 1998; Van der Kolk, 2014). The academic and classroom difficulties that arise as a result of childhood trauma can range from inattention and anxiety to explosive outbursts or unexplained illnesses (Blaustein, 2013; Cook et al., 2005). See Figure 2 below, adapted from Cook and colleagues (2005) for more specific impairments in the various domains.

Figure 2.

Domains of Impairment in Children Exposed to Trauma

	T	
I. Attachment	IV. Behavioral control	VI. Cognition
Problems with boundaries Distrust and suspiciousness	Poor modulation of impulses Self-destructive behavior	Difficulties in attention regulation and executive functioning
Social isolation Interpersonal difficulties	Aggression toward others Pathological self-soothing behaviors	Lack of sustained curiosity
Difficulty attuning to other people's emotional states	Sleep disturbances Eating disorders	Problems with processing novel information
Difficulty with perspective taking	Substance abuse	Problems focusing on and completing tasks
II. Biology	Excessive compliance	
Sensorimotor developmental problems	Oppositional behavior	Problems with object constancy
Problems with coordination, balance, body tone	Difficulty understanding and complying with rules	Difficulty planning and anticipating
Somatization Increased medical problems across a	Reenactment of trauma in behavior or play (e.g., sexual, aggressive)	Problems understanding responsibility
wide span (e.g., pelvic pain, asthma,	V. Self-concept	Learning difficulties

skin problems, autoimmune disorders,	Lack of a continuous,	Problems with language
pseudoseizures)	predictable sense of self	development
III. Affect regulation	Poor sense of separateness	Problems with orientation in time and space
Difficulty with emotional self-regulation Difficulty labeling and expressing	Disturbances of body image	in time and space
feelings	Low self-esteem	
Problems knowing and describing internal states	Shame and guilt	
Difficulty communicating wishes and needs		

Prevalence of Trauma

The occurrence of adverse childhood events is prevalent. According to the Center for Disease Control and Prevention (CDC; 2018), the following prevalence rates were reported in the original Adverse Childhood Experiences study in the mid-1990s, where over 17,000 adults, who had completed a standardized medical evaluation at a large HMO, answered a confidential survey about their current health and childhood experiences (see Table 1; Felitti et al., 1998). The majority of these participants were white and had at least some post-secondary education.

Table 1.

Prevalence of ACEs by Category from 1998 Adverse Childhood Experiences Survey

	Women	Men	Total
ACE Category	Percent (N =	Percent (N =	Percent (N =
	9,367)	7,970)	17,337)
ABUSE			
Emotional Abuse	13.1%	7.6%	10.6%
Physical Abuse	27%	29.9%	28.3%
Sexual Abuse	24.7%	16%	20.7%
HOUSEHOLD CHALLENGES	S		
Intimate Partner Violence	13.7%	11.5%	12.7%
Household Substance Abuse	29.5%	23.8%	26.9%
Household Mental Illness	23.3%	14.8%	19.4%
Parental Separation or Divorce	24.5%	21.8%	23.3%
Incarcerated Household Member	5.2%	4.1%	4.7%
NEGLECT			
Emotional Neglect ³	16.7%	12.4%	14.8%
Physical Neglect ³	9.2%	10.7%	9.9%

Note: Reprinted from the Center for Disease Control and Prevention,

https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/about.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestudy%2Fabout.html

Of the participants in the ACE study, 36.1% reported zero ACEs, 26% reported one ACE, 15.9% reported two ACEs, 9.5% reported three ACEs, and 12.5% reported four or more ACEs (CDC, 2018).

In 2010, ten states and Washington, DC included an ACE module on their state's version of the Behavioral Risk Factor Surveillance System survey (BRFSS; CDC, 2018). See Table 2 for a summary of the over 50,000 surveyed participants, who were also majority white and with some post-secondary education.

Table 2.

Prevalence of ACEs by Category in 2010 from the Behavioral Risk Factor Surveillance
System

ACE Category	Women	Men	Total
	Percent (N =32,539)	Percent (N =21,245)	Percent (N =53,784)
ABUSE			
Emotional Abuse	34.1%	35.9%	35.0%
Physical Abuse	15.8%	15.9%	15.9%
Sexual Abuse	15.2%	6.4%	10.9%
HOUSEHOLD CHALLENGES			
Intimate Partner Violence	15.6%	14.2%	14.9%
Household Substance Abuse	27.2%	22.9%	25.1%
Household Mental Illness	19.3%	13.3%	16.3%
Parental Separation or Divorce	23.1%	22.5%	22.8%
Incarcerated Household Member	5.2%	6.2%	5.7%

Note: Reprinted from the Center for Disease Control and Prevention,

https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/ace-brfss.html

Of the participants in the BRFSS survey, 40.7% reported zero ACEs, 23.6% reported one ACE, 13.3% reported two ACEs, 8.1% reported three ACEs, and 14.3% reported four or more ACEs (CDC, 2018).

In a nationally representative survey of youth conducted by Finkelhor and colleagues (2005), only 29% of children and youth had experienced no direct or indirect victimization. This included first-hand experience of physical assault of any kind, bullying, sexual victimization, or child maltreatment, and witnessing murder, domestic violence, abuse of a sibling, assault, or the violence of a war zone (Finkelhor et al., 2005). In a follow-up study, estimates of youth exposure rates to trauma ranged from 57% to

75% depending on the type of trauma (Finkelhor, Turner, Shattuck, & Hamby, 2015). Perfect and colleagues (2016) found similar prevalence rates, estimating that two out of three students had experienced at least one traumatic event before the age of 18. Additional research on adverse childhood experiences (ACEs) has also confirmed the pervasiveness of childhood trauma. Recent surveys indicate 45% of all children nationally have experienced at least one ACE, with significantly higher rates among black (61%) and Hispanic (51%) children (Sacks & Murphey, 2018).

In South Carolina, according to the U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau (ACF; 2018), there were 14,856 victims of abuse or neglect in 2015, a rate of 13.6 per 1,000 children and an increase of 19.4% from 2014. Of these children, 62.6% were neglected, 46.6% were physically abused, and 5.2% were sexually abused (HHS, ACF, CB, 2018). As evidenced by both national and local data, childhood trauma is pervasive. If left untreated, the impact of trauma may persist throughout the lifespan of a victim (Anda et al., 2006; Van der Kolk, 2014). The following section will review the literature to explain how this prevalent societal ill impacts students.

Impact of Trauma

Childhood trauma can affect students in many ways. A primary effect of the toxic stress resulting from trauma is abnormal neurodevelopment (i.e. brain dysfunction). The full impact of the effect of abuse or neglect on a child's developing brain is still being uncovered, but much has already been learned. Prenatal development until the fifth year

of life is the most critical period of brain architecture for a child (Perry, 2001). When traumatic stress or neglect happens during this time of brain development, abnormalities can occur. The brain, in an attempt to cope with the stress, increases production of cortisol or adrenaline. In the short term, this may help a child run from danger or hide from an intruder. However, when the stress is chronic, intense, and in the absence of a supportive adult, a tremendous negative impact can result (Perry, 2001).

A significant region of the brain that has been shown to be affected by stress is the prefrontal cortex, where higher-order skills reside. These skills of executive function and self-regulation are essential in academic success, and their absence makes behavioral regulation in a classroom difficult (Center on the Developing Child, 2018). When toxic stress disrupts the development of the cortex, it can also affect an individual's ability to plan, problem solve, and use language, all of which are critical to classroom success (Perry, 2007; Plumb et al., 2016; Teichner et al., 2010). The prefrontal cortex is also where empathic understanding originates, and when under extreme stress, it can go "offline" so that higher-order abilities are inaccessible (Van der Kolk, 2014). When the functioning of the prefrontal cortex is suspended, "invention and innovation, discovery and wonder all are lacking" (Van der Kolk, 2014, p. 60), making engagement in learning quite challenging for a child.

The limbic system can also be affected by childhood trauma. The limbic system, which regulates memory, emotional reactivity or mood, and attachment, also plays a significant role in the fight or flight response (Perry, 2007; Teichner, 2002). The fight or flight response is an evolutionarily adaptive reaction to danger, but when this fear

response is continually triggered because of abuse or neglect, brain cells can be destroyed, causing memory and attachment difficulties (Perry, 2001). When the limbic system's development is disrupted, impulsivity can become problematic and sexual behavior may be affected, leading to an unhealthy increase in number of sexual partners, unprotected sex and increased sexually transmitted infections, or early pregnancy (Anda et al., 2006; Perry, 2001).

Less complex areas of the brain, like the brainstem and diencephalon, can also be affected by toxic stress. These areas of the brain regulate sleep, blood pressure, heart rate, body temperature, and appetite/satiety (Perry, 2007). The brainstem and diencephalon are more likely to become dysfunctional with trauma that occurs in infancy or early childhood and affect a child's stress-response system in a way that can disrupt future and more complex development (Perry, 2007). When children struggle with frequent sleep and/or eating issues, their ability to concentrate or even stay awake in class is impaired. They may appear distracted or bored.

In addition to brain development, childhood trauma affects physical health. In the original ACE study, an increase in the number of ACEs correlated with an increase in heart disease, liver disease, depression, risk for sexually transmitted diseases, adolescent pregnancy, and poor academic achievement, among adults who had experienced childhood trauma (Felitti et al., 1998). Although these results and many replicated versions of this study represent the longer-term impact of childhood abuse or neglect on adult health, research is beginning to show that the negative health impact begins immediately. A large meta-analysis of the biological effects of childhood trauma

confirms that children exposed to toxic levels of stress can have increased inflammation, dysregulated (or suppressed) immune systems, impaired growth, or increased likelihood of metabolic syndrome (De Bellis & Zisk, 2014).

A recent study found that abused youth had higher resting blood pressure and blunted blood pressure reactivity, which can put a child on the road to future heart disease (Gooding, Milliren, Austin, Sheridan, & McLaughlin, 2016). Shenk, Noll, Peugh, Griffin, and Bensman (2016) prospectively examined female adolescent health over five years. They found that maltreatment significantly increased the risk for teenage birth and cigarette use as compared to the control group. Traumatized children are also more likely to report unexplained pain and somatic (medically unexplained) symptoms, such as headache, stomachache, fatigue, or other body pain (Anda et al., 2006; Paras, Murad, Chen, Goranson, & Colbenson, 2009). These illnesses and pains, though medically inexplicable, are real to the children experiencing them and can adversely affect their ability to show up for or engage in school. Physical and mental health are often linked, as can be seen in somatization disorder, when a child's mental or emotional distress manifests as a physical illness or pain (APA, 2013; Kroska, Roche, & O'Hara, 2018). The increased inflammation that results from the chronic stress of childhood abuse or neglect affects both physical and mental health (De Bellis & Zisk, 2014; Van der Kolk, 2014).

Mental health can also be more directly linked to childhood trauma apart from physical effects. Van der Kolk (2003) describes how trauma can increase risk for mental health problems, including diagnoses such as post-traumatic stress disorder (PTSD),

dissociative identity disorder (DID), major depressive disorder (MDD), reactive attachment disorder (RAD), or generalized anxiety disorder (GAD). Each of these mental illnesses disturb a child's ability to fully participate in an educational environment, and each may increase a student's inclination for aggressive or dysfunctional behavior (Van der Kolk, 2003).

Mental illness has been identified as a result of childhood trauma in many studies. In a longitudinal study of 1,093 urban, socio-economically disadvantaged high schools seniors, researchers examined the association between ACEs and three mental health outcomes, depression, drug abuse, and anti-social behavior (Schilling, Aseltine, & Gore, 2007). The young adults were interviewed in-person and then followed up with two years later by phone interview. Most ACEs were strongly associated with all three outcomes and the cumulative effect of ACEs was significant. Parental separation was not associated with depression or anti-social behavior. Interestingly, the adverse mental health impact was consistently greater on white participants than black or Hispanic (Schilling, Aseltine, & Gore, 2007). Similarly, in a nationally representative sample of 2,030 youth aged 2-17, sexual assault, child maltreatment, witnessing family violence, and other major violence exposure each made independent contributions to levels of depression and anger/aggression (Turner, Finkelhor, & Ormrod, 2006).

Edwards and colleagues (2003) surveyed nearly 9,000 adults on exposure to ACEs and current mental health, using a subscale of the Medical Outcomes Study. A dose-response relationship was found between the number of ACEs and lower mental health scores. An emotionally abusive family environment amplified the decline in

mental health scores as well (Edwards et al., 2003). Suicidality is a significant behavioral manifestation of severe mental/emotional/psychological distress. In a 2017 meta-analysis, Zatti and colleagues reviewed seven unique studies linking childhood trauma and suicide attempts. Sexual, physical, and emotional abuse, as well as physical neglect were significantly associated with suicide attempts. Emotional neglect and separated parents were not (Zatti et al., 2017).

Because of the brain impairment that occurs as a result of childhood trauma, a child who has been abused or neglected also likely has experienced behavioral effects that can intensify difficulties. As toxic stress interferes with the developing child, brain circuitry and architecture are affected in a way that impairs decision-making, self-control, and emotional regulation. Without the necessary scaffolding from caring adults, abused or neglected children can then struggle with impulsivity, sustaining attention, and working memory (Center on the Developing Child, 2018). When lack of self-regulation, impulsivity, and poor decision-making intersect, behavioral problems are much more common. For example, the original ACE study found a dose-response relationship between the number of ACEs experienced and drug and alcohol abuse, number of sexual partners, suicide attempts, smoking, and poor academic achievement (Felitti et al., 1998). Abused or neglected children may also display behaviors that are self-destructive (Van der Kolk, 2017). Children experiencing toxic stress do not intentionally choose maladaptive behaviors, rather they are typically unaware of the motivations resulting from the brain impairment that drive their destructive behaviors.

Many children exposed to abuse or neglect develop extreme reactivity to typically neutral stimulation, resulting in overreaction to frustrations and inability to tolerate anxiety (Van der Kolk, 2003). These children also have a heightened sense of vulnerability because the trauma often occurs at the hands of those who should provide love and protection. Children's own parents are responsible for about 80% of child maltreatment (Van der Kolk, 2017). This maltreatment can increase the incidence of aggressive behavior as a means of communication (temper tantrums), unhealthy coping (self-mutilation), or even dysfunctional connection (provoking) with teachers or peers (Van der Kolk, 2003). These behavioral effects can translate into social difficulties for students at school.

Potential Intervention

The impact of trauma can be vast, across domains of a child's functioning as well as across the lifespan. Much research has pointed to safe, consistent, caring adults as both inoculation and intervention in the treatment of abused or neglected children (Center on the Developing Child, 2018). Because school-age children and adolescents spend the majority of their waking hours in an educational environment, the faculty and staff of public schools are positioned to make a significant impact in the lives of their students. Bethell and colleagues (2014) found that when teachers taught resiliency strategies to their students such as mindfulness and remaining calm and in control during difficult situations, children (ages six to seventeen) were able to mitigate the negative effect of trauma and increase engagement with academics.

The Substance Abuse and Mental Health Services Administration (SAMHSA, 2019), a branch of the U.S. Department of Health and Human Services, recognized the potential positive impact of TIC and formed the National Center for Trauma-Informed Care (NCTIC) in order to advocate for and support systems in the implementation of trauma-informed care professional development. According to SAMHSA (2019), the six key principles of a trauma-informed approach are, 1) safety; 2) trustworthiness and transparency; 3) peer support; 4) collaboration and mutuality; 5) empowerment, voice, and choice; and 6) cultural, historical, and gender issues. A trauma-informed care approach in school would ensure that educators:

- Realize the widespread impact of trauma and understand the potential paths for recovery.
- Recognize the signs and symptoms of trauma in students.
- Respond by fully integrating knowledge about trauma into policies, procedures, and practices.
- Seek to actively resist retraumatization. (SAMHSA, 2019)

The next section presents one such school-wide philosophy.

Compassionate (Trauma-Informed) Schools

Trauma-impacted students may struggle behaviorally, academically, physically, socially, and emotionally in the school setting (Anda et al., 2006; Perry, 2001; Van der Kolk, 2003). ACEs have been shown to be predictive of academic difficulties, conduct problems, delinquency, and increased risk of suspension, expulsion, risky behaviors, low school attendance, and school disengagement (Bethell et al., 2014; Ford, Elhai, Connor,

& Frueh, 2010; Garrett, 2014; Greenwald, 2002). Without an understanding of the effects of toxic stress, trauma-impacted students are at risk of being labeled as 'problems' rather than as children in need of support and empathy (Dorado, Martinez, McArthur, and Leibovitz, 2016). Combining this reality with the fact that many teachers feel less than competent about how to handle traumatized students (Alisic, 2012), schools are faced with an important challenge to overcome. Although the evidence for the struggles of trauma-impacted students appears overwhelming, the reality of neuroplasticity, coupled with the significant impact of consistent, caring adults in the life of a student, gives room for much hope (Center on the Developing Child, 2018; Davis, Costigan, & Schubert, 2017; Van der Kolk, 2014). For teachers to feel more competent and to prevent misattribution of trauma-driven behavior, they have expressed a need for more traumafocused training (Alisic, 2012). Educators and researchers have predicted that with adequate support and understanding of the effects of trauma on students, teachers and administrators will be better equipped to manage challenging classroom behaviors (Plumb et al., 2016). Many have persuasively argued that trauma-informed school practices and policies targeted to help trauma-impacted children will benefit all children when applied universally (Cole, Eisner, Gregory, & Ristuccia, 2013).

In an effort to combat the significant problem of childhood trauma and its effect on students, researchers and practitioners developed the concept of Compassionate Schools (Wolpow, Johnson, Hertel, & Kincaid, 2009). Originating in the state of Washington, Compassionate Schools are focused on helping teachers understand "fundamental brain development and function, learning pedagogy, recognize a mandate

for self-care, correctly interpret behaviors, manage negative behaviors successfully with compassionate and effective strategies, and engage students, families, and the community" (Wolpow et al., 2009, p. xiii). The first stage of Compassionate Schools training focuses on the basics of trauma theory, ACEs research, and ecological theory (Bronfenbrenner, 1979) and how these impact students and classroom dynamics. During this stage, teachers are encouraged to change their initial response to students' problematic behavior from, "What is wrong with you?" to "What has happened to you?" (Wolpow et al., 2009). This seemingly minor shift in thinking can begin the process of transformational learning necessary for teachers to change long-held beliefs or attitudes. It can help contextualize students' behavior, while fostering connection and compassion (Dorado et al., 2016).

Next, educators are instructed on the importance of self-care and the danger of vicarious trauma. Then, skills training is used to help teachers implement compassionate instruction and discipline in their classrooms to create more empathetic, connected environments that allow all students, but especially traumatized students, the opportunity to learn without being disciplined for reactions that are outside of their control. Three primary domains are emphasized: (a) safety connection and assurance; (b) emotional and behavioral self-regulation; and (c) competencies of personal agency, social, and academic skills. Teachers learn classroom strategies to minimize triggers, set limits, increase mindfulness and listening practices, implement communication and processing instruction, and increase empathy (Wolpow et al., 2009).

Over the last decade, Compassionate Schools trainings have been increasingly implemented. Federal legislation is influencing the growth of the Compassionate Schools movement. In December 2016, President Obama signed The Every Student Succeeds Act (ESSA; Pub.L. 114–95), which outlines funding for supporting students in high needs districts with trauma-informed, evidence-based practices. ESSA also authorizes grants for in-service training for effective trauma-informed practices in classroom management and assistance recognizing when trauma-affected students need to be referred for additional services (Prewitt, 2016). According to Overstreet (2016), this movement is present in at least 17 states in the U.S., ranging from small clusters of schools in Louisiana to districtwide programs in California and state-wide implementation in Massachusetts and Wisconsin. A project based in Louisville, Kentucky is currently being conducted in partnership between the University of Virginia and Jefferson County Public Schools. It has received millions of dollars in grant funding from the Sonima and Hemera Foundations for a seven-year project in Louisville schools (see www.compassionschools.org). Professional development is useful only if it affects the participants in a way that changes their knowledge, attitudes, and behavior.

Professional Development and Educator Knowledge and Attitudes

In order to increase educators' knowledge of or change their attitudes toward a salient topic, schools typically rely on professional development. Teachers come to the profession with personal beliefs and experiences that shape their knowledge base and attitude toward students (Cranton & King, 2003). These ways of understanding the world,

or 'habits of mind,' are often unconsciously absorbed throughout a teacher's life, and as previously noted, most teachers have not had the experience or education to have correct interpretations of the behavior of students who have experienced trauma (Alisic, 2012). According to Mizell (2010), professional development is the only strategy school systems have to strengthen the performance of educators and the primary way educators can learn and improve their skills to raise student achievement. Transformational learning theory provides a framework for how professional development can help educators gain new knowledge and change their attitudes (Cranton & King, 2003; Mezirow, 1991). When adult learners engage in an opportunity to reflect on the meaning of what they are learning, they may reevaluate their familiar beliefs and assumptions, developing new understandings and experiencing shifts in their habits of mind (King, 2004).

In examining the effect of professional development on 58 educators, ages 21 to 59 years, King (2004) found that 36 (62%) indicated they have experienced a shift in perspective as a result of professional development. Participants reported a better understanding of the students they work with, a more reflective orientation to their work, and a more open-minded attitude towards others and themselves (King, 2004). King's (2004) findings reflected the kind of transformational learning Mezirow (1978, 1991) described as a process of revising the interpretation of one's prior experience to guide future action. According to Merriam et al. (2007), Mezirow's theory of transformational learning can be broken down into four parts:

1. An experience that does not align to the learner's existing understanding, prompting a dilemma of cognitive dissonance.

- 2. Critical reflection on how one's beliefs or assumptions created a discrepancy between what was perceived and what was true based on the new information (This can be accompanied by the emotions of guilt or embarrassment).
- Reflective discussion with colleagues about the conflict to come to a new understanding.
- 4. Integration of new knowledge into an innovative perspective, culminating in implementing plans for action and behavior changes.

Compassionate Schools training seeks to provide educators the opportunity to experience transformational learning via exposure to a new trauma-informed lens through which to view students. When educators hear how trauma can present in their classroom, they may experience guilt for their previous poor handling of situations or discomfort with the ignorance uncovered by their new awareness. If this dissonance prompts selfreflection, critical analysis and discussion, concluding with a change in perspective, the first three stages of transformational learning have occurred. For example, a teacher may have had many interactions with a withdrawn, seemingly unengaged student. After several attempts to gain his attention, the teacher may conclude the student is uninterested, distracted, and/or lazy. If the student's behavior continues, the teacher may feel justified in confirming her suspicion. When this teacher is confronted with the reality of the student's traumatic history and the science of trauma theory, she may experience the necessary discomfort to question her previously held beliefs about the student and reevaluate his behavior in light of the new knowledge (i.e. that the student is overwhelmed, afraid of failure, or unable to self-regulate).

As Merriam and colleagues (2007) suggest, an empathic understanding of other's views is a priority in teacher's interactions with students and with colleagues in order to have the necessary space to learn and dialogue. Transformational learning requires open, vulnerable examination of an educator's practice; a safe environment is necessary for the task of critical reflection on beliefs or behaviors (Cranton & King, 2004).

Relationship among Knowledge, Attitude, and Behavioral Change

Mizell (2010) argues that professional development is ineffective unless it causes teachers to improve their instruction and implement what they learned by changing their behavior in the classroom. Consistent with this belief/argument, the final step in transformational learning culminates with a new perspective that results in a plan of action and behavior change (Merriam et al., 2007; Mezirow 1991). Desimone's model (2009) presumes that behavioral change follows an increase in knowledge and change in attitudes or beliefs. This is the path that many professional development curriculums assume. Guskey (2002), however, proposed an inverted theory of teacher behavior change following professional development. Guskey (2002) suggested that behavioral/instructional change that results in improvement in student outcomes will precede true changes in teachers' beliefs and attitudes. For example, if new tools or skills are acquired and implemented as a result of a training, even if the teacher has not assented to their usefulness, positive student outcomes as a result of implementation can serve to solidify changes in attitudes or beliefs.

Kennedy (2016), using rigorous inclusion criteria, conducted a metanalysis of 28 studies evaluating if/how professional development improves teaching. Kennedy (2016) found varied results among all types of programs. Programs focused solely on content knowledge, programs with all levels of intensity (three to 80 contact hours), and programs that included or excluded collective participation showed no consistent outcomes of improving teacher effectiveness or student learning (Kennedy, 2016). Neither the structure, nor the amount of content, was therefore found to be a significant predictor of successful professional development, rather a more nuanced approach is recommended, considering the motivation and needs of the teachers attending. This finding is contrary to prominent consensus on effective professional development (Guskey, 2002; Desimone, 2009), but was previewed by Cranton (2002), who pointed out that there are no specific professional development methods that guarantee transformational learning. Rather, Cranton (2002) notes that individuals respond differently based on what speaks to their feelings or beliefs. The diversity of histories, cultures, or learning style must be respected by those leading professional development workshops.

A primary conclusion from Kennedy's (2016) meta-analysis was that more attention must be paid to the people who provide professional development. Many of the more effective programs were offered by individuals or groups who had extensive histories working with teachers and were very familiar with the problems teachers face (Kennedy, 2016). A team of highly qualified experts conducted the Compassionate Schools training (Parker et al., under review), but their previous experience working with

teachers is unknown. A secondary conclusion by Kennedy (2016) related to mandatory versus voluntary participation. Effect sizes were significantly larger for teachers who were motivated to attend (.16) versus those who were mandated (.03) (Kennedy, 2016). All participants in the Compassionate Schools training in the current study were volunteer attendees except for one who was mandated to attend.

Although trauma-informed care in schools has strong theoretical foundations and increasing implementation across the U.S., to date there is not a significant body of literature evaluating the effectiveness of trauma-informed professional development for educators (a broader category under which Compassionate Schools training falls). The next section details the few relevant studies that have been conducted.

Research on Trauma-Informed Care Professional Development

Dorado et al. (2016) describe the development and implementation of a multi-tier, trauma-informed school-wide program called Healthy Environments and Response to Trauma in Schools (HEARTS). The San Francisco United School District (SFUSC) initially began the HEARTS program as an intentional response to the 'school to prison pipeline' conversation, because when the program began in 2009-2010, African-American students were being suspended at six and a half times the rate of white students (Dorado et al., 2016). Between 2009-2010 and 2013-2014, HEARTS was implemented in four schools in southern San Francisco (three elementary schools and one kindergarten through 8th grade school). The three tier approach involved: (a) school-wide universal supports to change school cultures into safe, supportive, trauma-informed learning

environments, (b) capacity building among school staff to facilitate the incorporation of a trauma-informed lens for school-wide concerns, disciplinary procedures, and at-risk students, and (c) intensive interventions for trauma-impacted students (Dorado et al., 2016). Each tier had an emphasis on supporting students, adults in the system, and the school system as a whole. Across all tiers, HEARTS applies the following core principles: (a) understand trauma and stress, (b) establish safety and predictability, (c) foster compassionate and dependable relationships, (d) promote resilience and social emotional learning, (e) practice cultural humility and responsiveness and (f) facilitate empowerment and collaboration (Dorado et al., 2016).

In conducting a program evaluation of HEARTS, Dorado et al. (2016) asked four questions: (a) Was there an increase in school personnel's knowledge about addressing trauma and use of trauma-sensitive practices? (b) Was there an improvement in students' school engagement? (c) Was there a decrease in behavioral problems associated with loss of students' instructional time due to disciplinary measures? and (d) Was there a decrease in trauma-related symptoms in students who received HEARTS therapy? The evaluation team used a retrospective pre-post survey design to assess the learning outcomes of certified employees, with both the "before" and "after" being collected at the same time (Dorado et al., 2016). Across the four participating schools, 280 school personnel participated in HEARTS training and consultation for each of the 5 years of implementation. Of these 280, 175 (62%) completed the program evaluation survey (Dorado et al., 2016). Results indicated that significant effect sizes were found within all survey domains of school personnel's perceptions of gains in trauma-related knowledge,

adult use of trauma-informed care practices, secondary trauma, and changes in student ability to learn, focus on academics, and school attendance. Secondary trauma refers to the negative impact a child's trauma can have on a teacher indirectly or vicariously. It is one of the primary rationales behind why self-care is included in Compassionate Schools training. T-values ranged from 6.67 to 21.86, with effect sizes ranging from .54 (My students' school attendance) to 1.72 (My knowledge about trauma and its effects on children) (Dorado et al., 2016).

In the schools that had implemented the HEARTS program the longest (4-5 years), discipline referrals, violence, and out-of-school suspensions all decreased significantly. School leaders reported that their behavioral responses to problem behaviors had transformed by demonstrating more empathy and allowing students time to regain control of their emotions (Dorado et al., 2016). Significant student-level gains were also found for traumatized students who received program-related therapy (Dorado et al., 2016).

Anderson, Blitz, and Saastamoinen (2015) suggest that university-school partnerships are a promising way to provide up-to-date research to aid in support and implementation of trauma-informed approaches through professional development. Their study first incorporated a needs assessment with classroom staff. Then, a series of professional development workshops based on the needs assessment were developed and implemented. Finally, post-workshop surveys and focus groups were conducted to assess the impact of the workshops and identify areas for continued professional development (Anderson et al., 2015). Participants were 25 classroom staff from a small elementary

school in the Northeastern United States that serves predominantly economically disadvantaged students (90%). Sixteen classroom (one male) staff participated in the workshops, the final meeting, and completed the post-workshop survey and focus groups. A series of four 45-minute trainings were conducted over four months, including lecture, discussion, videos, role-plays, handouts, and modeling/practice of strategies (Anderson et al., 2015). The trainings covered four domains: (a) information on the neurohormonal impact of trauma and toxic stress, (b) positive behavioral strategies, (c) stress reductions and relaxation techniques, and (d) cognitive-behavioral strategies for classroom intervention.

Two to four months later, the 16 participants were given an anonymous survey. Eighty percent of participants reported that the training would be useful to their work, and 71% planned to share their learning with others. Almost all (94%) participants understood that students' disruptive behaviors may be linked to physiological changes related to stress. However, although 69% of participants agreed (or strongly agreed) that an adult's loud voice or stern tone can trigger a high stress response in some students, 63% of participants also agreed (or strongly agreed) that an aggressive tone or strong words are often the only way to get a student to stop a negative behavior (Anderson et al., 2015). In the focus groups, participants shared the following themes: (a) an increased concern about students' exposure to trauma and toxic stress, (b) increased stress for students and staff because of school climate (e.g., overly high expectations; common core standards), (c) unmet social-emotional needs and disruptive behaviors interfere with learning, (d) classroom staff lacked adequate professional support and development to

work effectively with trauma-impacted students, (e) classroom staff felt a lack of authority in influencing teachers with the trauma-informed techniques they learned during professional development, and (f) the many benefits of receiving trauma-informed professional development (Anderson et al., 2015).

Goodwin-Glick (2017) conducted a retrospective pre-post-test survey of Findlay City Schools (NW Ohio) employees who participated in a trauma-informed care professional development training. Of the 712 employees scheduled to attend, 552 participated in the survey. Most of the participants were teachers (n=320); administrators, counselors, and school psychologists were also present. About half of participants worked in an elementary school (n=225), 103 worked in a middle school, and 141 worked in a high school. Goodwin Glick (2017) developed a 52-item measure called Trauma-Informed Care Dispositions Survey (TIC-DS) to evaluate school personnel's perceptions of knowledge, dispositions, and behaviors. TIC-DS contained seven subscales: knowledge, empathetic concern, perspective taking, interpersonal relationship, sense of respect and trust, student-centered dispositions, and behavior (Goodwin-Glick, 2017). Strong internal reliability was reported, with Cronbach's alpha of .96 on both the pretest and the posttest.

The largest significant increase one day to three weeks after participating in the trauma-informed care professional development was on the trauma-related knowledge subscale (Cohen's d = .65) (Goodwin-Glick, 2017). Specifically, the greatest gains were made in the familiarity with symptoms traumatized students display and the understanding that the symptoms of trauma may be similar or identical to the symptoms

of other diagnoses. The smallest gain in the knowledge items was on the belief that all students can learn, but survey results indicated that the high pretest score left little room for growth (Goodwin-Glick, 2017). Behaviors toward traumatized students (Cohen's d = .46) and perspective taking dispositions (Cohen's d = .43) also had a medium positive effect as a result of participation. Data suggested that the professional development improved participant self-efficacy so that teachers believed they had the ability to help traumatized children. Behaviorally, participants had the greatest increases in selfawareness of interactions with students and using strategies intended to create safe environments. Participants also reported perceived increases in active listening and positive reinforcement with students (Goodwin-Glick, 2017). A small effect from the professional development (Cohen's d from .13 to .23) was found for the final four subscales: interpersonal relationship, empathetic concern, student-centered, and sense of respect and trust (Goodwin-Glick, 2017). Elementary school employees were found to be more positively impacted on five of the seven subscales as compared to secondary school employees.

Due to the dearth of psychometrically validated instruments to evaluate traumainformed care, Baker et al. (2016) conducted a quantitative study on their development of
the Attitudes Related to Trauma-Informed Care (ARTIC) scale. The ARTIC was
evaluated with a sample of 760 service providers, 595 who worked in human services
(78%), and 165 who were school personnel (22%). The majority of participants were
white (92%) and female (83%) (Baker et al., 2016). The ARTIC scale (in either the 45 or
35 question length) comprises seven subscales regarding respondents' attitudes toward

important trauma-informed care components. These include underlying causes of problem behavior and symptoms (a = .78), responses to problem behavior and symptoms (a = .76), on-the-job behavior (a = .72), self-efficacy at work (a = .79), reactions to the work (a = .71), personal support of trauma-informed care (a = .80), and system-wide support for trauma-informed care (a = .81). Analyses of internal consistency indicated strong internal reliability (a = .93) and test-retest correlations were strong at 120, 150, and 180 days (Baker et al., 2016). The ARTIC-35 was used to conduct a pre-post survey of school personnel who attended Compassionate Schools Spartanburg three-day training. Results are described in the following section.

Compassionate Schools Spartanburg

In 2016, the Child Protection Training Center (CPTC) launched a Compassionate Schools initiative. A committee of educators, principals, superintendents, social workers, and community leaders came together to form a model for implementing trauma-informed care in Spartanburg County schools (Parker et al., under review). From an ecological systems framework (Bronfenbrenner, 1979), its goal is to improve students' academic and behavioral outcomes by cultivating an empathetic, trauma-informed learning environment (Parker et al., under review). The CPTC uses the flexible Compassionate Schools paradigm from Washington (Wolpow et al., 2009) in order to create a trauma-informed school environment that does not depend on the identification of individual children who have experienced trauma. Rather, the CPTC uses an approach

that considers that pervasiveness of childhood trauma and therefore seeks to promote resilience in all students.

The primary goals in creating Compassionate Schools Spartanburg were: (a) to make the prevalence and impact of trauma well-known in schools and the community atlarge, and (b) "to train relevant personnel in appropriate strategies for responding to trauma, fostering resilience, and preventing re-traumatization" (Parker et al., under review, p. 7). Programming was informed by reviewing relevant literature, consulting with other Compassionate Schools initiatives, and conducting an informal needs assessment of the Spartanburg community, including communication with local school representatives about their particular challenges, concerns, and limitations. Trainings began in the summer of 2016 and continue until the present. They are planned and organized by the CPTC, under the direction of Dr. Parker, and conducted by CPTC staff and local experts, including master ACE trainers, pediatricians, forensic interviewers, and SLED [South Carolina Law Enforcement Division] officers (Parker et al., under review).

Participants in the current study attended a three-day Compassionate Schools training at the CPTC during the summer of 2018. All participants experienced the following components, which are categorized under four primary modules in Figure 3:

- 1. An introduction to the Compassionate Schools framework.
- 2. Standardized education in the ACEs literature (e.g., prevalence, lifelong risks, neurodevelopment, intergenerational transmission, community impact).
- 3. A simulation of ACEs in a staged mock house.
- 4. Training in recognizing signs of abuse and neglect.

- 5. Education on social/emotional learning and resilience skills.
- 6. A screening and panel discussion of the documentary "Paper Tigers" (http://papertigersmovie.com/), a film exploring the impact of ACEs on the lives of students and staff at a particular school.
- 7. Training in cultural sensitivity.
- 8. A presentation on mandatory reporting.
- 9. Education in healthy boundaries, practices, and self-care for professionals. (Parker et al., 2009)

Figure 3.

Summary of Core Training Modules for Educators (Parker et al., under review)

Trauma Informed	 Presentation of the ACE study and effects of toxic stress. Experiential activity in a mock house with a case example. The house is staged with signs of abuse and significant family issues. An interactive brain development activity that demonstrates the impact of toxic stress on early brain development. Presentation of signs of abuse and case examples. Presentation on mandated reporting and legal responsibility to report. Presentation on how to handle disclosures from children. View the documentary "Paper Tigers" and discuss <i>Compassionate Schools</i> initiative.
Trauma- Sensitive Practices	 Recognize disruptive behaviors are a response to stress and learn how to intervene early. Introduce techniques to help with stress management and self-regulation. Evaluate necessary environmental change to reduce overstimulation and create calming spaces. Examine policies and implement changes related to discipline practices and suspensions. Recognize and teach methods to manage triggers.
Skills of Resilience	 Develop practices that build relationships. Develop methods to build confidence and self-efficacy. Discuss issues of race, equity and inclusion.
How Trauma Affects Educators & Self-Care Strategies	 Presentation on compassion fatigue, vicarious trauma and burnout. Presentation of self-care strategies, including the development of healthy boundaries.

The mock house simulation is an opportunity for educators to experience a first-hand representation of the potential home life of a student who could be in their classroom.

The CPTC staff combine data and evidence from multiple Spartanburg DSS/CPS cases to recreate a home 'scene' in several rooms. Participants are led through the different areas of the home (front porch, living room, kitchen, bathroom, and bedrooms) with the instruction to note evidence of child maltreatment and trauma. The realistic scenes include trash, bugs, drug paraphernalia, dirty diapers, pornography, blood, and evidence of physical and sexual trauma.

Quantitative Pre-post-test ARTIC Results

Parker and colleagues (under review) at the CPTC conducted a pre-post-test survey using the ARTIC-35 scale (Baker et al., 2016) for educators to assess changes in participants' attitudes toward trauma-informed care as a result of attending the Compassionate Schools Spartanburg three-day training. The authors claim this is the first study of its kind using a psychometrically validated, peer-reviewed measure. Participants completed the ARTIC prior to their training and at the conclusion of the three days. Of the 219 participants, 192 completed both the pre and post ARTIC assessments. Large, significant pre-post effects (i.e., *Cohen's d* > .80) were found for each subscale even though the fact that all pre-treatment means were above the midpoint of their respective scales (potential for a ceiling effect) (Parker et al., under review). There was no differential impact for significant changes in pre- and post-test score across demographic or vocational variables (i.e., gender, race, years of experience, position).

Even though the authors assert the encouraging results of their preliminary investigation of changes in attitudes of participants toward trauma-informed care, they

also note the need for more research. Specifically, Parker and colleagues (under review) note that follow-up studies should assess whether the increases they measured are maintained over time. Long-term studies would add to the literature and strengthen their assertion that Compassionate Schools transforms the way educators view students impacted by trauma. Another suggestion they present is looking beyond attitudes to behavior, assessing whether the measured attitudinal changes result in behavioral changes. Finally, they suggest a true experiment where a control group's outcomes could be compared to the group that experiences the Compassionate Schools training (Parker et al., under review).

The current study aims to respond to two of their three suggestions. By conducting follow-up interviews six to nine months after the initial training, this study will add to the literature by contributing a longer-term evaluation of changes in knowledge, attitudes, and beliefs of trauma-informed care. This study, which involves 40-minute in-person semi-structured interviews with participants, also asks participants about changes in behavior, and gives participants the opportunity to share more than is possible on a survey.

This chapter provided a review of the literature regarding trauma, traumainformed care, professional development's impact on educators, and TIC in schools. Chapter three describes the participants of the current study, the procedures and measure used, and the strategy used for analyzing the collected interview data.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Participants

The CPTC offers a three-day Compassionate Schools training for educators in the upstate region of South Carolina. In the summer of 2018, three of these trainings were conducted, where the 35-question version of the ARTIC was given pre- and postworkshop to the participants. Attendees came from several South Carolina counties, including Spartanburg, Greenville, Cherokee, and Charleston. The pre-test was given before the training began on day one, and the post-test was given at the conclusion of the three-day training on day three. A sample of participants was drawn for the current study from the participants of these three-day trainings.

Two hundred nineteen South Carolina public school district employees participated in one of the three Compassionate Schools trainings. Of these, 192 completed both the pre and post ARTIC surveys. Women were the majority of participants (n=169, 74%). Caucasians also formed the majority of participants (n=156, 68%), while African Americans made up 25% of attendees (n=57). Teachers (n = 75; 33%), principals (n = 48; 21%), and behavioral health professionals (n = 38; 17%) employed by a South Carolina school district were highly represented. Elementary/early childhood educators were in the majority (n = 132, 58%), followed by Middle (n = 30, 13%), and High School (n = 23, 10%) educators.

For the purpose of this study, a sample of interviewees was drawn as a convenience sample from this group. They were initially self-selected in response to an email invitation to participate (see Appendix A) that was sent out by the CPTC to all training participants. Because of the current study's interest in direct instruction employees, many of the summer participants, who were administrators or other support staff, did not meet the criteria for inclusion and were disqualified. Seventy-five participants were classroom teachers. After receiving email responses from only four potential interviewees, two were determined to be unsuitable because they were not classroom teachers. Following the interviews with the first two teachers, they were asked if they knew other colleagues in Spartanburg County public schools who also attended the training. Snowball sampling was then used to find an additional eight volunteer participants from the same group of 75 classroom teachers who had attended one of the three-day summer trainings. If the colleagues expressed an interest in participating, the same recruitment email was forwarded to inform them of the details of the interview, and those who were willing to participate emailed the researcher.

Because Spartanburg County is comprised of seven distinct school districts, effort was made to include representatives from as many districts as possible. In the end, four of the seven districts were represented, comprising both rural and urban communities and both predominantly middle class and primarily low-income areas of the county. Similarly, diversity of school setting was sought, meaning educators were included who taught early childhood through secondary or high school. Forty percent of participants taught early childhood or elementary level, 30% taught middle school, and 30% taught

high school. Gender and racial diversity were also desired, though only partially achieved. Ninety percent of participants were white, while 10% were black. Ninety percent of participants were female, while 10% were male. Only educators who directly instructed students were interviewed in this study in order to gauge whether classroom instruction and/or direct behavior between educators and students was affected by participating in the Compassionate Schools training.

Procedures

The study procedures, including recruitment letter and interview protocol, were approved by Clemson University's Institutional Review Board (IRB). Interviewees received an informed consent form (see Appendix C) with all relevant information. After obtaining IRB approval, a recruitment arrangement was made between the researcher and the director of the CPTC at USC Upstate. An email correspondence from the CPTC (see Appendix A) was sent out from the director to all participants who completed the three-day Compassionate Schools training, from June to August 2018, seeking to recruit educators willing to be interviewed for the current study. Because of a low response rate, snowball sampling was then used to recruit further participants. From the respondents, two pilot interviews of educators who participated in Compassionate Schools were conducted to test and refine the interview instrument (see Appendix B). As a result of the pilot interviews, three questions were added to the interview protocol:

1. Did you have any educational background or exposure to the concepts covered in the Compassionate Schools training prior to the seminar?

- 2. Have you seen trauma-informed care have an impact on students? If so, can you give an example?
- 3. What age students do you teach?

Other questions were also clarified as a result of the pilot interviews, and prompts were added. In preparation for each interview, the interviewer used the eight principles for setting the stage for an effective interview noted by Turner (2010), which are as follows: (a) choose a setting with little distraction (private or quiet area of a school or coffee shop); (b) explain the purpose of the interview; (c) address terms of confidentiality; (d) explain the format of the interview (semi-structured interviews were used); (e) indicate how long the interview usually takes (44 minutes was the average length of the interview); (f) tell them how to get in touch with researchers later if they want to (contact information provided on informed consent form); (g) ask them if they have any questions before beginning; and (h) don't count on your memory to recall their answers (audio-recording was used for the present study).

Following the pilot interviews, which took place in the interviewees' schools, research interviews were scheduled. A total of ten interviews were conducted. The pilot interviews were not used for analyses. All research interviews were audio recorded. It was determined saturation was met because consensus was reached for most research questions and no new information was being obtained (Guest et al., 2006). Seventy percent of the interviews were conducted in the school where the participant teaches, either in their classroom or the library. The other three interviews were conducted at a public meeting place. Attention was given to ensure privacy and minimize distractions.

At the agreed-upon time, the interviewer traveled to the participant's schools or public meeting place to conduct the interview.

Participants were informed of confidentiality procedures and asked if they were comfortable having the interview audio recorded. Participants were told that the study would not collect or report identifying information. Participants were reminded not to use their name or the names of any students, past or present. They were informed that after the conclusion of the study, notes and audio recordings would be destroyed. Participants were given an informed consent form (see Appendix C) with this information as well. The interviews lasted an average of 44 minutes in duration, and participants (including pilot interviewees) received an incentive in the form of a \$25 gift card in appreciation for their time.

At the conclusion of the data gathering, all ten audio interviews were sent without identifying information to be professionally transcribed. Transcriptions were verified for accuracy and edited accordingly by the researcher who listened to the audio recordings while examining the transcripts line-by-line.

Document analysis of the Compassionate Schools training theory (see Figure 3) and agenda aided in evaluating the participants' recall of research question one, particularly the content focus and duration pieces of the core features. The agenda was obtained from the CPTC for the summer trainings attended by each interview participant. Session titles and descriptions were used to indicate the content focus of each period of time over the three day training. The agenda is not included as an appendix at the request of the CPTC. The researcher also observed a later session of Compassionate Schools

training which was another iteration of the training attended by participants, to gauge duration, active learning opportunities, and collective participation.

Measures

Data from the CPTC's training evaluation (Parker et al., under review) using the ARTIC (Baker et al., 2016) was presented as context for this qualitative follow-up study on the impact of trauma-informed care training. However, the measure for this study was a self-constructed interview protocol (see Appendix B). In creating the measure, the Interview Protocol Refinement (IPR) framework was used (Castillo-Montoya, 2016). This four-phase process involves: (a) ensuring interview questions align with research questions, (b) constructing an inquiry-based conversation, (c) receiving feedback on interview protocols, and (d) piloting the interview protocol. An interview protocol matrix, used to complete phase one of IPR, can be seen in Appendix D. Phase three was conducted by submitting the protocol to doctoral committee members and several qualitative research experts. In alignment with phase four of IPR, the interview protocol was revised and edited as indicated by the pilot interviewees' experience and suggestions on comprehension, clarity, and length. Interviews were semi-structured, using standard, open-ended questions. The semi-structured interview was chosen as the primary method of data collection because it provides participants with a format to express their thoughts. feelings, and opinions, as well as to offer examples of interactions with students or administration in their own words (Drever, 1995).

Analysis Plan

Each semi-structured interview was audio recorded and professionally transcribed. The data were devoid of identifying information when transcribed. After transcription, an initial manual coding of the responses was done. Because of the differences in research questions, both deductive and inductive approaches were used. A deductive approach, directive content analysis, was used for analyzing the interview data for research questions one through five (Hsieh & Shannon, 2005) because the analysis and coding were guided by Desimone's (2009) conceptual framework. In examining the interview transcripts to answer research question one regarding the presence or absence of the core concepts for effective professional development in Compassionate Schools training, the five core concepts were used as initial codes/labels for organizing participants' responses. For example, active learning was noted when teachers mentioned activities where they were participating in exercises intended to instruct on the information they were learning (see Table 3).

Table 3.

Coding Examples with Directive Content Analysis

Research Question	Codes	Example Quotes
1. To what extent were the core features of effective professional development experienced by participants?	Active Learning	 I remember the affirmation circle, and that was very powerful we actually used some Legoswe were to write things on the sides of the Lego building pieces that might assist and support, or what we relied on We were asked to create some type of visual representation Yes we did the building with trying to get the tower big with the weights on them The court situationthe mock house was really big for me. One that stands out in my head is we sat in a circlewe walked around the circle and we had one phrase that we repeated over and overfor instance 'you can do anything you put your mind to'and said that to every person in the group. They gave us time to
	Collective Participation	discuss in class on certain topics they threw outwe were able to talk about

ano I dia any do t been We dist root able anoth only som sche elen	nce ideas off of one ther If not attend with one from my schoolI hink that would have the beneficial. Is broke off into rictsthey had little ins where we were to sit and talk to one ther. If at was also cool to not to bounce it off eone who's at my tool but to hear from the that was also cools and
	dle schools

In following iterations of coding and organizing, data were more specifically coded for content. For example, within the active learning theme, more precise codes such as affirmation circle, brain game, or mock house were used to identify specific examples cited by teachers.

For research questions two through five, which were assessing teachers' perceptions of changes in their own knowledge, attitudes, or behaviors, or for students, initial codes were used to label prior versus current reflections on each topic. In subsequent iterations, more specific codes were used to identify the types of changes they perceived, i.e. what was learned (brain development), description of the previous interactions with students (harsh or avoidant), or current attitudes (all-in or committed).

The broader themes helped organize the responses for reporting as indicated in directive content analysis (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005).

Because of the more open-ended nature of research questions six through eight, an inductive approach was warranted (Elo & Kyngäs, 2008). Conventional content analysis (Hsieh & Shannon, 2005) was employed using Grounded Theory (Charmaz, 2006) as a guide. Participants' responses were initially labeled with specific codes for content. Next, a more focused manual coding was completed to compare participants' responses using the most useful initial codes that were then combined into broader themes for reporting (see Table 4). The computer program NVivo was used to aid primarily in organizing themes and remarkable quotes in answer to the stated research questions. NVivo helps assess the accuracy of the themes found from manual coding (Welsh, 2002).

Table 4.

Coding Examples using Conventional Content Analysis

Research Question	Quotes	Initial Codes	Theme
7. What suggestions for improvement do teachers recommend?	 The speakers I enjoyed the most were the ones that had been in classroomsand had examples of their ownthey had real examples to back up what they were saying and they had seen it. I think they can include more of that. maybe some more stories about teachers and their role, maybe 	Practitioners most impactful Suggestion for improvement Suggestion for improvement	More successful implementation examples More successful implementation
	more about things where they found successes, you know, specifically for classroom teachers	More real life examples	examples
	Or then, what do you do? You know?I am still not 100% sure of what I do once I tell the guidance counselor this or that so more about our role	Suggestion for improvement Unsure of reporting procedures	More mandated reporter instruction

Summary

Ten public school educators who attended Compassionate Schools training in the summer of 2018 were interviewed for the study. The semi-structured interviews were

audio recorded, professionally transcribed, and verified for accuracy. Then, qualitative data analysis was completed by iterative manual coding. Both deductive and inductive methods were used, depending on the nature of the research question. For the research questions that were guided by Desimone's framework (2009), directive content analysis was employed. For the more open-ended questions, conventional content analysis was used (Hsieh & Shannon, 2005).

Chapter four presents results from the qualitative data analysis of ten semistructured interviews of South Carolina public school classroom teachers.

CHAPTER FOUR

RESULTS

Descriptive Statistics

Ten public school educators participated in the study. Their ages ranged from 29 to 53 years old, with an average age of 40.4 (SD = 9.2). These educators had between two and 23 years of teaching experience in the South Carolina public school system with an average of 10.9 (SD = 7.6) years teaching. Ninety percent of the participants were female, while only 10% were male. Ninety percent of participants were white, while 10% were black. In their classrooms, participants taught students with ages ranging from three to 19 years old. Forty percent taught in early childhood or elementary settings, 30% taught in middle school settings, and 30% taught in high school settings. Four of the seven school districts in Spartanburg county were represented by the participants.

Research Question 1 – Core Features

The first research question of the study asked, to what extent were the core features of effective professional development—content focus, active learning, coherence, duration, and collective participation (Desimone, 2009) – present/experienced by participants in the Compassionate Schools training?

The presence of the core features of professional development were assessed by interview responses, document analysis, and observation by attendance at a more recent Compassionate Schools training by the researcher. The purpose of all three was to

determine whether and to what extent each of the core features from Desimone's (2009) framework were present in the Compassionate Schools training. Observation of a later training ensured no significant changes occurred from the different time points participants attended. Table 3 shows consensus of the presence of the core features of professional development from all sources. Each feature is presented individually in the following subsections in more detail with interview data.

Table 5.

Presence of Core Feature of Professional Development

Core Feature	Present via document analysis	Present via observation	% of respondents reporting presence (n=10)
Content Focus	Yes	Yes	100%
Active Learning	Yes	Yes	100%
Coherence	Yes	Yes	100%
Duration	Yes	Yes	100%
Collective	Yes	Yes	100%
Participation			

Content Focus

Content focus is the core feature that assures that each activity, lecture, or discussion in the professional development focuses on the intended subject matter (Desimone, 2009)—trauma-informed care in the case of Compassionate Schools training. Participants were asked, "What would you say was the primary content of the training?" If they needed a prompt, they were encouraged to "list the main topics you remember." (See Appendix B, Interview Protocol). As noted above in Table 3, content focus was

present in Compassionate Schools training according to document analysis of the training agenda, observation, and teacher reports.

Document analysis of the Compassionate Schools agenda confirmed the content focus of the training. Listed session topics included, adverse childhood experiences (ACEs), compassionate (trauma-informed) schools, viewing a film on resilience, success stories from a current program, recognizing signs of abuse, mandated reporting, responding to disclosures, cultural sensitivity, resilience and protective factors, mindfulness, and self-care. The same content was observed in another iteration of the training.

Six to nine months after receiving the training, educators were able to recall the content of the training with much detail. They listed the primary topics, such as signs and symptoms of trauma, the impact trauma has on brain development, adverse childhood experiences (ACEs), mindfulness, resiliency, secondary trauma, and self-care. They recalled specific speakers, such as the special agent from the local police department and employees from a neighboring district, who described a successful program that reframed in-school suspension to be more trauma-informed. They also reported listening to an actual, recorded 911 call, watching the film Paper Tigers, touring the 'mock house,' and other group learning activities (see next subsection on Active Learning. One educator described the general content as, "...how trauma can affect a child's behavior, but also how they learn...the trauma affects their brain physically as well as emotionally."

Another teacher summed up the content this way, "Instead of saying 'what's wrong with

you,' saying what has happened to you?' and shifting our thinking. So, it's not necessarily a curriculum but shifting a philosophy and a way of thinking."

Two content areas that were covered in the training but were mentioned less frequently by interview participants were cultural sensitivity and mandated reporting. Only 20% of those interviewed mentioned the speaker and discussion on implicit bias and cultural sensitivity. Both of those teachers also commented that they desired more time devoted to this topic. The topic of mandated reporting was only mentioned by 40% of participants, half of whom mentioned it to ask for more thorough training on the specifics of what/when/how to report suspected child abuse or neglect. Only one participant mentioned mandated reporting as a content focus area.

Active Learning

Active learning entails opportunities for teachers to engage in hands-on experiences that relate to the content of the professional development (Desimone, 2009). One hundred percent of participants reported engaging in active learning during the Compassionate Schools training. Active learning opportunities were scheduled into the training according to the agenda and were observed during another iteration of Compassionate Schools training. When asked whether there was too much, too little, or just the right amount of active learning, 80% reported the amount was 'just right' or 'a good balance.' One participant felt that some of the time used in group activities could have been allocated elsewhere for more impact ("There were a couple of times where we did group stuff where we probably spent more time than we needed to; we could've cut it down a little bit for those"), while the other ten percent reported that there is "no such

thing as too much...there's always room for more; the more active learning or the more hands-on the better. I just remember something better if I do it."

Interviewees reported participating in active learning exercises such as a brain game, building a resiliency tower, touring the mock house, group discussions, and a creative group activity (song, poem, or billboard) intended to communicate trauma-informed care to the community. In response to the final creative activity, one teacher commented,

I don't think it was the billboard that was important, it was the process we went through as a team as we tried to synthesize six or eight people's takeaways. It gave us that time to hear how someone who's a colleague interpreted information they heard...we all agreed, 'yes. This was a strong takeaway'.

In reflecting on the active learning experiences, participants described them as "eye opening," "interesting," and "helpful/beneficial" One teacher said,

Those experiential things had a huge impact on me...I think all of them were very appropriate...It was always built on learning...You're like oh okay, they were just talking about the trauma brain and now I'm building and I'm seeing it. We were just talking about mandated reporting, now I'm seeing what my [student]'s home might look like...no activity was useless.

The activity that was described most frequently (70%) as impactful and emotional was the affirmation circle. Half the teachers sat in encircled chairs while the other half stood behind them. Each standing teacher went around to each sitting teacher and quietly spoke words of affirmation or positive messages in their ear, such as "you are enough," "you

are intelligent," or "you are going to do great things." One teacher described her experience,

That was very powerful. Really powerful and emotional even to hear people coming by you saying over and over again, 'you are enough; you are worthy; you are special; you are loved.' These were strangers to me and it was still very powerful to hear. That just kind of highlighted how the words we speak day in and day out resonate with our students.

Coherence

Coherence refers to consistency of the training content, and the teachers' ability to integrate the new content with their beliefs. Coherence was apparently intended based on document analysis of the Compassionate Schools training agenda, and consistency and connectedness were observed by the researcher at a separate iteration of the training. When asked how coherent (or well-connected) the content of the training sessions were, the interviewed teachers all responded positively. Their answers ranged from "pretty coherent/clear" to "I thought it was perfect." One teacher responded,

I thought it was very connected. It all just kept coming back to the wellbeing of the whole child and their development as it relates to their ability to learn and reason and function within the classroom.

Regarding coherence, teachers also commented on the flow of the various sessions. "It was very smooth and I knew exactly the pieces that were going together." Other teachers responded,

The way they designed [it], like first you learn about the trauma, then you learn about mandated reporting and all the things to look for, warning signs, and then the self-care part. I love it because you are feeling kind of bummed out the second day but then the third day leaves you like, 'I can do this.'

I felt like the flow, it seemed to me there was...a very intentional plan in the order of events, and they were all coherent and well-connected, and gave us just the light activities we needed following a deeper, harder activity. So, my emotions appreciated the intentional planning of that so that we could have those moments to breathe a bit after two hours of almost holding our breath because something is so hard to hear.

Duration

Duration refers both to the span of time over which the activity is spread and the number of hours spent on it (Desimone, 2009). According to Desimone (2009), the longer time over which a professional development training is spread, the better for impact, and the minimum number of contact hours required for optimal learning is 20 hours.

According to the document analysis of the agenda for Compassionate Schools training, it exceeded the minimum number of hours required for adequate duration of professional development. Observation confirmed that the Compassionate Schools training conducted by the CPTC was 21.5 hours in duration. It was spread over three full consecutive days.

Participants were asked their opinion of the duration of the training (too long, too short, or just right) and why they answered the way they did. Two teachers came to the

training with concerns about the duration, but by the end understood it as necessary answering,

I felt like going into it, it felt a little lengthy, but being on the other side of it, I felt like it was the right amount of time to get all of the content.

Going into it, I was like man, three days, that's a lot of time...but after walking away with the content I'm like it needed that time and it needed to be back-to-back.

Another teacher shared,

As much as I wanted to know more, I think that intensity [three days] was probably as much as I could have taken.

However, the majority of teachers responded that the duration was just right.

I think it was just the right amount of time...I was engaged the whole time...I don't feel like if it was shortened you would be able to give that much thorough information.

Even though it was a lot of information, I felt like it was very beneficial to have it within the three-day period. [I was] grateful that I was able to get it in that timeframe. If it had been shorter it would probably have been overwhelming as far as the information.

I liked the three-day training—being able to go home and think about what we had done the day before and then come in and learn something different; never got bored or tired of being there.

Collective Participation

Collective participation is accomplished through teachers from the same school, grade, or department attending professional development training together (Desimone, 2009). Teachers were asked, "Did you attend the training with other from your school? Your district? If so, were you able to discuss and reflect together at any point?" (see Appendix B). Table 4 shows the percent of participants who reported attending Compassionate Schools training with other educators from their school, those who reported attending with other employees of their district, and those who reported time to discuss, reflect, and/or collaborate together with colleagues over the course of the training.

Table 6.

Collective Participation Rates

Collective Participation	% reporting (n=10)
Attended with peers from common school	40%
Attended with peers from common district	100%
Reported time to discuss/reflect together	100%

Teachers universally reported the benefit of participating and reflecting with colleagues from their school or district. "We sat beside each other and we talked a lot about it...what

compassionate schools would look like here at [our school] and what it would be in our district." They called the opportunities for collective participation "very useful," "great," and "beneficial." An elementary educator expressed her appreciation for conversation between teachers of different levels and administration,

I got to hear from intermediate; I got to hear from high school. I got to make those connections, and then there were stakeholders from the DO [district office]. For them to hear us was very valuable because I think...the day in and day out they may not understand exactly what a teacher goes through on a day-to-day basis.

Other teachers also mentioned the benefit of talking with non-classroom employees from their schools or districts. A high school teacher commented,

There was a guidance counselor on my left and an assistant principal on my right and being able to hear their points of view at different levels in the building of how they see students and things like that. That was great, as well as to be able to talk back and forth to them—just the opportunities of collaboration with my own school and our district.

The 60% of teachers who did not have the opportunity to attend training with anyone from their school acknowledged it as a loss. One said, "It would have been good for me if there'd been maybe another teacher [from my school]." Another commented,

That would have been beneficial...if there had been a group of us that could've gone and then worked together to kind of roll it out into the school.

When asked about time for collaborative reflection and discussion, 100% of interviewees answered positively, expressing they had the opportunity and it was "beneficial." Two teachers mentioned having additional time for discussion once they returned to their respective schools. One said,

We sat together, participated in group activities together, but most of our reflecting happened when we got back to school. During a faculty meeting, we talked about some of the takeaways.

Research Question 2 – Changes in Knowledge

Research question two asked, what changes do teachers perceive in their knowledge about the impact of trauma on the students in their classroom as a result of Compassionate Schools training six to nine months post-training?

In order to answer this question, teachers were asked about their previous exposure to the topic of trauma-informed care at any point during their educational preparation to become teachers. They were also asked, "Prior to the Compassionate Schools training, how would you describe your level of knowledge about how trauma impacts students in your classroom?" To aid in assessing their change in knowledge, they were asked, "What knowledge did you gain from Compassionate Schools training?" (Follow up, "What did you learn?")

Previous Educational Exposure

Fifty percent of participants reported no previous educational exposure to the topics covered in Compassionate Schools training. They responded with "no," "none," or

"nothing." The other 50% reported "a little bit" or "some" with the majority noting that the emphasis was on "cognitive" or "brain development." One teacher who came into teaching as a second career expressed receiving "a little bit" about classroom management techniques that fit in the structure of Compassionate Schools, "but as far as trauma-based stuff, there wasn't a lot." Similarly, another teacher with more than 20 years of experience responded that she received "a little overview of brain development" in her schooling but "had never heard of ACEs at all until Compassionate Schools."

Prior Knowledge

Teachers were also asked to describe their prior knowledge about the impact of trauma on students from sources other than their education/teacher training. In response, teachers' answers ranged from "unprepared" to "limited knowledge" to "pretty high." Fifty percent expressed having no or very little knowledge about trauma-informed care before the training, revealing a theme of lack of prior knowledge about how trauma affects students. One teacher responded that her level of knowledge was "not great...my thought was always kind of like, 'Well, when they're here, they just need to do what I need them to do." Another teacher said, "I had no training with trauma. I had no experience with trauma. I did not feel prepared at all." She described her knowledge, "basically the extent of it would be if a student tells you that they're being abused, you're going to want to report it."

Two teachers who disclosed their own childhood trauma felt their level of knowledge was higher because of this personal experience. "What I knew was based on personal experience of trauma. I did not know science backed me up." "I believe my

knowledge was pretty high from personal experience." Other teachers expressed that they had some knowledge, either instinctually or from another source. One teacher mentioned a previous training where she learned some of the concepts, "I had a little bit of knowledge because I went to some classes about poverty and how poverty affects the brain." One said,

I wasn't completely uninformed but thought about it affecting students emotionally. I didn't really take into account the physical effects and how the physical effects can affect them in their education and their capacity to learn.

Regarding her instincts, one teacher commented,

I knew that trauma was impacting kids...their ability to learn, [but] I couldn't name it, and I certainly didn't have the data or research to show how it impacted the brain development. But in my gut, I knew that it was.

Another addressed her naiveté,

I was naïve to think that kids would drop their troubles and come to school; that they weren't always bringing everything with them...and I wanted to keep that barrier of teacher/student relationship to a minimum...[not] get too close.

Knowledge Gained

One hundred percent of participants reported an increase in knowledge about the impact of trauma on their students as a result of Compassionate Schools. One teacher summed up what she learned this way:

Overall the takeaway was understanding. Understanding that [students] need to feel safe, and they need to have a place to go, and understanding that sometimes

you have to accommodate. Sometimes you have to be more accommodating, more so that strict...and also understand that sometimes you have to be flexible. To have a bigger impact in the classroom, you really need to be attentive to each student.

Teachers described learning about most of the content focus areas (ACEs, trauma's impact on the brain, and mindfulness), with particular attention focused on learning about the importance of building trusting relationships with students, recognizing signs of abuse/neglect, gaining awareness of the inaccurate stereotypes of who is impacted by trauma, and the hope of resilience. One teacher summed it up by saying, "I learned about brain development and that building relationship matters a whole lot." Another teacher responded,

Before the training, I really didn't understand how much the brain takes over; I knew fight, flight, or freeze, but how much trauma changes your DNA and the chemistry of your brain. I never put two and two together with a kid talking back to their teacher or yelling could be like a PTSD or trauma response.

Teachers emphasized their knowledge gained about the "significance of relationships."

Understanding that even though standards are important (I take my job very seriously when it comes to content), sometimes taking a moment out of your day to engage in things going on in their life and being relatable really helps the student engage with you, which helps them trust you more.

I feel more equipped now knowing the tools that I have, just understanding that relationships are everything with those kids.

So kind of overall arching was forget that you're teaching a content area, [remember] that you're teaching people and just you're teaching students who don't just need to learn math, that they also need to learn life skills and that they need a support system and that they need someone that's going to be there.

There's still trauma there left behind after a report has been made. You have to support that child through the trauma.

Another theme teachers reported learning about was the concept of resilience. Teachers valued the hope that "resiliency trumps ACE score" with their students,

Just because a child has experienced trauma doesn't mean that they can't become resilient and that they can't overcome that trauma. It's easy to say, 'Gosh, that child has so much stacked against them,' but to know there's hope and that we do make a difference—that was big.

[Children who have experienced trauma] may need more support structures to overcome the trauma, but in time with the right interventions they can have social interactions and academic outcomes that are as strong as children who have not experienced trauma.

Teachers also confronted some of the stereotypes they had about who is impacted by trauma. For example, one teacher realized, "just because the grades look good doesn't mean the whole self is good." Others responded,

I learned that even the cleanest, the most prim and proper situation may not be all that they're made up to be...so not to be too judgy or hard on people [because] you have no idea what's on the other side of their home.

Trauma can impact any person in any walk of life, not necessarily our lower socioeconomic groups or certain ethnicities. That trauma can be with you your entire life, and that support systems can help counteract the effects of trauma.

Teachers also reported learning about child maltreatment, specifically looking for signs of abuse or neglect,

Don't let the little things slide because the little things could definitely be major things.

Things aren't always as they appear...because sometimes it's subtle...spotting signs of some sort of trauma.

I learned [there are] different kinds of neglect...that it's more prevalent than we even know. I learned to not just assume that everything's 100% great for [students].

One teacher also expressly mentioned learning various practical takeaways for use in her classroom, "It didn't just teach me content, but it gave me a lot of ideas of how to present it to my kids."

Research Question 3 – Changes in Attitudes

Research question three asked, what changes do teachers report in their attitudes about trauma-informed care six to nine months after Compassionate Schools training?

Prior Attitudes

Regarding their attitudes before attending the training, teachers were asked, "If you had knowledge about trauma-informed care prior to the training, how would you describe your attitude towards it? How important did you feel trauma-informed care was in schools?" Eighty percent of the interviewees participated in the training voluntarily and had primarily positive attitudes about trauma-informed care. They repeatedly used words like "very important," "excited" and "eager" to learn more,

I was super excited about it...I sought it out and wanted to go. My attitude was really positive.

[The importance was] ten out of ten. I feel like it's super important and was definitely really passionate about trying to figure out what I can do to learn about it and being more effective at teaching the students.

Other teachers commented on their uncertainty and curiosity. "I was really interested because I had a lot of questions." "I was very curious definitely, but a little bit of me was like, 'I am compassionate, why would I need this?""

One of the teachers who was mandated to attend did not have a positive attitude leading up to it,

Honestly, I did not think it was going to be important. I was actually trying to get out of it, like not going. I'm like, 'Why do I need to go to this? It's summer time. I don't think I need to go to this.'

In reflecting on her previous attitude toward trauma-informed practices, one teacher feared her approach might not have been rigorous, "I thought of myself as more of a softy and maybe that, oh, I'm not as demanding of my students." Another commented on her preconceived stereotype, "[I thought] that it was geared for lower SES groups or minority students predominantly."

Current Attitudes

Teachers were also asked about their current attitude; "What is your attitude toward trauma-informed care in schools today? What do you think about the effects of trauma on your students? How important do you feel trauma-informed care is in schools?" One hundred percent of the teachers had a positive attitude toward TIC six to nine months after the training. They described their attitudes as "passionate" and "all-in," and now believed TIC in schools to be "vital" and "very important." One said, "I think that trauma-informed care is very critical for our students." Another responded, "I believe it is a matter of success or failure at school." A third said, "It ranks equally as

important as academics in my book." The teacher who had an openly negative attitude before the training reported a significant change,

It was totally not what I was expecting, so that was a good thing. It really blew me away...I loved it...It was beneficial. It's very important, a very vital part of education, [and] I feel like it needs to be more thoroughly implemented.

Everybody needs to experience the training.

Another teacher recognized their change in attitude: "a lot more important than I probably would have said before." The teacher who had questioned her classroom rigor responded,

I'll tell you what's happened to me since this training. I am so confident of my approach to students, and I am...all-in. I [now] think my standards are higher than this teacher that just puts a zero. Because my requirement, my expectation of my student is no matter what's going on, it might not be today, maybe you had a bad day, you're going to do the work. That's a high expectation. That's a higher expectation than I'm just going to put the zero and it's too late, can't do it.

When my student is not doing the work, I'm losing and they're losing. When they're doing the work, even if it's eight weeks later, I'm winning and they're winning. So this training has reaffirmed for me, that my way is a higher expectation. Compassionate School's way is more inclusive of everyone and gives every student an opportunity to succeed. I really believe that.

The teacher who had to face inaccurate stereotypes now realized that TIC is "necessary for students from all walks of life." In addition to the noted importance of the training,

one teacher recognized that TIC is also difficult, "It's hard. It would be much easier to just run my classroom a certain way and be like, 'this is it." One teacher saw the potential for TIC to improve students' behavior,

It's super important. I feel like if everybody could adopt this mindset our troubled students wouldn't be causing us this much trouble. I feel like if we could all kind of go in with a little bit of grace and just really with an attitude of maybe you're making wrong decisions but we want to help you versus punish you, I really think the concept would work. But I feel like more than just a random person here or there has to buy in.

Another expressed regret that TIC had not been implemented before in schools, "We should have been doing it the whole time. We should have never just come in and taught our subjects. We should have been teaching children."

Research Question 4 – Changes in Behavior

Research question four asked, six to nine months after training, what changes do teachers perceive in their behavior/interactions with students?

One hundred percent of teachers interviewed reported a change in their interaction with students in response to Compassionate Schools training.

Prior Behavior

Before the training in TIC, many teachers (50%) reported their behavior as harsher and rigid, with no second chances.

I think I tried to take a dictator approach to my classroom. Like, I came in and it was 'my way or the highway' kind of thing of knowing my rules and that you're going to follow them...I didn't want them to think I was their friend. I wanted them to see me as an authority.

I was too forceful. A kid may come in and they're whining, and I'm like, 'What's wrong with you?'

I was an authority figure. Not listening. Just laying down the law. "This is my policy and I'm not budging on it." "Nope, you didn't turn in your homework so you just get the zero. I'm not giving you any more time."

I was concerned about curriculum, curriculum, curriculum. This isn't turned in, you're going to get a zero.

If they disrespected me, I sent them out in the hallway and kind of lay into them.

Other teachers felt unprepared, "unsure" and "cautious," and rather than engage with students, one noted that she would, "send them to guidance." Another pointed out the difference between what she said and what she did; "On the surface being like 'I feel bad for what's going on with you,' but 'back to this test."

One teacher recognized,

I had lower expectations because I thought I was helping make up for, in some way, the trauma they had suffered. And I think without recognizing it, I may have perpetuated a sense of helplessness out of what I thought was compassion.

One teacher expressed her lack of awareness, "I don't know that I knew I had any of them."

Two teachers were already using "some calming strategies" and characterized their behavior as "very sensitive, nurturing."

I always tried to remain calm, and I always tried not to take it personally. I was successful some of the time, but not all of the time. Something that I instinctively did [was to] remove them from the situation...I always tried to use positive reinforcement as opposed to negative.

Current Behavior

To assess change in behavior, teachers were asked, "Has your behavior in the classroom changed as a result of Compassionate Schools training? If so, how?" All the teachers reported changes in their behavior in their classroom and with students. They reported becoming more relational, more intentional, and more flexible. One teacher gave the example of checking in with students about extracurricular activities. They also said they were more understanding and listened more, giving students more choices. All of them had incorporated at least one trauma-informed technique in their classroom, like brain breaks, breathing exercises, yoga, fidget toys, or a calming zone.

Teachers gave examples of these behavior changes, how they incorporated TIC techniques,

Instead of berating [a student] in front of the class, it's best to just go tap her on the shoulder and be like, 'Just go get some water right now.'

I still have high standards...some of their emotional issues keep them from doing well, so we've kind of come up with ways creatively to work with that. Maybe let a couple of things go because they have anxiety. They can show me that they know what they're doing. Last year you couldn't have talked me into that.

Now when this child throws toys, I approach more calmly, I get down on their eye level, before I speak to them, I make sure my voice is calm and lowered. [I recognize] this behavior shouldn't make me upset, it should make me curious. 'What is this child telling me through his behavior?'

I help more with self-regulation because I want it to be lasting and I help in terms of focus on their end goal. I'm more intentional in seeing my students and their needs. I do brain breaks; I do positive self-talk; I do a lot of affirmations; I do superhero poses. I can offer so much more concrete-wise; I have a lot more to offer [now].

My first two weeks, I intentionally gear my work and my unit, towards culture in the classroom, towards diversity, towards learning each other, myself included, learning my students and learning about effort and who we are and what we have in common and what we have different, but how at the end we're all in this together. I am very intentional, since this training about those first two weeks being about building that culture... I am also using the breathing in my classroom this year, and my students love it. It's very effective.

I'm letting them talk more to other people. My kids are in groups instead of straight rows. And we laugh, we have fun. We take the pressure off of grades all the time. I let them express, 'I like this. I don't like this.' I even listen a little more to what they need. They'll tell me that they're bored with what we're doing or that 'this is too much; I can't handle this.' And instead of saying, 'yes you can' and pushing them on, I'm like 'Alright, let's take a break' because I would want a break. 'Let's take a break and just take a deep breath and let's figure out where we're at and let's reboot and figure out where we're going.'

I tell my kids that I love them. Try to ask more questions about [their lives]. I've been a lot more intentional this year, really trying to have a better relationship and get to know the kids.

I have them all write me a 'Dear Teacher' letter (a five paragraph essay about their life and how the teacher can help them be successful). It really really helps me know where they are coming in and what I like to see going out is that they've grown in some way.

I feel like I look at it with a different lens. I feel like it just gives me just an extra little bit of empathy and leniency...flexibility, just knowing they'll be more successful than with hard, rigid deadlines.

Teachers recognized that their self-regulation had improved and that they were being calmer and less reactive with students.

[I am] more aware of my tone of voice; being a lot softer; more aware of my physical position – position myself lower than the child, give them personal space.

I always take the child aside. I never ever speak in front of anyone. That's not easy in school when you have got 70 students. That has been an effort, that I've... it's something I've worked on since this training, and I've gotten pretty good at it. I know that in my head, I can think something, but out my mouth and my face I say, "Would you please step outside?" I've always said, and even if it's every day, I say, "This is so unlike you, is everything all right?" Even if it's like that kid every day.

I try not to raise my voice as much. I try to announce when we are making transitions...I try to be sensitive and aware of what students' triggers might be and avoid those things. I only use positive reinforcement. I quickly got rid of [the clip chart] because it was such a negative thing. We have a calm zone...I'm more open to outside the box types of things.

Two teachers responded that they are more comfortable and now have "more boldness and courage" to stand up for students or advocate for trauma-informed care. Another commented that she is, "more observant, looking for changes in the students" like behavior, emotions, or hygiene.

Research Question 5 – Student Impact

The fifth research question examined whether teachers have observed traumainformed care have a direct impact on student outcomes.

One hundred percent of respondents answered that they had seen TIC have a direct impact on student outcomes. They referred to students receiving more emotional support, having more connections, increasing motivation, and improving academic outcomes like test scores, grades, and commitment to graduate. Regarding emotional connection, one teacher reported, "*They know they can trust me*." Referencing the addition of yoga and breathing techniques to her early childhood class, one teacher reflected,

We have to remember this peace, this short amount of peace may be the only quiet time that they get. So that small moment of quiet can do wonders for these little people.

A student with a high ACE score who was struggling with anger and difficulties at home was given the freedom to excuse himself to the restroom, wash his face and collect himself when he arrived at school upset. This was happening two to three times per week at first.

But by the end of the semester, it is amazing to me, it really is. That child would come to school, he would have a bad day, he would check in with me quietly, and he would be able to get it together to come back to class. That to me is success. That's success. I mean, that child passed his EOC [end-of-course exam] too, okay. That's an IEP student, he had study skills class, he passed, he was able to learn self-regulation. He did fine. I mean, I'm not telling you his life is a cup of tea, okay. But he learned how to do that. That's success. That's a concrete example of success.

Teachers had comments on the general impact on students,

When you have all these things [components of TIC], then they [students] are opening their arms for the content. When you don't have all those things, I can teach til I'm blue in the face—their head's down, and they're in the hoodie.

This training has really helped me put on what I call my self regulation face. It has done amazing things for my classroom in terms of classroom management. I do not write referrals. I was never a big referral writer before this, I don't write them at all now. That's one of the main changes for me. Because I feel like I'm building relationship with my students, and if something happens, I'm not turning it over. I love my administration, they're there to support me, they will always support me. But I'm not turning over all this time and effort I spent to build a relationship with this student, to my administrator.

My students are more willing to come and eat lunch with me and talk openly about what's going on, what they're struggling with. Prior to having training...I was just another teacher and they just felt like another number, which [made me] feel like I did a disservice to those children.

I can see more relationships being built in the hallways with teachers and more teachers doing high fives in the halls and greeting [students] at the door. That's making the kids feel better in the morning when they come in and they know they're wanted at school...they know we care about them.

One high school teacher told the success story of a student with an ACE score of nine. She had a drug addicted mother, was responsible for caring for her four younger siblings, and she was the victim of rape. With intentional mentoring and tutoring, she passed her End-Of-Course (EOC) exams, even with poor grades and extensive absences. Passing these tests is required for graduation at the school.

An elementary teacher gave this example:

So, I had a student who moved in, and this child came in midyear, and for the first probably three weeks that he was here, he would run out of the classroom every day. He would just become overwhelmed and didn't know how to express that, so he would just walk out. I worked to introduce him to the calm zone, and he's actually the one that I introduced the [clothes] basket with. We worked on a plan where when you're feeling this feeling and identifying what that feeling was, then instead of going here to escape, now this is your place to go to escape. So, we

worked on just transferring his escape route to something that was suitable for the classroom, and within a few weeks, he transitioned to not leaving the classroom at all. Then it transitioned to rarely even going to the basket to get away, so that to me was a big success. Just being sensitive to what he needed and making that transition of let's flip the script and kind of give him first of all, a different narrative to say to himself when he's feeling that way, but also a safer option for him. I think that's a good success story.

Teachers reported more collaboration for student success, sharing strategies that work for specific students. Several students were removed from abusive homes because of teachers' recognition of the signs of abuse or neglect.

A high school teacher saw the impact on her students' enthusiasm for her class as well as their academic performance,

I've seen that they've changed in the way of wanting to be there. They say science is fun. They love learning in my classroom. They love my labs, but I haven't changed anything about the content. It's just I've changed my approach to the kids. And so I love to hear, 'Man, I hated science before this class, but Miss ____ makes it fun.' And the scores have gone up. My tests look better. My quizzes look better. They care more. They work really hard on their work. The success in my classroom is higher.

Research Question 6 – Change in School or District-Level Plans/Practices

Research question six investigated to what extent trauma-informed practices had been planned or implemented at their schools, as a result of the training.

Teachers were asked, "Have any plans been made and/or implemented at your schools as a result of the training? If so, can you describe those?" Eighty percent of the participants responded that their school and/or district had made plans as a result of the Compassionate Schools training. Sixty percent were aware that the school and/or district had plans to train as many teachers in TIC as they could. One school sent all new employees to Compassionate Schools. One school made Compassionate Schools training mandatory for all teachers and teachers' assistants. One had a goal to train all employees within the next four years. Two schools created volunteer steering committees to help create goals and implement changes in the school.

One teacher reported that her district hired a psychologist or a mental health counselor who rotates through schools to meet with children specifically who maybe have red flags. She believed this to be at least in part as a result of administrators attending Compassionate Schools training. The high school also joined a non-profit suicide hotline. According to a teacher, their school had suffered several suicides in the past few years. Another teacher reported that their "assistant superintendent goes out and checks on certain families" more after having the training.

One of the elementary teachers reported that they had implemented "calm zones for all of first grade and communal baskets for kindergarten and 2nd." She had applied for and won a grant to outfit them. Another teacher said, "It's not necessarily that a plan

has been implemented, but it's more of just a care mentality, an attentiveness; checking on the student individually. And then not only meeting with the student, but also meeting with the parent."

Collaboration among teachers had increased according to one teacher,

I can definitely see that with a lot of our teachers caring. We talk to one another like, 'Hey, I'm really struggling with attitude with this child in class. How are you with this kid? What are you doing differently? What can we do to help this kid?'

One teacher talked about her school's implementation of a positive intervention program that used incentives and goals with students. She said that after adding the Compassionate School philosophy,

Teachers now [use] not just incentives but little things they do in the classroom to protect a child. Help build that resiliency without a reward. Make it be more intrinsic. Showing them that it's because you care about them that may push them over instead of a sticker or a piece of gum. And the compassionate side seems to be heavy weighted in that the kids are responding more to that and they're responding more to what the teachers care about and how much they love them and how they want their grades to be better.

Research Question 7 – Suggestions for Improvement

Research question seven asked, what suggestions for improvement do teachers recommend six to nine months after participating in the Compassionate Schools training?

When asked what suggestions they had for future trainings, teachers offered several opinions. One teacher who had experienced childhood trauma encouraged trainers to "be cautious of those [attendees] who have had their own trauma." She said there were warnings given, but still felt unprepared for the intensity of some of the video cases. Even though she was triggered, she did not recommend changing the content, however, because she felt it was "necessary" for teachers to be aware.

The other suggestions focused on wanting more of a specific topic or additional content. Thirty percent (n=10) of participants asked for more time with the SLED agent (police officer) who presented real, local cases. Twenty percent of participants asked for more conversation around the topic of implicit bias and cultural sensitivity. A high school teacher requested more focus on secondary education students and interventions and also asked for help answering the question, "How do we reach those kids that everything is fine on the surface, the kids that we have no clue?"

Two teachers suggested having a time for teachers to talk together about ways to implement what they were learning, to share ideas and troubleshoot issues in their classrooms. They suggested "listening to teachers" more. One suggested to "include time for teachers to talk together about what this may mean for them. Maybe it could even be a follow-up to year one. 'What did you do?'" Three of the most repeated suggestions were asking for more examples of implementation or success stories (60%), more practical tools and takeaways (80%), and more detailed information about mandated reporting (40%), which will be described below.

More Implementation Examples/Success Stories

Teachers expressed much positive feedback about the example of the local ISS (in-school suspension) program that was integrated with trauma-informed practices. One teacher said she "would have loved to get more information about the trauma-informed ISS program, [and] how you could set up that type of thing in your own school."

Other teachers commented,

The speakers that I enjoyed the most were the ones that had been in the classrooms...and had examples of their own. They had real examples to back up what they were saying, and they had seen it.

[I suggest] more stories about teachers and their role; more times where they found successes, specifically for classroom teachers.

People coming in and talking about their personal experiences a little bit more—of a child who has overcome and is resilient...seeing those success stories would be even more amazing.

Practical Tools and Strategies

Teachers most commonly said they "would love to hear even more about specific strategies." Eight out of the ten teachers interviewed suggested having more practical tools or strategies for teachers.

[I suggest] focusing a little better towards what we can do within the classroom...want to hear more about the data and what it's doing.

I'd like more concrete things schools could do to address behavior concerns coming from trauma.

More takeaway strategies for teachers. Teachers need those.

One teacher suggested "giveaways—like a mindfulness jar."

Interestingly, one of the teachers who did not suggest more concrete takeaways suggested providing clarity that Compassionate Schools is a philosophy rather than a curriculum,

It's not really a 'tell me what to do' kind of thing because there's not one package that you can pick up and say 'you do this and it's all going to be okay.' I don't think teachers are really understanding that when they leave. I think they're thinking, 'Oh, when we go to the next training, they're going to tell us exactly what to do and we're going to be able to do it.' So, maybe a little more full disclosure on (and I know they say it) [but] maybe it's just that teachers are so excited that someone's finally listening that they're not picking up on that.

Detailed Mandated Reporting Instruction

Forty percent of participants suggested including more information about mandated reporting for teachers.

I wish I would have had just a little bit more time to talk about the law, kind of side of things. That's something we don't get as a teacher in the classroom. We

know that we have a responsibility to do something, but sometimes we don't always know exactly what to do, what processes to go through.

I am still not 100% sure of what I do. I mean, once I tell the guidance counselor this or that, you know? Just more about our role and how we can help.

One teacher shared an example of how she still feels uncertain about her role as a mandated reporter,

I have a child who was homeschooled for seven years and came to me this year in 8th grade. Well, they really hadn't done anything. He never learned math. And his sister is at home still...my thought is, "That's odd."...to me that's neglect. Well, is that, you know, does that warrant a welfare check? Or every once in a while there'll be [a situation] where a child looks like they're not warm enough, so I didn't always know...I wanted to know more about what our line is or when we have an obligation.

Research Question 8 – Additional Resources Requested

The eighth and final research question asked, what additional training, resources, or supports do teachers report needing in order to more effectively implement what they learned at the Compassionate Schools training?

Seventy percent of participants, when asked what additional resources they need to effectively implement trauma-informed care, answered 'designated mental health

counselors' or something similar (i.e., therapeutic counseling, school psychologist, mental health professional).

We need somebody here around the clock to come in and pull these kids out and talk to them. I'm not specialized...I'm just a mandated reporter. I love them, and I'm their teacher, but I mean as far as to really help them psychologically, I'm not skilled to do that.

Forty percent of participants answered that they would like "more training and support." For example, "A website of resources; a place to quickly access information," "a script or sample lesson plan tor maybe video recordings that teachers could access of how to implement some of the things [learned]," or "refresher trainings." One teacher suggested that the CPTC could follow up on the training by coming out to the school, "even running a class, modeling" the trauma-informed practices. Another educator believed that having a consultant available for school personnel to contact when they needed assistance would be a valuable resource for implementing TIC in her school. Regarding additional training, one teacher added,

We get curriculum training, we get content training, but when we left college and left school, we're not getting the, I guess you'd say the human side of training, basically. We're getting things that our district needs for our report card to look good or things that our district needs for our test scores to look good. And beyond that there's this huge world.

An early childhood educator pointed out the need for common standards for social-emotional learning in public education:

Once you hit public school and your five-year old kindergarten and above, there are no standards about social emotional development. There's nothing that serves as a continuum that shows me as a teacher this is typical behavior for a seven year old, and this is atypical, this is the continuum that this develops on, and you do see that in the early learning standards, not only just the continuum of development from birth to age four, and what expressing frustration looks like, what developing communication, what knowing about oneself looks like.

A final resource that teachers felt that needed was awareness and support from local and state administration, as well as legislators,

Just because we're trauma-informed doesn't mean that it all goes away and that if we put a few practices into place that that's going to take care of it. I think it's still very important that our state get behind us with policies and procedures that support what we're trying to do within our classrooms. I think it's very important that states and districts and our superintendents understand that teachers becoming trauma-informed is not going to fix the situation, that there are still a lot of children who need much deeper help than we're able to provide.

Barriers to Implementation

In discussing what resources would help them be more effective in implementing TIC in school, teachers were also asked about what barriers they have seen or experienced that may be preventing or slowing implementation. Several themes appeared in the teachers' answers. The first theme was parents or homelife, mentioned by 60% of interviewees:

How do you help provide the resources for someone who's experiencing trauma when you have to depend on the person who may be causing the trauma?!

All of our teachers can be trained, but they go home.

I don't think there's any barriers as far as school implementation. I don't think the school is holding us back. It's more the barriers [are] the ones at home.

Parents feel attacked, like you're overstepping a boundary

The only thing that I've ever wished for is to somehow get the parents on board.

The parental involvement is the part we're missing, and we all talk about it.

The second and third themes were time (mentioned by 60% of participants) and class sizes (mentioned by 50%).

We've just lost over the years in general, the flexibility for teachers to play with their kids and got to know their kids outside of rigid curriculum.

Another major theme was culture or mindset (40%) as a barrier. They referred to an "outdated discipline system" and the "older generation [who] might be set in their ways…resistant."

The bad thing I've learned about compassionate schools is that most teachers that need Compassionate Schools don't think they need it.

The secondary level [employees] can be less likely to buy-in. There is a lot of 'this is babying; this is coddling.'

Money or funding was also mentioned by 30% of participants, as was fear, "you don't want to get too close to students."

You don't want to ask the wrong questions...you get slapped on the hand for almost anything...it makes you hesitate. You know, you don't want to lose your job.

Two teachers mentioned needing more district and/or school board support. The final barrier was suggested by one teacher,

Lack of self-regulation in teachers—we get overwhelmed...it's easy to get in a debate with a student. It's easy to get your feelings hurt and take things personally.

Other Themes

Several themes emerged from the interview data that were not directly addressed by the research questions. The first theme was teachers' concern about the increasing prevalence of trauma in the lives of their students. The second corresponds to transformational learning in that teachers reported a change that impacted their mindset more than just their knowledge, and that shift activated many of the behavioral changes that followed. The final theme related to policy, both at the legislative level and in teacher training.

Prevalence of Trauma

Many teachers (60%) commented on the prevalence of trauma-exposed students in their classroom, and specifically how they have seen the rates increase over time. Even with the hope of resiliency, there seemed to be a fear or a sense of impending helplessness.

I think it's more and more prevalent. I think it's still increasing.

This year I've had even more trauma in my classroom.

Out of a class of 25, you may have 10 to 15 kids who were exhibiting the signs and symptoms of trauma...at least two-thirds of every [Title 1] class was probably filled with trauma.

Last year, my trauma might have been 30% in the classroom, This year I have felt like it's 50%. I feel like it's getting higher every year.

So many of them just have one parent or they have a parent in jail, or their dad has abandoned them...kids that don't have a stable situation. I mean, pretty much, that's 80% in some classes.

I don't know how we are going to combat [it]...I'm on the Facebook group for public school teachers, and we are all just seeing it year after year get worse and worse and worse.

Transformational Learning

Some of the comments made by teachers went beyond a 'simple' change in knowledge about or attitude toward TIC to a deeper shift in perspective, a realization that their old way of thinking and behaving was no longer possible. Their remarks display transformational learning (Mezirow, 1991). One teacher, in describing the change in her mindset, recognized that her thinking regarding her students who had experienced trauma had moved "from pity to empowerment, from feeling sorry to feeling hopeful." She was then able to raise her expectations of these students to an appropriately high standard. Many educators explained how their perspective was changed significantly.

It has certainly changed. It's transformed my classroom and it is kind of tucked away into everything that we do in most of my interactions with my students.

It really made me look with a clearer lens.

It just changes who you are as a teacher. This changes who you are and how you respond.

Because that's not just about English, it's about life, and that translates into all of our subjects and all of our choices.

I really think this training, it changes your mindset.

I teach 125 kids every year. That's a lot of little humans that are going back out into the world, you know? By changing my perspective through this training, it's changed everything about my job.

Another teacher began to realize that a current safe living situation does not negate the trauma to which a student was previously exposed.

I had a couple [of students] where I knew that they had a parent in jail. [Before] I didn't really think about how that might be affecting them. I think about it more this year, mom's in jail; dad's in jail, and he's with grandparents. I thought, 'Okay before it got to that point and he was with grandparents, what could have gone on?' There could have been a time where they were with the parent and they were neglected. I think more about that now. Like what lead to that? Because it probably didn't go, 'Alright, parents in jail for drugs, moved in with grandparents. All is well.' There was probably a whole period where they were being neglected and not cared for...I'm more mindful of that.

This middle school teacher had no to very little personal exposure or awareness of childhood trauma. This shift in mindset allowed her to be more flexible with students who were struggling in her classroom.

Because, you know, just growing up in a house where you've got such unsanitary condition, no food. I mean the idea that the kid's gonna turn their homework

in...it's not going to happen....We're going to need to work with this child in a different way.

Two teachers experienced the training as personally transformative. One said, "It's helped me with my own self-regulation," and saw this difference manifested in her classroom management successes. Another teacher who had experienced significant childhood trauma felt transformed by what she gained from the training,

It was powerful. Helping us figure out different methods on how to be at peace with ourselves [and] impactful to someone else. I'm a superhero. Whatever I'm going to face, I have to put on this cape and know that whatever is in front of me, no matter how difficult, no matter how hard it's going to be, I have it. I got this. In reflecting on her change in mindset, one teacher summed it up this way, "I don't even know how to think differently now."

Policy

When asked if there was anything else she would like to share, one teacher summed up her assessment of the importance of trauma-informed care for South Carolina schools. She perceived the impact of trauma on the learning outcomes of students and the need for legislators to act accordingly.

I think that this is one of the most important things that has come across my table in the 16 years that I have been teaching. We know what to teach. We know the core curriculum. Teachers know the mechanics of running a classroom. Teachers, especially in South Carolina, do not know the level of impact that trauma is having on their students. We have teachers walking out left and right, and it's not

because they're not getting a \$10 raise a week, it's because they're dealing with the effects of trauma, and they're getting really burned out. I really wish that our state would address this on a state level. I really do... I know that teachers all around the state have been telling them the same things, and I just wish that they would listen because I think this is the key to why our students aren't learning and why our students aren't reading. If we don't address, it's looking pretty bleak for South Carolina. It's very important.

Another teacher asked if legislators had been through the training and suggested that as a helpful next step in disseminating trauma-informed care at the policy level.

Other teachers commented on the need for trauma-informed care training to be added to undergraduate and new teacher training,

I hope it grows and grows to where it is just an integral part of every single new teacher...I think that would just be amazing to be incorporated into the undergrad and into new teacher orientation.

I think we need to do more to train, not just our older, experienced teachers. I think we need to do a lot more at the front end with our new teachers.

I don't think enough is being done in our education system. I don't think there's enough yet. For student teachers that I have or practical students. They've never heard of it. So, that's... I think that we need to be doing more of that. I think it's a game changer.

Summary

Table 7 displays a summary of the results from the qualitative analysis of the semi-structured interviews conducted for the study. They are organized by research question. During the interview, teachers were asked to define TIC in their own words. Their responses are presented in Appendix E.

Table 7.

Summary of Results by Research Question

Research Question	Results
1. To what extent were the core features of effective professional development present/experienced by participants in the Compassionate Schools training?	100% of participants reported the presence and their experience of each of the following core features: • Content Focus (TIC) • Active Learning • Coherence • Duration (21.5 hours) • Collective Participation
2. What changes do teachers perceive in their knowledge about the impact of trauma on the students in their classroom six to nine months after receiving Compassionate Schools training?	 100% of participants reported an increase in knowledge. Some areas mentioned were: ACE's, brain development, mindfulness, significance of relationship building, resiliency, and recognizing sign of abuse/neglect. 50% of participants had no educational exposure (during teacher training) or prick knowledge from other sources to traumainformed care concepts. Of those with 'little' or 'some' prior

- 3. What changes do teachers report in their attitudes about traumainformed care six to nine months
- 80% of participants came in with positive attitudes ('eager,' 'curious,' 'important')

knowledge, the majority was based on personal experience and/or 'gut instinct.'

after receiving Compassionate
Schools training?

4. What changes do teachers perceive in their behavior/interactions with students six to nine months after receiving Compassionate Schools training?

5. To what extent do teachers report trauma-informed care impacting student outcomes?

6. To what extent have traumainformed practices been planned or implemented at their schools, as a result of staff participation in the Compassionate Schools training?

- toward TIC, even if they had little to no knowledge of it.
- 100% of teachers reported a positive attitude toward TIC at interview time, describing themselves as 'passionate' or 'all in.' They thought of TIC as 'very critical,' 'vital,' and a 'game changer' for schools.
- 100% of participants reported positive, intentional changes in their behavior with students.
- 100% incorporated at least one traumainformed technique in their classroom.
- Many characterized their previous behavior as 'rigid' or 'forceful,' or 'authoritarian.'
- Changes included becoming more intentional, relational, flexible, and regulated with students, listening more, and incorporating TIC practices like breathing exercises, yoga, or calming zones
- 100% of participants reported seeing TIC have a direct impact on students' outcomes.
- They saw improved motivation, more connections with teachers, less time out of the classroom, and improved academic outcomes like test scores and commitment to graduate.
- 80% of participants reported that their school or district had made plans.
- 60% of the schools had plans to train more or all teachers within certain time frames (i.e. all teachers in the next four years).

- 7. What suggestions for improvement do teachers recommend six to nine months after participating in the Compassionate Schools training?
- 8. What additional training, resources, or supports do teachers report needing in order to more effectively implement what they learned in the Compassionate Schools training?

- 20% of schools created steering committees to help drive change in the school.
- Elementary/early childhood teachers implemented calming zones in their entire grade levels.
- The three most common suggestions were:
 - Present more success stories and examples of implementation of TIC in schools.
 - Provide more practical takeaway tools and strategies for the classroom.
 - Offer more detailed mandated reporting instruction.
- The primary response (70%) was more mental health professionals in schools.
- 40% asked for more training and practical supports.
- Reported barriers to implementation were lack of parent/caregiver support (60%), time (60%), class size (50%), school culture (40%), and funding (30%).

This chapter presented the results from semi-structured interviews of ten public school teachers. Chapter five includes a summary of the study in Desimone's (2009) framework and the researcher's analysis of the results. Relevant connections to the theoretical frameworks of Desimone's theory of professional development (2009) and transformational learning theory (Mezirow, 1978) are presented. Recommendations for policy, educational standardization, and future research are provided.

CHAPTER FIVE

DISCUSSION

Summary of Results in Desimone's Framework

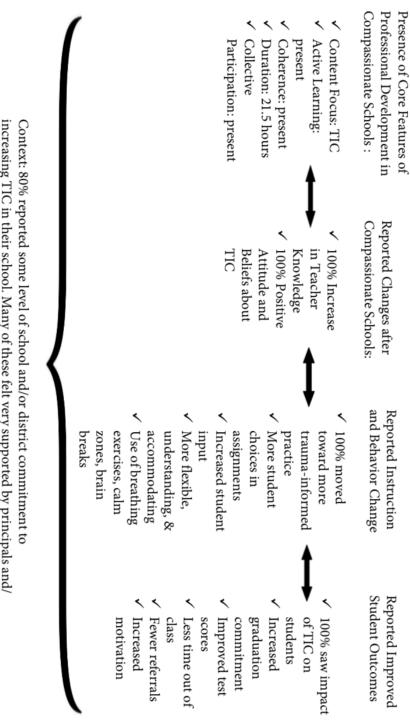
Research questions one through six were informed by Desimone's (2009) framework for effective professional development (see Figure 1). The intention was first to see how/if Compassionate Schools training met the minimum requirements of incorporating the core features of effective professional development into the training. The next aim was to assess whether these core features, if present, proved successful in changing teachers' attitudes, knowledge, and behavior regarding trauma-informed care (TIC) in schools. Finally, the impact on student outcomes was assessed based on the reported changes in teachers' behavior and instruction. The context was also evaluated, particularly by considering policy, the supportiveness of administration, and the cultural acceptance or resistance.

As illustrated in Figure 4, Compassionate Schools training met all necessary criteria to be considered an effective professional development, according to the core features presented by Desimone (2009) and supported by the literature (Garet et al., 2001; Wayne et al., 2008). Teachers reported trauma, its impact on students, how to handle trauma in the classroom, and self-care as primary content foci in the training. Their recollection aligned with the intended focus set out by the CPTC (see Figure 3).

Teachers' stated increase in knowledge also aligned with the content focus of TIC. One hundred percent of teachers reported an increase in knowledge about the impact of

Figure 4.

Results of Compassionate Schools Training in Desimone's Framework for Professional Development (2009; adapted with author's permission)



increasing TIC in their school. Many of these felt very supported by principals and/or superintendents. Still, state level policy, administrative support, and culture/mindset were listed as barriers. Increasing prevalence of trauma-exposed students was also mentioned as context.

trauma on their students as a result of Compassionate Schools. One hundred percent of teachers also reported a positive attitude toward TIC, and subsequent changes in behavior as a result of their new knowledge and attitudes. Some teachers moved from a harsher, authoritarian approach to a more relational and flexible approach to classroom management and instruction.

Even for the teachers who already considered themselves as caring, compassionate, and nurturing, they too recognized areas for improvement and/or practical ways to implement their new knowledge. For example, one teacher described improving her own self-regulation in response to learning mindfulness and calming techniques. After experiencing these benefits personally, she was able to confidently train her students how to use the strategies as well. Teachers who previously refused students any leniency or academic accommodations found themselves providing more voice and choice in assessment options and realizing that a 'no tolerance' policy for late or missing work was a detriment to learning and positive student outcomes. Several teachers reported 'never' using referrals for classroom management anymore because they recognized the relational capital they had built with their students was more valuable and influential than traditional discipline practices. An attitude of mutual respect was more commonly fostered by increasing listening and understanding of student stress both in and outside of school. Each of these behavioral or instructional changes had the potential to impact student outcomes.

One hundred percent of teachers reported that they had observed or experienced trauma-informed care have a direct impact on student outcomes. They saw improvement

in student motivation, resulting in increased commitment to graduate. They saw TIC behavioral plans cause students to miss less instructional time, resulting in improved grades and test scores. Another major student impact with a less obvious tie to outcomes was noted by many teachers. They saw a significant increase student/teacher connection, emotional support, and trust after the Compassionate Schools training. Although this change is harder to quantify, the healing nature of this kind of relationship can have the most profound and lasting impact on trauma-exposed students (Center for the Developing Child, 2018). One of the components that has repeatedly been found to improve a youth's resilience is a supportive relationship with a trustworthy adult (Goldstein & Brooks, 2005). The results of this study point to Compassionate Schools training as a means to increase these connections between teachers and students.

While the context in which Compassionate Schools was experienced differently for teachers in various schools (context), eighty percent reported that their school or district had at minimum a plan to train more teachers in TIC. Many teachers felt that their school leadership was supportive and encouraging of implementing TIC. Others, however felt resistance from peers' or administration's reliance on 'traditional' discipline policies and 'old school' mindsets. Several teachers referred to the need for state-level policies mandating TIC in public schools and hoped for more momentum at the district level to implement lasting change. Several teachers also noted the concern of increasing levels of childhood trauma in recent years. They believed they were seeing the numbers of trauma-exposed students in their classroom climb noticeably each academic year.

Analysis of the qualitative interview data, summarized and compiled in Figure 4, shows that Compassionate Schools training does indeed meet the criteria for effective professional development according to Desimone's framework (2009). All core features were experienced; teachers reported subsequent changes/improvement in knowledge and attitudes; teachers' behavior and instruction were then impacted, leading finally to perceptions of better student outcomes.

Transformational Learning in Compassionate Schools Training

Transformational learning theory (Mezirow 1978;1991) explains how a shift in mindset as a result of knowledge gained can lead to the necessary internal reflection required for fundamental, conscious changes in thoughts, feelings, beliefs, and behaviors (Simsek, 2012). As Desimone's framework has shown above (see Figure 4), Compassionate Schools training is designed to provide the requisite environment for teachers to experience transformational learning. A primary ingredient for transformational learning is confrontation with new knowledge that forces one to challenge prior mindlessly held beliefs or perspectives (Merriam, Caffarella, & Baumgartner, 2007; Simsek, 2012). In Compassionate Schools training, teachers were informed about the trauma of ACEs, their prevalence and academic, social-emotional, behavioral, and psychological impact on students. Teachers walked through a mock house set up to resemble the home of a trauma-exposed student who might occupy their classroom. They watched moving films and discussed real life student case studies containing graphic detail of child abuse and neglect.

The second necessary component for transformational learning is the reflection resulting from new knowledge and consciousness that begins the process of confronting old imprudent perspectives. During and after the various experiential components of the training, teachers were given time for reflection and conversation to process what they had seen and heard. Because the training lasted the course of three full days, participants were also able to take their new awareness home for processing and reflection between sessions. Many teachers commented on the transformational nature of Compassionate Schools training for themselves and, in turn, their classrooms.

Examples of Teachers' Statements of Transformational Learning

In addition to the evidence of transformational learning based on Compassionate Schools' results aligning with Desimone's model for effective professional development, teachers' words during the interviews also pointed to profound changes in mindset or perspective.

It's transformed my classroom and it is kind of tucked away into everything that we do in most of my interactions with my students.

It really made me look with a clearer lens.

It just changes who you are as a teacher. This changes who you are and how you respond.

By changing my perspective through this training, it's changed everything about my job.

I feel like I look at it with a different lens

I don't even know how to think differently now.

Other Key Findings

This study contributes to the literature on the outcomes of trauma-informed care training with educators. Unlike existing research (Goodwin-Glick, 2017; Dorado et al., 2016; Parker et al., under review), this study examined the impact using qualitative data, with interviews conducted six to nine months after the training.

Alignment with CPTC Study

Using survey data from immediately before after Compassionate Schools training, the research team at the CPTC found significant changes of nearly a standard deviation overall and in each subscale of the ARTIC (Baker et al., 2016; Parker et al., under review). This study contextualized and verified the CPTC's short term quantitative findings with more long-term qualitative data. The ARTIC subscales include educators' perceptions of: (a) underlying causes of problem behavior and symptoms, (b) responses to problem behavior and symptoms, (c) on-the-job behavior, (d) self-efficacy at work, (e) reactions to the work, (f) personal support of Trauma-Informed Care (TIC), and (g) system-wide support for TIC.

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Participants in this study reported significant increases in each of these constructs in their interview responses as well: (a) 100% reported as increase in knowledge about the impact of trauma on their students, (b) increased awareness of symptoms of trauma and self-regulation in response to problem behavior, (c) 100% reported changes in behavior and classroom management, (d) increased confidence, (e) increased self-care, (f) 100% personally supported TIC, and (g) 100% saw the benefit of system-wide implementation, whether it had occurred or not. In short, the significant gains found by Parker and colleagues (under review) at the CPTC in knowledge and attitudes related to trauma-informed care appear to have been maintained by the sample six to nine months after the training. Additionally, their learning can be deemed transformational (Mezirow, 1978), as evidenced by their reported reflection, shift in thinking, and subsequent behavioral changes.

Resilience-Building Relationships

The apparent impact of Compassionate Schools training on teachers' behavior and the resulting effect on student outcomes is notable. One hundred percent of teachers interviewed reported changing their interactions with students as well as observing TIC have a direct impact on students. One of the most prominent changes teachers reported involved intentionality and relationship-building with students. Teachers described how their classrooms were transformed as they increased student voice and choice, spent more time connecting with students, reduced or eliminated referrals, and recognized the value of listening. These types of behaviors lead to strong, supportive relationships, which can have a significant positive impact on the trajectory of child who has experienced trauma.

According to the Center on the Developing Child (2018), the single most common factor for children who develop resilience is having at least one consistent, caring relationship with a supportive adult. An encouraging relationship with a teacher can provide the responsiveness and protection that buffers a trauma-exposed student from developmental disruption.

The changes in student outcomes observed by teachers suggest that resilience is being fostered in their schools. Teachers reported increased student morale and motivation, increased commitment to graduate, better test scores, and a reduction in missed instructional time. They saw more positive relationships forming between teachers and students. They also commented on the increased trust and mutual respect students feel for their teachers. For example, teachers perceived that students were more willing to talk openly about their struggles and voice their concerns or stresses with teachers. According to teachers, students were also more inclined to spend informal time with teachers (lunch breaks or after school). The crucial conversations that happen between a trusted adult and trauma-exposed student help build key capacities for resilience, like self-regulation, self-efficacy, self-monitoring, and planning ahead (Center on the Developing Child, 2018; Goldstein & Brooks, 2005).

What Teachers Need

Teachers were given the opportunity to share their ideas for improving Compassionate Schools as well as what additional resources they find necessary for implementing TIC. Their voices are the heart of this research.

Teachers wanted more mental health support for their students available in the school building. They recognized the dearth of mental health professionals at all levels of public school and felt overwhelmed by the prospect of being responsible for student problems for which they had no specialized training; "there are still a lot of children who need much deeper help than we [teachers] are able to provide." A systematic review of reviews of research on evidence-based mental health work in schools uncovered a wide range of beneficial effects on students, as well as their families and communities (Weare & Nind, 2011). Positive impacts included reducing aggression, impulsivity, depression and increasing optimism, problem solving, and resilience. According to a comprehensive review by Wahlbeck (2015), mental health support in schools, considered a public, population-based mental health intervention, is supported by the evidence as more effective over high-risk approaches.

Teachers indicated that they did not feel confident, even after Compassionate Schools training, in their role as mandated reporter. They were uncertain of what specific steps must be taken, who is accountable for making the actual call to report abuse or neglect, and what responsibility they have after the report. Mandated reporting of child maltreatment is a fundamental role teachers play in helping protect their students, but it is also vital that they fully understand their responsibility. Many teachers reported sharing concerns or suspicions with their guidance counselor alone, but according to mandated reporter statutes, the teacher must report suspected abuse or neglect personally to fulfill their duty under the law (McCoy & Keen, 2014; SC Children's Code 63-7-310). A study of 137 early childhood educators in Florida found that many teachers were unsure of their

legal requirements to report child maltreatment even after most had received training (Dinehart & Kenny, 2015). After interviewing 30 primary school teachers in Australia, researchers found that teachers experienced their mandated reporter training as inadequate and inconsistent, which led to ambiguity about when and whether to file reports, and even to teachers questioning the child victim to gather evidence before filing a report (Falkiner, Thomson, & Day, 2017). Comprehensive mandated reporter training is needed to give teachers more certainty about their role and responsibility in child protection.

Teachers also expressed a need for more unstructured time with their students. Many reported being overloaded with curriculum expectations, standardized tests, and paperwork to the extent that they did not have any time to get to know their students beyond their coursework. They felt the lack of margins prevented any classroom flexibility for informal connection. A study of fifth-grade students found that increased free time positively affected students' time on-task in the classroom (Stapp & Karr, 2018). Similarly, teachers felt restricted by the large class sizes. Individual attention is nearly impossible according to teachers who have classroom at or above capacity. Those who also taught elective courses with smaller class sized commented on their increased ability to connect with those students.

The teachers' request for more unstructured time and smaller class sizes was rooted in a desire for more authentic student-teacher connection. Research confirms the potential significance of this relationship on students. Like the Center on the Developing Child at Harvard (2018), in a review of the literature on resilience, Brooks (2006) found

that schools can strengthen resilience by increasing the bond between students and caring teachers. Bryant and colleagues (2013), while investigating school factors that affected attendance, found that schools with a welcoming, intentionally supportive environment promoted attendance. They also found that when students felt heard and were given opportunities to establish supportive relationships with caring adults, they wanted to come to school.

Increasing Prevalence of Childhood Trauma

Teachers reported perceptions of increasing rates of trauma-exposed students in their classrooms. According to Child Trends data, the rate of substantiated child maltreatment has shown little change over the past several years (Child Maltreatment, 2019). Without evidence to support the teachers' common claim, their observations cannot be confirmed. However, their perception is meaningful and worth noting. As one teacher mentioned,

We have teachers walking out left and right, and it's not because they're not getting a \$10 raise a week, it's because they're dealing with the effects of trauma, and they're getting really burned out.

Whether their perceptions of increasing trauma are accurate or not, the emotional toll exacted on teachers is real and felt (Adera & Bullock, 2010). In a 2017 study of teacher burnout, Skaalvik and Skaalvik found correlations between discipline problems and low student motivation and teachers' emotional exhaustion. This is one of the primary reasons the topics of self-care and secondary (vicarious) trauma are included in Compassionate Schools training. More needs to be done to safeguard our teachers to prevent burnout and

teacher shortages. Many burnout interventions, even when initially somewhat effective, do not produce lasting results (Iancu, Rusu, Maroiu, Pacurar, & Maricutoiu, 2018).

According to the Learning Policy Institute, the annual 8% teacher attrition rate is mostly due to dissatisfaction with aspects of teaching conditions (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). Additionally, there was a 35% drop in enrollees into teaching preparation from 2014 to 2009 (Sutcher et al., 2016). Policy changes at the district and state level are a good place to start.

Policy Implications

Several teachers who were interviewed for the study mentioned the need for stronger policies around trauma-informed care. Considering the high stakes of the success or failure of students, as well as the loss or retention of teachers (Sutcher et al., 2016), law makers, as well as district and school administrators ought to take heed. An opportunity exists for legislators and school administration to use the theoretical frameworks and research findings herein as support for providing TIC training, at minimum, for all public school teachers and teaching assistants. Providing TIC to all employees regardless of position (including bus drivers, custodial staff, cafeteria workers) would go even further toward creating a trauma-informed environment that would be welcoming and safe for students throughout their K-12 educational experience. School leaders would do well to incorporate resilience-building procedures and practices into school policy, as well as offering opportunities to help teachers avoid secondary trauma.

State Policies

States such as South Carolina could enact polices requiring all public schools to assess for trauma, while providing adequate professional staff to schools for intervening when trauma has/is occurring. This would obviously take increased funding to realize but is essential for intervening in the lives of trauma-exposed children. The Colorado Department of Education (CDE; 2018) has begun the process of implementing a statewide trauma-informed approach that could provide a guide for other states (see https://www.cde.state.co.us/pbis/traumainformedapproachesarticle). The majority of teachers interviewed for this study were acutely aware of the lack of and need for more mental health professionals in their schools. Even with TIC training, teachers do not have the time, nor are they equipped to conduct psychotherapy or mental health counseling with students in crisis (Koller & Bertel. 2006). Guidance counselors are often tasked with educational testing, registration and scheduling, and classroom visits for teaching antibullying (see violencepreventionworks.org) or body safety curriculum (see erinslaw.org). Requiring a distinct mental health professional role in every school would allow for a separation of the necessary guidance tasks and personalized intervention with students. This would also provide trauma-informed teachers with direct referral sources who can deliver more in-depth care so that students are not identified but without appropriate intervention.

Second, states can mandate trauma-informed care training as an educational requirement for teacher training and certification. This could include a basic exposure to and understanding of the prevalence, impact, and appropriate response to childhood

trauma in the classroom (see Teacher Training below). One teacher suggested rightly that perhaps South Carolina legislators ought to attend a Compassionate Schools training so that they have a more nuanced understanding of the reality faced by teachers and students daily. In Colorado, state and local administrations have aligned to provide cross-departmental guidance, and the CO Department of Human Services has "convened state partners across agencies and departments to develop a statewide theory of change for trauma responsive care" (CDE, 2018). The CPTC in SC is well-situated to coordinate a similar strategy if the state would support it.

Local, District Policies

Whether or not lawmakers enact changes at the state level, district administration can play a significant part in implementing TIC in schools. School districts can do a sweeping overhaul of 'old fashioned' discipline policies, getting rid of policies that do not result in improved student outcomes. For example, tiered discipline policies that have hard and fast consequences for first, second, or third time offenders, often tie the hands of school staff who may see a better alternative to help a student. Forty years of research indicates that African American students are disproportionately affected by exclusionary discipline (suspension or expulsion) (Children's Defense Fund, 1975; Smith, 2015). Smith (2015) points out the statistical connection between out-of-school discipline practices and the "school-to-prison-pipeline." She also indicates the misuse of zero tolerance policies add to the discrepancy, with minority students and students with disabilities being overrepresented (Smith, 2015; see Figures 5 and 6).

Figure 5. *Impact by race and gender on the use of out-of-school suspensions 2011-12* SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12

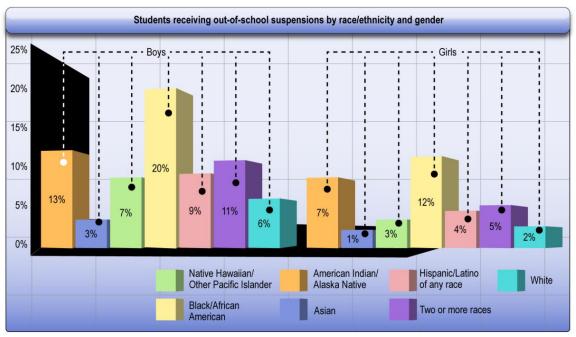
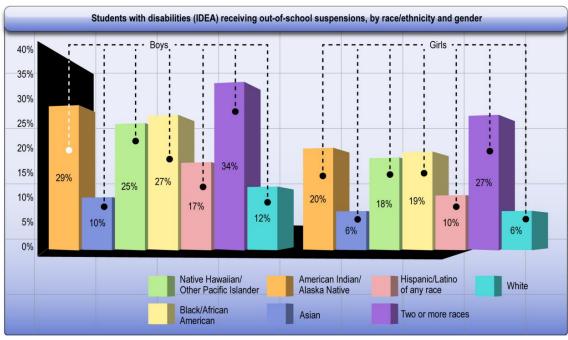


Figure 6. *Impact by disability status and gender on the use of out-of-school suspensions* SOURCE: U.S. Department of Education, Office for Civil Rights, Civil Rights Data Collection, 2011-12



Research on ACEs show that black and Hispanic children are also disproportionately affected by childhood trauma (Sacks & Murphy, 2018), which when misunderstood, can lead to behavioral outbursts that contribute to increased ineffectual discipline. When students' behavior is being negatively affected by trauma, they need to be granted compassion and thoughtful discipline to prevent escalation or giving up. More thoughtful, intentional discipline strategies can create a less punitive and more supportive school climate where students are less inclined to drop out (Smith, 2015). Results of this study indicate that Compassionate Schools training can help increase teachers' awareness of their own biases, as well as move them from harsher to more understanding classroom management techniques. Trauma-informed discipline policies and procedures should replace outdated, punitive ones. Again, Colorado has led the way here by ending zero tolerance policies in public schools (Wachtel, 2012).

Districts can also facilitate communication between schools about students who have been impacted by trauma. When a student is promoted from middle to high school or elementary to middle school, there can be a loss of progress and/or connection. This could be minimized if districts increased communication between teachers at different levels. This would provide helpful information to the teachers receiving new students, as well as an opportunity for former teachers to help transition students in whom they have invested. Loss of instruction time could be minimized by sharing effective strategies for helping particularly challenging or struggling students. Teachers in this study expressed the benefit of receiving and sharing this type of information with colleagues, particularly in order to benefit struggling students.

Finally, districts can mandate trauma-informed care training for all district employees. In South Carolina, this could involve all faculty and staff attending a three-day Compassionate Schools training. Creating a truly trauma-informed environment involves everyone in an organization to be committed to the TIC philosophy, from the superintendent to the bus drivers. When everyone involved with students has a common language and understanding of the district's policy and intention in educating the whole child, a trauma-informed culture is created (CDE, 2018). The resulting culture produces a healthier environment for staff and students, and the potential for healing for trauma-exposed students.

School Policies and Procedures

Individual principals and schools, independently or with district support, can also generate in-house policies and procedures around TIC. Schools can create clear, specific standards for how to proceed when/if a child discloses abuse or neglect. These policies could be created in conjunction with the CPTC for schools in South Carolina, or with a local child advocacy center in other areas. Many teachers in the study reported feeling underprepared for their role as mandated reporters of child maltreatment. A clear policy with subsequent procedures presented at an in-service could remedy this uncertainty. As some of the schools represented in the study have already done, school leadership can require new and current teachers and assistants to attend Compassionate Schools training (or an equivalent TIC training). Alternatively, schools can have a faculty representative trained to present the information and provide it in-house at teacher in-services. This

involves the risk of losing some of the continuity from the three-day training. A couple of specific examples of application follow.

Examples of Implementation. Several teachers mentioned a specific example of implementation they learned about at Compassionate Schools—a local school that had revamped in-school suspension to be trauma-informed (TIC ISS). The program known as Cavaliers Care sent representatives to the training to talk about how they had implemented what they learned at Compassionate Schools training. This school district had replaced traditional ISS with a more intentional time to help students overcome the issues that led them to suspension in the first place. It was no longer simply a punishment with busy work, but it became a time for the student to make connections, create practical goals, and progress towards graduation. This kind of intentionality and creativity in implementing TIC in schools is likely to make true, sustainable change for students.

Another teacher mentioned an example that her school's guidance counselor had put in place as a result of Compassionate Schools training—resiliency groups. This guidance counselor created therapy groups for children she knew were struggling with past or current ACEs. She taught them the hand-brain model (Siegel, 2010) and explained how stress can cause people to make poor and/or impulsive decisions. She then taught the children TIC strategies for dealing with stress, like mindfulness, belly breathing, and positive self-talk. The teacher saw both social-emotional and academic growth in the students who attended these resiliency groups. This is another example of how TIC in school can manifest to help students succeed.

Teacher Training Implications

Being on the front lines of a child's trauma response (e.g., intensity, aggression, shutting down.) is challenging in the classroom. It is even more difficult when a teacher is unaware of what s/he is facing. Students' behaviors may be perceived as defiance, laziness, or even a personal attack, when in fact they are responses to unrelated triggers (Bethell et al., 2014; Cannon & His, 2016). Most teachers in this study expressed having little to no knowledge of how trauma could manifest in their classroom. They described themselves as eager and curious to know more and wished they had access to the information earlier in their careers. Preparing educators for what to look for, how to react, and when to get additional support is crucial. Unfortunately, according to the teachers interviewed, none of this type of information was provided during their formal education, teacher training, or orientation.

Undergraduate Teacher Education

In order to remedy this lack of knowledge about the impact of trauma on students, undergraduate education programs can add TIC as a requirement for graduation. Ideally, state accrediting bodies will mandate this change, but even in their absence, faculty and administrators at teachers' colleges and universities can provide course work that will more adequately prepare educators for what they will face in the classroom. Basic TIC instruction could be included in child development or classroom management coursework. For some educator curricula, this addition may be too cumbersome to fit into the course of study. In that case, an interdisciplinary minor could be offered.

The University of South Carolina—Upstate, which houses and partially funds the CPTC, provides a Child Advocacy Studies (CAST) minor to students of any major. This minor provides comprehensive training in:

- Understanding healthy child development
- Understanding factors that lead to child maltreatment
- Understanding the responses to maltreatment, to work more effectively within various systems and institutions
- Recognizing child abuse and making high quality child abuse reports
- Receiving training in best practices with victims
 (Minor in Child Advocacy Studies, 2019)

Institutions training future teachers would do well to offer a similar course of study. The Zero Abuse Project (zeroabuseproject.org) has recently begun a push to help spread CAST programs to institutions of higher education around the country. They offer technical support for developing a program and evidence to show the benefit to the institution (Child Advocacy Studies, 2019). According to their literature, CAST programs have been implemented at the undergraduate level in 28 colleges or universities in 21 states (Child Advocacy Studies, 2019). See Appendix F for a brief overview of their program.

Current Educators

For teachers who are already in the profession, adding preservice training or additional credits toward graduation or certification will not be beneficial. In this case, experienced teachers need in-service professional development. Locally, the CPTC's

Compassionate Schools training is an excellent resource for teachers, as evidenced by the current study. The Zero Abuse Project also offers on-site TIC training opportunities for institutions without local access to training (see zeroabuseproject.org/education). They offer a 6.5 hour Comprehensive Trauma-Informed Care Training for up to 30 participants per session. The importance of disseminating this knowledge cannot be overstated. As evidenced by many teachers in the study with decades of experience, they were transformed by the training and some even felt guilt for not having the TIC tools earlier in their careers.

Limitations

Although this study has the potential to provide valuable information regarding the impact and benefits of trauma-informed care training, it has limitations that must be mentioned. As with all interview data, the content is self-reported. Participants were asked to provide their perceptions of their attitudes, knowledge, and behavior before and after the Compassionate Schools training. They also reported the perceived impact they observed TIC having on student outcomes which may not reflect actual changes.

Retrospective, self-report designs are vulnerable to social desirability responses as well as recall issues, and therefore may not be the most reliable assessment of attitudes, knowledge, and behaviors (Holtgraves, 2004). Social desirability can lead participants to evaluate and edit their responses before responding to self-report questions, which could confuse study results. However, participants were informed that their responses would

remain anonymous with no identifying information associated with their interviews to improve reliability.

Participants in the current study were all from one large county in South Carolina. Although Spartanburg county is comprised of seven distinct school districts, as well as urban, rural, and suburban areas, it is a moderately sized, county situated in the southeast of the United States. The findings of this study, therefore, may not be generalizable to other larger, geographically, or culturally different regions. Participants were self-selected either in response to a recruitment email or being asked by another participant. This potentially biases the sample to teachers who benefitted from the training. Additionally, the small sample size and limited range of participant demographics, a common weakness of qualitative interview data, was a limitation. Because only classroom teachers were studied, it is worth noting that administrators might have different perceptions of TIC and its effects. This study did not specifically make an effort to compare or contrast the experiences of teachers of different grade levels or levels of experiences.

A final limitation is based on the Compassionate Schools training provided by the CPTC at USC Upstate. Although the study is evaluating the impact of TIC training on educators, the results may vary with Compassionate Schools versus other TIC programs offered elsewhere because of the nature of the activities included or excluded (i.e. mock house).

Recommendations for Future Research

Future researchers can look at data from various geographical regions with more diversity of participants, i.e. more racial, ethnic diversity or participants with different positions in the school. This would allow researchers to assess whether diverse participants experience and are affected similarly by attending a TIC training. Similarly, evaluating the effectiveness of TIC on teachers at different levels of education (elementary vs. middle vs. high school) would further add to the knowledge base, illuminating whether there is a differential impact on teachers or students depending on the grade levels a teacher is instructing. A larger scale study using mixed methods to evaluate all participants would provide a clearer picture of the impact of TIC training on educators' attitudes, knowledge, and behavior, as well as eliminate selection bias. The field would benefit from a randomized control trial of TIC, with demographically similar schools to compare student outcomes as a measure of TIC training effectiveness. Including student perceptions of changes in teachers' behavior would add another layer to the study and eliminate or control for retrospective self-report bias. Comparing students' perceptions to teachers would provide important insight into reported behavior changes. As Goodwin-Glick (2017) noted, educators may believe that are exhibiting traumainformed care, but if students do not perceive it, the disconnect can have a negative effect on the relationship. Measuring actual changes in student behavior as a result of TIC would also be valuable.

An evaluation of a school's discipline and/or academic records before and after receiving TIC training would provide an objective, quantifiable look at the impact on

student outcomes. This would be particularly useful in a RCT, where TIC training had been experienced by all faculty, staff and administration, and subsequently embedded into one school's policies, procedures, and practices. If a TIC culture had been thus established, a study could look particularly at pre- and post- graduation rates, standardized test scores, referrals, in and out-of-school suspension rates, and even teacher retention. Pre- and Post- results could then be compared to a control school that had not implemented school-wide TIC.

The current study was conducted six to nine months after teachers experienced TIC training. Future researchers would contribute to the field by surveying and/or interviewing educators after more time had passed to evaluate which behavior changes were maintained, what knowledge was retained, and whether improvement in student outcomes was sustained. Finally, researchers could look beyond classroom teachers to assess the perceived impact of TIC from other staff's perspectives, such as administrators, guidance counselors, or support staff.

Conclusion

The pervasiveness of childhood trauma (Perfect et al., 2016; Sacks & Murphy, 2018) coupled with the profundity of its potential negative lifetime impact (Blaustein, 2013; Fellitti & Anda, 2012) has created a crisis of mental, emotional, and physical health in the United States. With average rates of exposure to at least one traumatic event ranging from 60 to 75% (Finkelhor et al., 2015), a plan of action is necessary to foster resiliency and protect these children against the potential for negative impact on brain

development, well-being, immune function, etc. Compassionate Schools was initiated for just this reason (Hertel, Frausto, & Harrington, 2009). Other than primary caregivers, teachers spend the most amount of time with school-aged children. As the Harvard Center on the Developing Child (2018) has repeatedly found, a key component for fostering resilience in children affected by trauma, is the presence of one caring, consistent adult. Teachers often fulfill this role unknowingly. Compassionate Schools is intended to arm teachers with awareness and TIC techniques as a way to combat the epidemic of childhood trauma.

The purpose of this study was to evaluate the impact of Compassionate Schools training on educators through a qualitative study of participants six to nine months after the training. Findings are intended to add to the nascent literature evaluating the impact of TIC training, specifically in schools. By asking research questions related to effective professional development criteria, changes in educators' attitudes, knowledge, and behavior, and impact on students, the study confirmed that teachers experienced the TIC training of Compassionate Schools to be transformative. They gained understanding of the potential negative developmental impact of childhood trauma, how this might display in their classroom, and tools to help build resiliency in students. The results supported the significant quantitative findings of the CPTC's self-evaluation (Parker et al., under review) using the ARTIC scale (Baker et al., 2016).

Evaluating the results of the analysis within Desimone's (2009) framework for effective professional development confirmed that Compassionate Schools training aligned well with the model (see Figure 4). All core features were present; teachers'

attitudes and knowledge subsequently changed/improved; teachers' behavior and instruction were then impacted, leading finally to better student outcomes. Ultimately, ridding childhood of all trauma would be ideal, but Compassionate Schools training provides an effective avenue for preparing those on the front lines to both build resilience in those affected and protect themselves from burnout.

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APPENDICES

Appendix A

Recruitment Letter

Child Protection Training Center University of South Carolina Upstate 25 March 2019

Dear Compassionate Schools Summer Training Participant,

We hope this note finds you well. We are writing to say thank you for participating in our trauma-informed practices seminar this past summer, and to ask for your help. One of our adjunct professors from the CAST program at USC Upstate is conducting follow-up interviews with classroom teachers about participants' experiences at the Summer Summit

Emily Schafer, MA, is a PhD candidate at Clemson University, and is conducting interviews with classroom teachers to assess the long-term impact of the trauma-informed training. If you are willing to participate, Emily will come to your school, at your convenience to conduct a 45-minute interview. You will receive a \$25 gift card in appreciation of your help and time.

Your involvement will aid in the future development of trauma-informed training and curricula, as well as contribute to the growing body of knowledge about trauma-informed practices in schools. Your input is invaluable. Thank you for considering!

Please reply to this email indicating your willingness to participate and Emily will contact you to schedule a convenient interview time.

CPTC staff

Appendix B

Interview Protocol

INTRODUCTION:

- Thank you so much for participating in this interview. The purpose of this study is to follow-up after the Compassionate Schools Summer Training you participated in last summer. Our interest is to better understand your experience with the training and your attitudes, knowledge, and behavior about trauma-informed care in school before and after the training.
- Results of the study will assist in evaluating the effectiveness of the training and in improving future trainings for other educators.
- We invite you to share honest feedback about your experience with the training and the extent to which it may have impacted your knowledge, attitudes, and behavior in the classroom. You will also have the opportunity to discuss opportunities and barriers you may have faced in implementing what you learned. We welcome hearing your suggestions.
- Your input is extremely valuable and will help not only locally, but regionally and even nationally to increase effective trauma-informed care implementation in schools. We truly appreciate you taking the time to share your experiences and impact from the training.

This interview is expected to take about 45 minutes of your time.

Opening:

- 1. Can you recall any students you've taught who have experienced trauma? Tell me a little about that experience for you without using the student's name. How prepared did you feel to work with those students?
- 2. Did you have any educational background or exposure to the topics covered in Compassionate Schools during your teacher preparation?

Introductory:

3. Overall, how was your experience with Compassionate Schools Summer Training?

Core Features of Professional Development:

- 4. What would you say was the primary content of the training? Could you list the main topics you remember?
- 5. What was your opinion of the duration of the training? Did you feel it was too long, the right amount of time, or too short? Why?

- 6. How coherent did you find the content of the sessions? How clear was it? How well-connected?
- 7. Did you participate in any active learning exercises during the training? Can you describe any of them? Did you feel there was too little active learning, about the right amount, or too much?
- 8. Did you attend the training with others from your school? If so, were you able to discuss and reflect together at any point during the training?

Transition:

9. In your own words, how would you define trauma-informed care in school?

Key Questions:

[Pre-training; Retrospective]

- 10. Prior to the Compassionate Schools training, how would you describe your level of knowledge about how trauma impacts the students in your classroom?
 - a. Did your post-secondary/college degree program cover any of this information?
- 11. If you had knowledge about trauma-informed care prior to the training, how would you describe your attitude towards it? How important did you feel trauma-informed care was in schools? (If no prior knowledge, what did you think about the effects of trauma on your students?)
- 12. Prior to attending the training, how did you interact with students who had experienced trauma?

[Post-training; Current]

- 13. What knowledge did you gain from the Compassionate Schools training? [What did you learn?]
- 14. What is your attitude toward trauma-informed care in schools today? What do you think about the effects of trauma on your students? How important do you feel trauma-informed care is in schools?
- 15. Has your behavior in the classroom changed as a result of Compassionate Schools training? If so, how?
- 16. Have you seen trauma-informed care have an impact on students/student outcomes? If so, can you give an example?

17. Have any plans been made and/or implemented at your schools as a result of the training?

If so, can you describe those?

Ending Questions:

- 18. What suggestions do you have for improving future trainings? [Don't filter your response; be as forthright as you feel comfortable.]
- 19. What would help you more effectively implement what you learned from this training? [Supports, resources, additional training, etc.]
- 20. What barriers to implementing trauma-informed care do you observe?
- 21. Is there anything else you would like to share with us?

Demographic Questions:

- a. How old are you?
- b. What is your gender?
- c. What is your race?
- d. What is your current position?
- e. How long have you held this position?
- f. What is the age/grade of the students you teach?

Thank you so much for your time! We truly appreciate your willingness to share your thoughts and experiences with us.

Appendix C

Informed Consent

Information about Being in a Research Study Clemson University

Examining the impact of trauma-informed care training on educators' attitudes, knowledge, and behavior

KEY INFORMATION ABOUT THE RESEARCH STUDY

Voluntary Consent: Dr. Susan Limber and Emily Schafer are inviting you to volunteer for a research study. Dr. Limber is a professor in the department of Youth, Family, and Community Studies at Clemson University. Emily Schafer is a graduate student at Clemson University who is undertaking this research for her dissertation.

You are free to decline to participate, and you may withdraw from the study at any time. You will not be punished in any way if you decide not to be in the study or to stop taking part in the study

Alternative to Participation: Participation is voluntary and the only alternative is to not participate.

Study Purpose: The purpose of this research is better understand teachers' experiences with trauma-informed care training.

Activities and Procedures: In the summer of 2018, you participated in the Compassionate Schools Summer Summit held at the Child Protection Training Center in Spartanburg, SC. As a part of our research project we would like to interview you to learn about your attitudes, knowledge, and behavior related to trauma-informed care before and after the three-day training. Your answers will help us examine the impact of the training on educators and improve future trainings.

Your part in the study will be to respond to interview questions in a face-to-face interview with Emily Schafer. Notes will be written during the interview, and an audio tape of the interview and subsequent dialogue will be made.

Participation Time: Participation in this study will take about 45 minutes of your time.

Risks and Discomforts: We do not know of any risks or discomforts to you in this research study. If, however, you feel uncomfortable in any way during the interview session, you have the right to decline to answer any question or to end the interview.

Possible Benefits: Your participation will contribute to a growing body of literature about how trauma-informed care can be applied in the school setting. Your responses can assist in the development of future trainings, encourage trauma-informed care to become more broadly implemented, and ultimately improve students' learning environment. It may also benefit you to have the opportunity to process your experience of the training.

INCENTIVES

A \$25 gift card will be given to you, at the conclusion of the interview, in appreciation of your time and participation in the study.

AUDIO/VIDEO RECORDING AND PHOTOGRAPHS

No names or other personal identification data will be appear in the notes or audio recording from the interview. If, in reviewing the recordings, we note that any names were mentioned, that portion of the recording will be deleted before being sent for professional transcription. After the data are entered into the data management software, the audio recording of the interview and the notes taken during the interview will be destroyed.

PROTECTION OF PRIVACY AND CONFIDENTIALITY

The information that you provide in the study will be handled confidentially. Your answers will be grouped with the answers given by other respondents to be analyzed statistically for research reports. The results of this study may be published in scientific journals, professional publications, or educational presentations; however, no individual participant will be identified. Your name will not be used in any report, professional publications or presentations that may result from this study.

Identifiable information collected during the study will be removed and the de-identified information could be used for future research studies or distributed to another investigator for future research studies without additional informed consent from the participants or legally authorized representative.

CONTACT INFORMATION

If you have any questions or concerns about your rights in this research study, please contact the Clemson University Office of Research Compliance (ORC) at 864-656-0636 or irb@clemson.edu. If you are outside of the Upstate South Carolina area, please use the ORC's toll-free number, 866-297-3071. The Clemson IRB will not be able to answer some study-specific questions. However, you may contact the Clemson IRB if the research staff cannot be reached or if you wish to speak with someone other than the research staff.

If you have any study related questions or if any problems arise, please contact Dr. Susan Limber at Clemson University at 864-656-6320 or Emily Schafer at schafe3@clemson.edu.

CONSENT

By participating in the study, you indicate that you have read the information written above, are at least 18 years of age, been allowed to ask any questions, and are voluntarily choosing to take part in this research. You do not give up any legal rights by taking part in this research study.

Appendix D Interview Protocol Matrix

RQ1	RQ2	RQ3	RQ4	RQ5	RQ6	RQ7	RQ8
IQ2	IQ10	IQ11	IQ12	IQ17	IQ16	IQ18	IQ19
IQ4	IQ13	IQ14	IQ15				IQ20
IQ5							
IQ6							
IQ7							
IQ8							

RQ = research question

IQ = interview question

Appendix E

Trauma-Informed Care (TIC) According to South Carolina Educators

The following quotes are responses from SC teachers who were asked to define TIC in their own words:

- It's not a set prescription, but it's an approach. It's about having the knowledge of what a child has experienced and treating them with compassion, and helping them move beyond that. So, not just putting a label on them and saying, 'Oh, they just have this problem, or oh their parents are just this way,' but actually seeing past the trauma. 'You're more than this. You're more than what's happened to you.'
- Trauma-informed care is seeing a child's potential and helping support them beyond their circumstances.
- Being aware of how a child's past traumatic experiences affect their learning, behavior,
 and what we can do as educators to take that into account and still provide a good, quality
 education for them.
- It would be from day one creating an environment for kids that feels safe to them. And then making said environment safe and building trust with kids...a lot of it is just being honest and trying to help and talking with kids and actually listening.
- [It] should be where all kids can come into the school and they feel the entire schools has that feeling and the teachers and the principals and the cafeteria workers and everybody are all on the same page: This is who we are; we're here to care for you and teach you how to deal with the world out there as well.

- To me it means responding, approaching every child and every family as if they have
 experienced trauma because often times we won't know, and so it's just a safer approach
 to treat everyone as if they have or are experiencing trauma—to be open, responsive,
 caring...
- TIC to me is understanding that trauma does impact how children behave. It impacts how children respond in circumstances; it impacts how their brain develops and is able to take in and retain information. It's having an understanding of someone's circumstances and creating an environment in my classroom where I'm sensitive to those things...but I still holds them to a high standard academically.
- TIC is having the background and understanding of trauma and being able to respond appropriately in the classroom.
- I think of loving these children where they are because they've been so unloved and just thrown away their entire life that they don't trust. They don't care to listen to anybody in authority because those are people that have hurt them most and so understanding that you're never going to reach those kids if you take an authoritative approach; you've got to be soft with that. You've got to de-escalate.
- It would be really understanding what trauma is and what it looks like before you're able to teach a child... understanding the different types of childhood trauma that could be going on and then adjusting the way you educate...the way you handle your classroom.

Appendix F

Child Advocacy Studies (CAST)



Child Advocacy Studies, or CAST, is

an academic minor or certificate program that focuses on child maltreatment

What is CAST?

Child Advocacy Studies (CAST) is an academic minor or certificate program that focuses on child maltreatment. A CAST minor can be paired with any related academic major (e.g., Criminal Justice, Social Work, Psychology, Medicine, Law) to prepare the student for the real-world intersection of the two disciplines.

Established in 2004 and implemented at 74 academic institutions, both nationally and internationally,4 CAST:

- Offers an innovative, engagement-based academic · Prepares graduates to: curriculum involving:
 - Hands-on **experience**
 - Practical skill-development
 - A focus on community & career
- - Recognize variables leading to child maltreatment
 - **Identify existing systems** that react to child maltreatment
 - Develop multidisciplinary approach to respond effectively to cases of child abuse & neglect in its varying forms

Why is CAST Important?

- · Cases of maltreatment are rising:1
 - **10% increase** in the number of children who received a child protective services (CPS) investigation or alternative response from 2013 (3,184,000) to 2017 (3,501,000)
 - An average of **72 annual responses** per CPS worker in 2017
- 3.5 million children received an investigation or other CPS response, at a rate of 47.1 children per 1,000 in the population
- The average CPS response time to children in need is 76 hours (3.2 days)
- Frontline Child Protection employees lack skills to effectively and appropriately meet the needs of children²
- Child Protection caseload inflation and insufficient workforce preparation lead to high staff-turnover as high as 90% turnover in some jurisdictions3

The Result?

Child maltreatment cases are mishandled due to:

- Ineffective training & insufficient skill-development in · High staff-turnover, which affects state budgets & Frontline Child Protection employees
 - inflates response times for cases due to understaffing



The Solution:

CAST:

- Builds competencies & core skills for identifying, investigating, reporting, & responding to maltreatment instances
- Prepares the workforce with ethical, trauma-informed care approaches to mitigate polyvictimization, while recognizing underlying cultural/social values pertinent to investigation & evidence collection
- Establishes resiliency tactics to ensure long-term employment
- Develops or uses community systems & multidisciplinary or cross-agency collaborations to best meet needs



CAST is a proven solution with

6 publications indicating the program's efficacy⁵

How Can I Learn More About CAST?

- · Visit the Zero Abuse Project (ZAP) website: www.zeroabuseproject.org/CAST
- Contact the ZAP Director of Child Advocacy, Tyler Counsil, EdD: tyler@zeroabuseproject.org | 812.698.1065

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