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The Perceptions of Special Education Teachers Regarding Trauma-informed Care: A Qualitative Case Study

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Abstract

More than one in four children in every classroom are exposed to prolonged trauma that impacts their neurobiological development. Children with developmental trauma demonstrate unique internalizing and externalizing behaviors in school. Research shows that there may be a higher concentration of children with developmental trauma in special education classes. Most special education teachers lack the training needed to support the unique internalizing and externalizing behaviors of their students. The problem examined in this qualitative case study was the lack of SE teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. The purpose of this qualitative exploratory case study was to examine SE teachers' perception regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. Developmental traumatology, a relatively new theoretical framework, was used to investigate the impact of prolonged maltreatment on the development of children. A sample of 7 SE teachers was selected from schools in New Jersey. The participants were interviewed using a semi-structured interview. The research question focused on teacher's perceptions. The recorded interviews were transcribed and the transcriptions were coded and analyzed for themes. The results of this study indicate that (1) Special education teachers need more training in managing the internalizing and externalizing behaviors of children with trauma. (2) General education teachers need more training in managing the internalizing and externalizing behaviors of children with developmental trauma and (3) Administrators need to support a whole school approach to trauma-informed care in their schools. This

research is significant because it may inform administrators in schools and professors in pre-service teacher programs of the need for more trauma-informed training for teachers. Increasing the training for special education teachers on trauma-informed care may reduce the school to prison pipeline and improve the social emotional and academic outcomes for children with trauma exposure. More research is needed to examine the perceptions of general and special education teachers regarding their training needs to support children with trauma in schools.

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Chapter 1: Introduction

Teachers are often confronted with managing the challenging behaviors of children who have experienced trauma. One out of four children in a school classroom have experienced trauma (Duke, Pettingell, McMorris, & Borowski, 2010). The likelihood of children in a special education (SE) classroom who have experienced trauma may be as high as 80% of all classified students in a district (Blodgett, 2015). Children who experience prolonged trauma have been shown to develop difficulties with internalizing and externalizing behaviors (Hanson et al., 2014; Lovallo, 2013). With training, teachers can improve the internalizing and externalizing behavior of children with trauma in their classrooms (Perry & Daniels, 2016; Shamblin, Graham, & Bianco, 2016). There is evidence, however, that SE teachers lack the training needed to support children with trauma in the classroom (Alisic, 2012).

Children who experience prolonged exposure to trauma may have impaired limbic system development (Hanson et al., 2014; Whittle, 2014). The term developmental trauma (DT) has been suggested to describe prolonged exposure to childhood trauma such as physical, mental, and sexual abuse; neglect; interfamily violence; adoption and substance abuse that results in atypical neurobiological development (D'Andrea, Ford, Stolbach, Spinazzola, & van der Kolk, 2012; Gabowitz, Zucker, & Cook, 2008). Research indicates that the atypical development of the limbic system associated with DT has a mediating effect on the behavior of children in school (Jaffe et al., 2015; Milot, Ethier, St. Laurent, & Provost, 2010). Lovallo (2013) found that the impairments to the development of the limbic system resulting from childhood trauma caused reduced stress reactivity, unstable affect regulation and impulsive behaviors. The reduced stress reactivity and unstable affect regulation results in children with DT living in a constant fear-activated state of hyperawareness. Their brains are telling them they are not safe, which impedes

their ability to self-regulate (Baldwin, 2013; Lavallo, 2013). They may demonstrate other externalizing behaviors such as defiance, disrespect, or severe aggression (Greeson et al., 2014). Other students with DT may respond to their unstable affect regulation with internalizing behaviors such as withdrawal, shutting down, or zoning out (McLafferty et al., 2016).

Because of these behaviors, many children with trauma histories are evaluated for, and placed in, receive SE services. In Washington State, 80% of all children receiving special education services have trauma histories (Blodgett, 2015). There is also a connection between children with trauma histories and children classified as emotionally/behaviorally disordered under IDEA (Franklin et al., 2010). Because so many of the children in SE may have trauma histories, SE teachers should have training necessary to support these children in their classrooms.

Students with DT need explicit instruction in self-regulation if they are to decrease their internalizing or externalizing behaviors in the classroom (Steele & Kuban, 2011). Self-regulation can be developed through the teaching of resiliency (Esquivel, Doll, Oades-Sese, 2011), executive function (Diamond & Lee, 2011) and the development of trusting relationships (McMahon, 2015; Pasco Fearon et al., 2010). In schools where teachers are provided with training on trauma-informed care, the teachers have noted improvement in the behavior of the children with DT (Perry & Daniels, 2016).

The classroom can represent a very stable and consistent environment in the lives of children with DT (Phifer & Hull, 2016). Thus, teachers can positively influence the children in their classroom who have internalizing or externalizing behaviors because of DT (O'Neill, Guenette, & Kitchenham, 2010). Children with DT have been shown to respond positively to explicit teaching of self-regulation and resiliency (Rutter, 2013; Ungar, 2013). However,

teachers lack the training necessary to implement these practices (Alisic, 2012; McMahon, 2015). This qualitative case study contributed to the research in this area by exploring SE teachers' perceptions of their lack of training. This information may inform administrators and staff developers regarding the training needs their SE teachers have in trauma-informed teaching. In addition, SE teachers may gain insight by learning of the perceptions of other teachers (Maring & Koblinsky, 2013).

Background

The results of a study conducted in 1998 known as the Adverse Childhood Experiences (ACES) study connected childhood maltreatment with negative adult health outcomes (Anda et al., 2006). Since that seminal study, researchers have focused on the emotional and physical adult health outcomes for children who have experienced adverse childhood experiences such as physical, mental, and emotional abuse, separation from primary care giver, gang violence, poverty, and domestic violence (Anda, Butchart, Fellitti, & Brown, 2010; Finkelhor, Turner, Shattuck, & Hamby, 2013). As interest in this area grew, studies showed atypical limbic system development children who are maltreated (Hanson et al., 2014). Recent studies have shown that there is a connection between maltreated children's neurobiological development and their internalizing and externalizing behaviors in school (Greeson et al., 2014; Jaffe et al., 2015). Very recently, a study showed that as many as 80% of children receiving special education services were exposed to adverse childhood experiences (Blodgett, 2015).

The quality and content of teacher preparation programs and professional development for classroom management has been explored for many years (O'Neill & Stephenson, 2012). Specifically, studies have been conducted that examined preparation of classroom management for special education teachers (Oliver & Reschley, 2010). However, due to the recent data on the

understanding of DT and its connection to school behavior, studies have only recently explored the training needs of teachers regarding trauma-informed care. There has been a call in the literature for study of the training needs of teachers (Phifer & Hull, 2016). However, at the time of this study, no peer reviewed research regarding the training needs of special education teachers was discovered.

Statement of the Problem

The problem examined in this qualitative case study was the lack of SE teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom (Alisic, 2012; Phifer & Hull, 2016). According to Hanson (2014), children with DT have smaller amygdala and hippocampal size resulting from the toxic levels of cortisol associated with childhood maltreatment. Impaired development of the amygdala and hippocampus creates a fear-activated state of hyper awareness (Baldwin, 2013; Lovallo et al., 2013). Children with DT who live in a state of constant fear may have a decreased ability to self-regulate which leads to behavioral challenges in school (Hanson, 2014). Students with DT demonstrate internalizing behaviors such as task refusal, withdrawal, school avoidance, and a failure to develop relationships with teachers or peers (Romano et al.,2015). Students with DT may also demonstrate externalizing behaviors such as fighting, cursing, leaving the classroom, and aggressive behavior toward teachers or students (Hanson et al., 2014).

Failure to properly respond to the behavioral challenges of children with DT may result in deteriorating behavior and re-traumatization (Mullet, 2014). Research indicates that teachers can play a role in reducing children with DT's internalizing and externalizing behaviors by helping them to regulate the toxic level of stress hormones (Ungar, 2013). Teachers lack the

knowledge and training in trauma-informed care to respond to the learning and behavioral challenges of students with DT (Alisic, 2012). There is a call in the research for studies to investigate the teachers' trauma-informed training needs (Alisic, 2012; Perry & Daniels, 2016). Because many of the children in SE may have DT, this case study addressed the problem by exploring the perceptions of SE teachers regarding their training needs to adequately support their students with DT.

Purpose of the Study

The purpose of this qualitative exploratory case study was to examine SE teachers' perception regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. A purposive sample of 7 SE teachers was selected from school located in New Jersey (Patton, 2014). The participants were selected from two school districts in New Jersey. Each participant has received a minimum of one hour of training in trauma-informed care. The participants were interviewed using a semi-structured interview protocol (Patton, 2014). The interviews were digitally recorded and transcribed verbatim into Word. The participants checked the transcriptions of their interviews to verify accuracy and make any changes if necessary (Tongco, 2007). The transcribed data was analyzed using Yin's Five-Phase approach (Yin, 2011).

Theoretical/Conceptual Framework Overview

This study built upon the work of developmental traumatology and social learning theory (Bandura, 1996; DeBellis, 2001). Traumatology research provides a neurobiological explanation for the unique internalizing and externalizing behaviors demonstrated by children with DT in school (Jaffe et al., 2015). Social learning theory (SLT), specifically, self-efficacy has proven to

be the foundation of trauma-informed care in schools (Sachs-Ericsson, Medley, Kendall-Tackett, & Taylor, 2014)

Developmental traumatology is a relatively new theoretical framework used to investigate the systematic psychological and biological impact of prolonged maltreatment on the development of children (DeBellis, 2001). A recent study was designed to explore the neurological impact of childhood trauma exposure (Hanson, 2014). The participants were 64 abused and 64 non-maltreated children who were all 12 years old. In addition, each participant had a brain scan that measured hippocampus and amygdala volume. The results showed that the volumes of both hippocampus and amygdala were smaller in the abused children as compared to the non-maltreated children. In addition, the results of the interviews indicated that the abused children demonstrated more internalizing and externalizing behaviors and had more difficulties with academic achievement. Numerous studies within this framework have shown that the neurobiological impact of childhood trauma contributes to deficiencies in executive function, cognitive development, and self-regulation, all of which may impact academic performance in school (Bucker et al., 2012; DeBellis, Woolley & Hooper, 2013; Jaffe et al., 2015).

The developmental traumatology framework holds that prolonged maltreatment impacts psychological development as well in that the interpersonal nature of the abuse interferes with the child's ability to trust and establish relationships (DeBellis, Hooper, Woolley, & Shenk, 2010). Sheridan, Fox, Zeanah, McLaughlin, & Nelson (2012) measured the growth of brain structure in children raided in a Romanian orphanage compared with the brain structures of children removed from the orphanage and raised in middle class families in England. They found that the children who were removed from the orphanage demonstrated growth in areas of the brain that had been undersized when first measured in the orphanage. The authors of this

study concluded that improved environment including food, health care, and consistent nurturing (all things that may be found in a school) may contribute to improved brain development despite impoverished beginnings. Thus, researchers within the traumatology framework have called for schools and child mental health workers to take the impact of trauma on brain development into consideration when working with children exposed to maltreatment (DeBellis et al., 2010).

Bandura's social learning theory (SLT) holds that a person's success is effected by self-efficacy or belief in their capabilities (Bandura et al., 1996). One of the characteristics of self-efficacy is the ability of a person to understand their own physical and emotional states. This domain of SLT has provided the foundation of research into the development of self-regulation and resilience in the treatment of DT (Sachs-Ericsson et al., 2011). In an extensive review of the literature, Rutter (2013) found that children who were exposed to maltreatment showed better adult outcomes where resilience was present. Rutter defined resilience as the development of self-efficacy and personal agency. Although the concept of trauma-informed school care is recent, the models that have been developed make mention of the importance of the development of self-regulation leading to self-efficacy in improving the academic and behavioral outcomes of children with DT in schools (Morton, 2015; Sibinga, Webb, Ghazarian, & Ellen, 2016; Walkley & Cox, 2013).

In summary, the traumatology framework provided an understanding of the impact of developmental trauma on the internalizing and externalizing behaviors of children in the classroom. SLT provided a foundation for trauma-informed care in schools by establishing the importance of self-efficacy in academic and behavioral achievement. This study examined the influence of training in trauma-informed care in managing the internalizing and externalizing

behaviors of children with DT in the classroom. The body of literature supported the position that teachers lack the training to shift from traditional classroom management strategies to trauma-informed classroom management strategies that address the neurobiology of trauma in a way that increases the development of self-efficacy.

Research Questions

This study focused on the present challenges and lack of training that special education teachers are facing regarding internalizing and externalizing behaviors of their students with DT. The following questions supported this qualitative case study because the focus of the study was on the individual experiences and perceptions of each of the participants in a real-life setting (Yin, 2011).

Research Question 1. What are teachers' perceptions of the training they have received in responding to behavioral challenges of students with DT?

Research Sub-Question A. What are teachers' training needs regarding internalizing behavioral challenges of students with DT?

Research Sub-Question B. What are teachers' training needs regarding externalizing behavioral challenges of students with DT?

Nature of the Study

The study of teachers' perceptions and experiences is subjective and can best be examined through a constructivist research philosophy using qualitative design and methods (Miles, Huberman, & Saldana, 2014). Constructivist research seeks to gather understanding through multiple participant perspectives (Oleinik, 2011). Post positivism research using quantitative methods are useful when the data are inherently numerical and when researchers are

seeking a determination or verification of a theory (Landrum & Garza, 2015). Case study design allows for consideration of a contemporary phenomenon within a real-life context (Yin, 2011).

The study was conducted with individual special education teachers in elementary, middle, and high schools in New Jersey to explore their perceptions and experiences regarding working with children with DT in the classroom. The population was comprised of special education teachers because research showed that a significant number of children in special education have been exposed to childhood trauma (Blodgett, 2015). The participants were selected from schools in New Jersey and California to increase geographic generalization. Every effort was made to conduct the interviews fact to face rather than remotely.

The participants were recruited through contact with principals and superintendents in public schools in NJ as well as via a Facebook page for educators who were engaged in trauma-informed care in schools. All the participants had previously attending at least one hour of training in trauma-informed care. A recruitment script (Appendix A) was distributed. The principals and superintendents were contacted via email. A site permission form was obtained (Appendix B). Participation in the study was voluntary.

The procedures for this study were carefully documented to allow others to review and repeat this study. A transparent process lead to credibility and trustworthiness (Yin, 2011). After the sample was selected, the researcher scheduled time to meet with each participant for a face-to-face interview. One participant was unavailable for a face-to-face interview, so the interview took place through an online meeting site. Semi-structured interviews were used to capture the teachers' perceptions as they unfolded throughout the interview (Agee, 2009; Turner, 2010). Follow up questions were asked to further explore a participant's initial response and to and give the participants an opportunity to reflect on their own experiences and perceptions

(Turner, 2010). Semi-structured interviewing was more appropriate than structured interviewing because it allowed the researcher to better manage irrationalities or repressed attitudes through the building of trust and the careful use of nonverbal expressions (Branthwaite & Patterson, 2012). Structured surveys were appropriate because the participants are restricted to replying only to what is asked, without the opportunity to discover an experience or perception they were not aware they had prior to the interview (Diefenbach, 2008).

The questions were asked using a semi-structured interview protocol without assumptive language (Appendix C). Follow-up questions were asked to extract more information, keep the interviewee on topic, or encourage the interviewee to address the question being asked (Esin et al., 2014). The same general information was collected from each teacher to describe the participants' collective perceptions and experiences with working with children with DT in the classroom. Interview questions designed to provide data to support the research questions included but were not limited to; How much training have you had on trauma-informed care in schools? How many children with trauma exposure do you work with? How much training have you had on managing the externalizing behaviors of children with trauma in your classroom? Do you feel confident managing the internalizing behaviors of your students with trauma? In addition to interviews, participants were asked to provide all information they had on the previous trauma-informed care training they received. The documents were reviewed to determine what concepts and strategies were provided in the training.

The data collected from the interviews was coded and central concepts and themes were established (Miles et al., 2014). The use of a concept map helped determine connections that existed between and among the responses of the individual teachers (Miles et al., 2014). After

the data was coded and analyzed, the themes were discussed as they related to the research questions (Yin, 2011).

Informed consent was collected and confidentiality was maintained. Each participant was assigned a letter that corresponded to their transcripts. Ethical consideration was provided to the teachers by assigning pseudonyms and coding other identifiable information to protect the participants from being connected to sensitive information (Oleinik, 2011). There were no known conflicts of interest for the researcher. The data collection did not take place in the researcher's place of employment. IRB approval was obtained before any research was conducted.

According to Yin (2011), qualitative case study is appropriate when the focus of the study is on the individual experiences and perceptions of each participant. This study was focused on the present challenges and lack of training that the teachers are facing regarding internalizing and externalizing behaviors of their students with DT. To better understand the training needs of teachers, it was beneficial to speak to the teachers who are in the actual classrooms working with children with DT. Because this study presented a situation (the training of SE teachers in trauma-informed care), and was intended to inform other situations (teachers working with children with DT) it was best examined using an instrumental case study (Yin, 2011). While narrative analysis also allows for study in a real-life context, there is consideration of the cultural context of the participants (Esin, Fathi, & Squire, 2014). In this study, the cultural context of the special education teachers was not relevant to the research questions. Ethnography, another qualitative design, was not appropriate for this study because researchers using ethnography study a cultural group in a natural setting over a prolonged period (Vogt, Gardner, & Haeffele, 2012). The current study examined the participant's perceptions of

a program. Time did not need to elapse to collect the information needed to answer the research questions.

The purpose of this qualitative exploratory case study was to examine SE teachers' perception regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. This study was best conducted using qualitative methodology and instrumental case study design. The qualitiative approach was most appropriately aligned to the problem and the purpose of the study. Because the problem in this study is related to the experiences of individual teachers, case study was an appropriate design. The research questions were deveopled to support the purpose and the qualitative nature of the study.

Significance of the Study

The problem examined in this qualitative case study was the lack of teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. Trauma Sensitive School Climates are a relatively new concept; thus, little is known about the experience and perceptions of the teachers working in classrooms with children with DT (Phifer & Hull, 2016). This research is significant because it may inform administrators in schools and professors in pre-service teacher programs of the need for more trauma-informed training for teachers. Increasing the training for special education teachers on trauma-informed care may reduce the school to prison pipeline and improve the social emotional and academic outcomes for children with trauma exposure (Balfanz, Byrnes, & Fox, 2014; Sibinga et al., 2016).

Definitions of Key Terms

Developmental Trauma – Developmental trauma is prolonged exposure in childhood to physical, emotional, sexual abuse, neglect, family violence, separation from primary care giver, or living in a war-torn area (D'Andrea et al., 2012).

Externalizing Behavior – Externalizing behaviors are observable behaviors such as emotionally reactive, rule breaking, aggressive behavior, and attention problems that occur with severity and frequency (Greeson et al., 2014).

Internalizing Behavior – Internalizing behaviors may or may not be observable and include sleep problems, thought problems, anxiety/depression, somatic complaints, and suicidal ideation that occur with severity and frequency (Greeson et al., 2014).

Mindfulness – Mindfulness is a state of awareness of an individual that includes refined attention and non-evaluative acceptance of one's internal and external experiences as they occur (Bajaj & Pande, 2015).

Resilience – Resilience is the demonstration of self-regulation, personal agency, and planning that promote positive outcomes despite the experience of prolonged adversity (Rutter, 2013).

Re-traumatization – The inadvertent creation of stressful or toxic processes or environments that interfere with the recovery of traumatized individuals (SAMSHA, 2014).

Self-Regulation – Self-regulation is the children's ability to deliberately modulate thoughts, emotions, and behavior in response to a given situation (McClelland & Cameron 2012).

Trauma-Informed – This term refers to teaching strategies that involve the specific use of knowledge about trauma to modify instruction and classroom climate to enhance relationship development and improve academic and behavioral outcomes (Blodgett, 2015).

Summary

The concept of trauma-informed school climates is relatively new (Phifer & Hull, 2016). Thus, little is known about the experience and perceptions of the teachers working in classrooms with children with DT (Phifer & Hull, 2016). The purpose of this qualitative case study was to explore teachers' perceptions and experiences regarding training needs (Kahlke, 2014). A semi-structured interview process was conducted to allow the researcher to deeply explore individual teacher's experiences in a natural setting (Turner, 2010). Narrative analysis of the data protected the rich information from interpretation and bias (Esin et al., 2014). Thus, the results may provide readers with an opportunity to learn from the participants' individual experiences in working with children with DT in the classroom (Alisic, 2012).

Chapter 2: Literature Review

Introduction

The literature review began with an overview of the research on the impact of trauma on children's neurological development and the traumatology framework. Studies within the traumatology framework as they relate to the unique internalizing and externalizing behaviors of children with DT were also reviewed. The role that executive function and self-regulation play in the demonstration of internalizing and externalizing behaviors was discussed. Research regarding the impact of childhood maltreatment on attachment was discussed. Preventative and reactive classroom management strategies (CMS) as they relate to children with DT were also reviewed. Research on the trauma-informed strategies developed to reduce internalizing and externalizing behaviors of children with DT in schools was reviewed. Finally, studies on implementation of trauma-informed programs and the training needs of teachers were presented. The chapter concluded with a summary.

Many teachers lack the trauma-informed training to manage the challenging internalizing and externalizing behavior of children with DT in their classrooms (Alisic, 2012; Stough et al., 2015). The challenging behavior demonstrated by children with DT is caused by atypical neurobiological development (Hanson, 2014; McLafferty et al., 2016). Childhood trauma exposure has also been shown to impact attachment. Atypical brain development, insecure attachment, and traditional classroom management practices conspire to make learning and behaving in school a challenge for children with DT (D'Andrea et al., 2012). Studies show that explicit instruction in mindfulness, self-regulation and resilience improves behavioral outcomes for children with DT (Rutter 2013; Sibinga et al., 2016). Because of decreased cognitive function (Bucker et al., 2010) and increased internalizing and externalizing behaviors, children

with DT are more likely to have special education services (Blodgett, 2015; Scarborough & McCrae, 2010). Special Education teachers with trauma-informed training that includes self-regulation and resilience can improve behavioral outcomes for children with DT (Phifer & Hull, 2016; Romano et al., 2015). However, traditional classroom management strategies do not include development of resilience and self-regulation (Korinek & deFur, 2016). Teachers may need more training on trauma-informed classroom strategies (Shamblin et al., 2016; Stough et al., 2015). Thus, the purpose of this qualitative case study was to explore the perceptions and experiences of special education teachers who have had a minimum of one training session on trauma-informed classroom strategies.

The library databases used in the collection of research for this study included; Ebrary, EBSCOhost, LexisNexis, ProQuest, SAGE Journals Online, Science Direct, and Wiley Online. The search engine most commonly used was the NCU library search as well as Google Scholar. The search terms used included; childhood trauma, childhood maltreatment, childhood trauma and neurobiology, childhood trauma and attachment, adverse childhood experiences, trauma-informed schools, classroom management, classroom management and special education, childhood trauma and special education, childhood trauma and academic achievement, childhood trauma and behavior, complex trauma, and developmental trauma. Research on the topic of childhood trauma and school performance has been collected for four years. When research on this topic began, there was little peer reviewed research on the impact of childhood trauma on school performance. There were some articles written by authors who were connecting the recent neurobiological research with behavior and executive function, few, however, were peer reviewed. The peer reviewed research collected in the beginning of this journey was conducted by attachment theorists and neurobiologists and medical doctors (Jones & Smith, 1973; Teicher

et al., 2003). The information connecting the attachment and neurobiological research was mainly news, internet, and blog based articles written by teachers, social worker, and psychologists. There have been a few seminal pieces of research including Eckenrode, Laird, & Doris (1993), Teicher et al. (2003) and van der Kolk (2005), in which direct connections were made between the neurobiological the impact of childhood trauma and children's academic and behavioral challenges in school. Following those discoveries, publications connecting the research to changes in school practices began to be published (Cole at al., 2009; Wolopow, Johnson, Hertel, & Kincaid, 2011). The Cole et al. (2009) and the Wolopow et al. (2011) publications remain two of the most popular publications used by schools. In the past year, there has been a dramatic increase in the publication of peer reviewed studies conducted specifically on the impact of trauma on learning and behavior (Perry & Daniels, 2016). There remains, however, little peer reviewed research on the training needs of teachers working with children with DT in schools or on the impact of trauma-informed practices on academic outcomes of students with DT.

Theoretical/Conceptual Framework

Trauma-informed care in the classroom was developed out of the theoretical frameworks of attachment theory, traumatology, social learning theory, and cognitive behavioral theory (Bowlby, 1982; Caparara et al., 2008; Riggs, Greenburg, Kusche, & Pentz, 2006). Attachment theory and traumatology research provide an explanation of the unique internalizing and externalizing behaviors demonstrated by children with DT in school (Jaffe et al., 2015; Pasco Fearon et al., 2010). Social learning theory (SLT), specifically, self-efficacy, and CBT research has proven to be the foundation of trauma-informed care in schools (Nadeem et al., 2011; Sachs-Ericsson et al., 2014)

Attachment theory provides a framework for much of the current research on developmental trauma (Aideuis, 2007). In fact, the current definition of developmental trauma makes a direct reference to attachment. Developmental trauma is defined in the literature as the experience during early childhood of prolonged exposure to adverse experiences of an interpersonal nature (Spinazzola et al., 2005). Bowlby's work showed that an attachment to a caregiver was necessary for the development of self on an internal level and an external level. Thus, the studies conducted to explore this theory began to focus on the causes of disrupted attachment (Cicchetti, 2004). Following the Strange Situation (Ainsworth, 1969), studies of attachment expanded to include the comparison of various developmental behaviors in children who had a disruption in their attachment process with children who had no disturbance (Aideuis, 2007). A study of children with incarcerated mothers showed that 63% demonstrated behaviors of over-dependence or avoidance. Children separated from their mothers showed two types of responses. They were more withdrawn and reluctant to develop relationships, or more aggressive toward those who attempted to establish relationships (Poehlmann, 2005). Subsequent study has shown that children who are abused or neglected fail to attach to their caregivers in a similar way to children who fail to attach because of separation (Bebe, et al., 2013). In addition, without intervention, children who were exposed to childhood trauma demonstrated enduring struggles with relationships in adulthood (Muller, Thornback, & Bedi, 2012). The results support the idea that exposure to child abuse is a form of attachment disruption (van der Kolk, 2005). In addition, the results of this study indicate that participants who sought treatment for their attachment problems had fewer lasting effects from the child abuse suggesting that developmental trauma may be linked to attachment theory in treatment methodology.

More recently, the study of developmental trauma goes beyond attachment theory to include neurobiological evidence. A recent study was designed to explore the neurological impact of childhood trauma exposure (Hanson et al., 2014). The participants were 64 abused and 64 non-maltreated children who were all 12 years old. In addition, each participant had a brain scan that measured hippocampus and amygdala volume. The results showed that the volumes of both hippocampus and amygdala were smaller in the abused children as compared to the non-maltreated children. In addition, the results of the interviews indicated that the abused children demonstrated more internalizing and externalizing behaviors and had more difficulties with academic achievement.

Traumatology and attachment theory help to explain the higher rates of internalizing and externalizing behaviors of students with DT in schools (McLafferty et al., 2016) and form the basis for effective treatment in schools. A study of 64 children with DT examined the effect of an attachment-based therapy as compared to a more traditional cognitive behavioral therapy. The results of the study indicate that the children who participated in the attachment –based treatment made greater and more lasting gains than did the children in a more traditional therapy program (Becker-Weidman, 2006). In addition, researchers within the traumatology framework have called for schools and child care workers to take the impact of trauma on brain development into consideration when working with children exposed to maltreatment (DeBellis et al., 2010).

Cognitive behavioral theory influences the need for a shift from traditional classroom management to trauma-informed care in classrooms. Cognitive behavioral theory continues to evolve from its roots in behavior theory. Recently cognitive behavioral theory was applied to children in the form of cognitive behavioral therapy (CBT; Edmunds et al.,). CBT interventions

for children are characterized by the following: cognitive activity affects behavior, cognitive activity may be monitored and altered, and behavior change may be achieved through cognitive change (Dobson & Dozois, 2001).

CBT is the foundation upon which traditional classroom management is built (Oliver & Reschley, 2010). Schools currently employ strategies such as Positive Behavioral Interventions and Supports (PBIS; Mullet, 2014). PBIS is based upon CBT. The program has three tiers of behavioral response. The first tier is a universally applied positive school climate. Good behavior and academic successes are celebrated and rewarded. The second tier of intervention is applied when students demonstrate internalizing or externalizing behavior. At this point, consequences are applied and a program of improvement, involving strategies for cognitive change, is developed. At the third tier of intervention, children are often excluded from class or school. Nowhere in this plan is there a place for relationship development or strategies to address the neurobiological influences of trauma (Mullet, 2014). In addition, excluding children with DT prevents attachment and positive relationship development. Oliver and Reschley (2010) suggest that traditional classroom management strategies are reactive and stem from a cognitive behavioral approach to externalizing behavior. When children demonstrate acceptable behaviors, teachers react with reward. When children react with unacceptable behaviors, they respond with punishment or consequence. In addition, CBT assumes a functioning cognition. Because of stalled limbic system development, Children with DT often have delayed cognitive abilities (Bucker et al., 2012).

Trauma-informed care requires proactive treatment of behavior (Statman-Weil, 2015). Bandura's social learning theory (SLT) expanded on cognitive behavioral theory (Bandura et al., 1996). This theory expanded the role of cognition in behavior, and introduced the importance of self-efficacy (Edmunds et al., 2017). One of the characteristics of self-efficacy is the ability of a person to understand their own physical and emotional states. This domain of SLT has provided the foundation of research into the development of self-regulation and resilience in the treatment of DT (Sachs-Ericsson et al., 2011). In an extensive review of the literature, Rutter (2013) found that children who were exposed to maltreatment showed better adult outcomes where resilience was present. He defined resilience as the development of self-efficacy and personal agency.

In summary, the traumatology framework provided an understanding of the impact of developmental trauma on the internalizing and externalizing behaviors of children in the classroom. Attachment theory and social learning theory provided a foundation for trauma-informed care in schools by establishing the need for safety and self-efficacy. Cognitive behavioral theory provided the backdrop for traditional classroom management strategies. This study will examine the influence of training in trauma-informed care in managing the internalizing and externalizing behaviors of children with DT in the classroom. The body of literature supported the position that teachers lack the training to shift from traditional CBT based classroom management strategies to and trauma-informed classroom management strategies that address the neurobiology of trauma.

Developmental Impact of Childhood Trauma on Internalizing and Externalizing Behaviors

The impact of trauma on children is explored through three theoretical frameworks; traumatology, evolutionary perspective, and social learning theory.

Traumatology Framework

Children with DT have atypical limbic system development, which leads to internalizing and externalizing behaviors. Chronic childhood maltreatment influences neurobiological development (Sheridan et al., 2012, Teicher et al., 2003; Tottenham et al., 2010). Early studies of brain development in children, when not conducted using rodents or observation of living children, were primarily conducted through post mortem examination. A landmark study was conducted by performing necropsy on the brains of infants with fetal alcohol syndrome. The results of the study indicated significant impact on brain mass (Jones & Smith, 1973). This study marked the beginning of visible evidence that what happened to children in their early years influenced brain development and the beginning of a body of research referred to in the literature as the traumatology framework (Delima & Vimpani, 2011).

Researchers within the traumatology framework have shown that prolonged exposure to childhood trauma impacts the development of the amygdala and the hippocampus within the limbic system (Dannlowski et al., 2009). In a study on children with trauma exposure, Hanson et al. (2014) showed that the volume of the amygdala and hippocampus was different for children with trauma exposure than for children with no trauma exposure. Tottenham et al. (2010) showed that children raised in a Romanian Orphanage showed larger amygdala volume. They explained that their findings were consistent with animal studies that have shown larger amygdala volume in response to postnatal stress. Other research has shown that in addition to the amygdala being

larger in volume for children with maltreatment histories, it may also be hyper responsive (Tottenham & Sheridan, 2010).

There is some debate within the traumatology framework regarding the impact of early childhood maltreatment on the development of the amygdala and the hippocampus. DeBellis et al. (2010) failed to find atypical hippocampal volume in a study of childhood PTSD. They hypothesized that extent of maltreatment, hippocampal volume, and lower neurocognitive ability would be associated with a greater number of PTSD symptoms. They did not find a difference in hippocampal volume between the PTSD and non-PTSD diagnosed participants. They did, however, find poorer visual memory. The authors of this study suggested that the visual memory deficits may be an indication of hippocampal dysfunction. The study participants were children and the authors suggested that possibly the change in hippocampal volume occurs in adolescence. In an extensive review of the literature regarding the inconsistencies in amygdala and hippocampal volume and reactivity in response to childhood maltreatment, Tottenham & Sheridan (2010) concluded that hippocampal volume is impacted by early childhood trauma, but may not be detectable until adulthood. In addition, the amygdala is altered both structurally and functionally in response to childhood trauma. A later study found retarded hippocampal growth and accelerated amygdala growth in a study of adolescents with psychopathology (Whittle et al., 2013).

In addition to amygdala and hippocampal involvement, research within the traumatology framework has explored the importance of the hypothalamic-pituitary adrenocortical axis (HPA). The amygdala and the hippocampus are closely linked with the HPA axis (Tottenham & Sheridan, 2010). The HPA axis is an important neuroendocrine mediator of stressful experiences for humans. Because the amygdala and the hippocampus are large receptors of cortisol, they are

impacted by large amounts of cortisol production by the HPA axis. Alink, Kim, Cicchetti, & Rogosch, (2012) looked at whether maltreatment influences social functioning which influences the HPA axis and cortisol regulation or if the HPA axis and cortisol regulation influence social functioning. They found that maltreatment had an indirect effect on cortisol levels through social functioning. Thus, they suggested that maltreated children may improve their social functioning through regulation of their cortisol levels. A group of researchers who were examining the relationship between early life stress and risk for young adult substance abuse measured cortisol stress reactivity (Lovallo et al., 2012). They examined cognitive processing and behavioral regulation in young adults with adverse childhood experiences by measuring limbic system activity to stress (Lovallo et al., 2013). They found that the young adults with two or more adverse experiences demonstrated reduced cognitive function and less stable regulation affect. These findings support the results found in previous studies (Carpenter et al., 2007; Elzinga et al., 2008). It is important to note that the stress applied to the participants in these studies was a combination of public speaking and mental math problems. Both activities are common in schools. In studies where the results did not suggest reduced stress response activity, other stress inducing activities including video games and solving difficult puzzles were used, but not in combination (Murali & Chen, 2005; Kapuku et al., 2002). This suggests that those activities were not effective in causing the participants to feel sufficiently stressed. Thus, in a school environment where stressful activities such as public speaking, reading aloud, and solving mental math problems take place routinely, children with DT may demonstrate cognitive deficiencies and problems with behavioral regulation (Lovallo et al., 2013). This is important to consider in schools where few children are taught to regulate their stress responses to improve social functioning.

Evolutionary Perspective

An evolutionary perspective contributes to an understanding of the high frequency of externalizing and internalizing behaviors of children with DT in the classroom. The amygdala is known as the survival brain (Baldwin, 2013). When the amygdala is activated in response to a stressful situation, it creates a freeze, flight, fight response in humans. This freeze, flight, fight response is an autonomic response originally coined by Walter Cannon in 1929. It happens without planning (Siegel & Bryson, 2012). When the safety of a person is threatened by violence or natural disaster, their amygdala is triggered, the stress response system is activated, and the person responds to the threat by holding very still, running away, or defending themselves against their attacker (Baldwin, 2013). The amygdala comes online at birth (Siegel & Bryson, 2012). It is heavily impacted by stress hormones such as adrenaline and cortisol (Danese & McEwen, 2012). Overtime it becomes hyper-responsive to fluctuations in stress hormones (Tottenham & Sheridan, 2010). Thus, in response to continuous threats to physical and emotional safety, children with DT may have an exaggerated freeze, flight, fight response. In the classroom, they are more likely to act out, demonstrate aggression, tune out of the lesson, leave the classroom or be completely withdrawn than typically developing peers (Jaffe et al., 2015).

Social Learning Theory

Researchers outside of the traumatology framework make a similar connection between trauma exposures in childhood to increased likelihood for externalizing or internalizing behaviors but apply different causation. One study suggested that the increased externalizing behavior demonstrated by economically disadvantaged children was the result of their lack of opportunity to practice emotional regulation (Sektnan, 2010). The influence of the

neurobiological evidence, however, is strong in the research and can be found referenced and embedded in research with a social learning theoretical framework. The study discussed above by Alink et al. (2012) is an example of social theorists making connections between social functioning and neurobiology. In a study on parental expressivity and child physiological regulation, researchers found that parental expressivity may influence the development of adaptive skills through physiological regulation (Liew, Johnson, Smith, & Thoemmes, 2011). This convergence of social learning theory with neurobiology is an important when schools implement social emotional learning programs in a trauma-informed setting (Oliver & Reschley, 2010).

The Impact of Childhood Trauma on School Performance

The research connecting DT to school performance attributes poor academic performance to cognitive weakness in the traumatology framework, academic weakness because of behavioral problems, executive function, self-regulation, and failure to advance grades due to absenteeism (Bucker et al., 2012; DeBellis et al., 2013; Romano et al., 2015). Cognitive abilities connected to the development of the hippocampus such as working memory, maintaining attention, and inhibitory control have been shown to be influenced by DT (Bucker et al., 2012; Suor et al., 2015). Children with trauma histories score lower on tests of cognitive ability (Cheng et al., 2014; DeBellis et al., 2013). Low cognitive ability has been associated with poor academic achievement (Romano et al., 2015). Children with low cognitive ability struggle with memory, organization, and processing speed (DeBellis et al., 2013). Thus, they have trouble studying information for tests, they often fail to complete assignments, and may not process information at the speed at which it is being delivered in the classroom. All of this may result in poor grades and minimal learning (Romano et al., 2015).

There is evidence that trauma exposure impacts the development of executive function (DeBellis et al., 2013; DePrince et al., 2009). Executive function is defined in the literature as a range of abilities including shifting and focusing attention, memory, and self-regulating behavior (DePrince et al., 2009). The areas of the brain associated with executive function such as the hippocampus and the corpus callosum, have been shown to be the areas of the brain predominantly affected by trauma (DeBellis et al, 2013). Executive functions are central to many of the tasks required for academic success and behavioral control. Diamond & Lee (2011) suggest that executive functions may be more important for academic success than cognitive ability. Furthermore, they suggest that executive functions should be explicitly taught in schools. There is much overlap in the literature regarding the impact of trauma on executive function and self-regulation (DePrince et al., 2009; Korniek & DeFur, 2016). In some cases, the terms are used interchangeably (Korniek & DeFur, 2016). From a traumatology framework, however, it is important to understand that executive function is necessary to achieve self-regulation (DePrince et al., 2009). Children with DT may have impaired or delayed executive function and thus demonstrate less ability to self-regulate their behavior (Bucker et al., 2012). Outside of the traumatology framework, some researchers incorporate the skills associated with executive function into their definition of self-regulation. For example, McClelland & Cameron (2012) define self-regulation as cognitive flexibility, working memory, and the capacity to control attention, thoughts, actions, and emotions. Children with weak executive function or self-regulation demonstrate more externalizing and internalizing behaviors in school. Cloitre et al. (2009) found that ongoing childhood trauma led to more severe behavior and that the behaviors were qualitatively different due to the impact of trauma on self-regulation ability. Some of the literature refers to the skills of self-regulation and executive functions including, planning,

organizing, and problem solving as self-determination (Carter et al, 2011). These studies come to similar conclusions regarding the importance of these skills for academic success. However, they fail to address the reasons that the children may have poor self-determination skills in the first place (Carter et al., 2011; Cho, Wehmeyer, & Kingston, 2012).

Extensive research exists that connects poor behavior to poor academic achievement (Metsapelto et al., 2014). For example, a recent study connected externalizing behavior to poor academic achievement through task avoidant behavior. Children with externalizing behaviors missed important instruction in the classroom which lead to task incompletion. Consistently poor grades impacted the children's self-efficacy which lead to task avoidance which lead to poor academic achievement (Metsapelto et al., 2014). The research on trauma and externalizing behavior builds on the existing research connecting externalizing behavior with poor academic achievement and suggests that the cause of the externalizing behaviors may often be trauma (Sektnan, 2010). Milot et al. (2010) found that early childhood maltreatment was associated with behavior problems in preschoolers. Jafee et al. (2015) found a relationship between a child's trauma exposure and HPA axis reactivity. The HPA axis reactivity was shown to influence internalizing and externalizing behaviors. Hardaway, Larkby, & Cornelius (2014) found that exposure to trauma such as community violence negatively impacted behavior in school and the behavior problems resulted in poor academic achievement. Researchers working within the traumatology framework have suggested that future research regarding behavior and academic achievement consider the trauma histories of the participants (Hanson et al., 2014; Teague, 2013).

Research within the traumatology framework is explored in the literature across different age groups and different types of trauma. When this literature review began, most of the studies were conducted with adult participants who reported to have been exposed to childhood maltreatment or trauma in the form of abuse, neglect, or neighborhood violence or poverty. In the last five years, researchers have shifted to younger participants (Briggs-Gowan et al., 2010; Bucker et al., 2012; Jaffee et al., 2015) Briggs-Gowan et al., (2010) examined exposure to trauma and disorders in preschool children. Other studies have examined the impact of childhood exposure in young adolescent children and teenagers. An extensive review of the traumatology research showed that variance in amygdala and hippocampus volume is partially influenced by the age of the participants (Tottenham & Sheridan, 2010). Researchers concluded that changes in the volume of the amygdala becomes more apparent in adolescence. In addition to age of exposure, researchers have studied the impact of different types of maltreatment and trauma exposure on neurobiological development (DeBellis et al., 2010; Ford et al, 2010). A recent study found that there is a dose response relationship between the types and total number of maltreatment types and externalizing behaviors in children (Greeson et al., 2014). In their research, Bucker et al (2012) suggested that more frequent and severe maltreatment would produce lower cognitive function. Pervasive across the literature regardless of the age of participants or the type and frequency of exposure to trauma is a connection between maltreatment exposure and behavior problems in school (Hardaway et al., 2014; Jaffee et al., 2015).

Studies have made a connection between the impact of trauma on cognitive ability and behavior and special education. Sosbey reported (2002) that 30% of children with special needs have been exposed to maltreatment. It has also been suggested that children who undergo

neuropsychological evaluations in consideration for special education should be thoroughly screened for trauma exposure (Gabowitz et al., 2008). More recently, Blodgett (2015) reported that 80% of children receiving special education services in Washington State have been exposed to childhood maltreatment. Thus, special education teachers are more likely than their general education counterparts to have children with DT in their classes. The understanding of the impact of trauma on the brain's survival response and the development of cognitive function is important when teachers attempt to manage the behaviors of children with DT in their classroom (Korineck & deFur, 2016). However, special education teachers report that they feel under prepared to meet the internalizing and externalizing behaviors of their students (Oliver & Reschley, 2010; Stough et al., 2015).

Childhood Trauma and Attachment

Attachment theory has deep roots in psychoanalytic theory. Sigmund Freud first described the interaction between mother and infant as object relations. Infants' attachments to their mothers were oral in nature and were derived out of a need to be soothed and fed (Brandell, 2010). In response to criticism that the object relations that stem from the infant unconscious were not observable, the Hampstead War Nurseries study was conducted during World War II (Freud & Burlingham, 1942). Researchers observed children who experienced traumatic wartime events and who were often separated from one or both parents over the course of a year. The patterns of behavior that emerged showed that children who were separated from their mothers demonstrated atypical relationship formation. The behavior of the children fell into two categories; over dependent, or obtuse, withdrawn, and subject to aggressive behavioral outbursts.

The Hampstead War Nurseries Study showed excellent heuristic value. The results of the study generated more questions than they provided answers about formation secure early attachments. Social learning theorists acknowledged the findings of the War Nurseries studies and began describing infant/mother relationships as dependent or independent (Beller, 1957). In keeping with their theory, however, social learning theorists attributed the path to dependent or independent attachment to a series of learned behaviors in infancy. Behaviorists, critics of the primarily qualitative studies on infant attachment, were asking why children attached securely or insecurely. Thus, behavior theorists looked for the motivation behind the attachment. They conducted several animal studies. Results indicated that birds would imprint on a caregiver in response to the reward of being fed which was reminiscent of Freud's oral stage of object relations (Midgley, 2007). Further study of the motivation for attachment to a primary caregiver showed that rhesus monkeys would choose the cuddly mother figure over the hard mother figure, even though the food came from the hard mother (Harlow & Zimmerman, 1959). The monkeys' selection of the comfort-providing mother over the reward of being fed suggested that there was a need for infants to be soothed by their mothers. The cycle of scientific work continued in response to the criticism that animal studies were, at best, minimally generalizable to human behavior. Research on infant interaction with their mothers showed that the concept of attachment for humans was much more complex than what was previously observed in animals. Thus, the study commonly referred to as the Strange Situation was conducted using human subjects. The study measured the responses of human infants to being separated from their mothers for shorter and longer periods of time (Ainsworth, 1969). The stress demonstrated by the children separated from their mothers was in proportion to the length of the separation.

The results of the Strange Situation helped to bridge the divide between animal studies that suffered limitations in generalization and the correlations developed from the Hampstead War Nurseries study (Midgley, 2007). Bowlby, said to be the father of attachment theory, pulled together the behaviorists view, the psychoanalytic view, and the view of social learning theorists (Ainsworth & Bowlby, 1991). This merging of theoretical frameworks gave rise to a paradigm shift. Instead of the traditional psychoanalytical approach to adult dysfunction by working back to the impaired stage of development, researchers began to study children in different stages of development in various environments (Bowlby, 1982). Attachment theory described the interaction between infants and their primary caregivers (Ainsworth, 1969). Children become securely attached when their primary needs are consistently met by a primary caregiver. Bowlby described four types of attachment; secure, anxious-ambivalent, anxious–avoidant, and disorganized. Securely attached children can explore their environment and return to their attachment figure in times of need. They seek help from their care givers. When the help is provided, they learn to trust and to regulate their emotions (Arnoff, 2012). Anxious-ambivalent attachment is characterized by children who become highly distressed when their care givers depart and demonstrate ambivalence upon their return. They generally do not explore their environments freely and inconsistently look to care-givers for assistance (Ainsworth, Blehar, Waters, & Wall, 1978). Anxious-avoidant attachment is demonstrated by children who avoid or ignore their care-givers. They seem disinterested in the departure or return of the care-giver (Kochanska & Kim, 2013). Disorganized attachment is most often connected with childhood maltreatment and is characterized by displays of anger and fear in the presence of the primary care-giver (Rholes, Paetzoid, & Kohn, 2016). When young children are raised in less than optimal settings, they are deprived of the interaction between mother and child that teaches the

brain to regulate in stressful situations (Erokzan, 2016; Perlman et al., 2016).

In an article about his life's work, Bowlby (1982) explained that when two or more adverse childhood experiences are present, the risk of psychological concerns is multiplied. He also explained that individuals with two or more adverse experiences is more vulnerable to later adverse experiences. When infants are traumatized by the people that are supposed to keep them safe they develop a distorted internal working model which impacts their ability to have satisfying relationships as adults (van der Kolk, 2005). Thus, the research on the impact of trauma on attachment has, until recently, been predominantly conducted with adult participants who experienced childhood trauma (Hocking, Simons, & Surette, 2016; Sachs-Ericsson et al., 2014). Childhood trauma has been associated with high prevalence of adult interpersonal violence and dysfunction with attachment as the mediator (Hocking et al., 2016). Adult romantic relationships most closely mimic the attachment behaviors between child and primary care-giver. The internal working models developed between a child and his or her primary care-giver guides their ability to navigate relationships as adults (Godbout et al., 2016). Thus, the impact of adverse childhood experiences on adult romantic relationships with attachment as the mediator have been studied extensively in the research (Godbout et al., 2016; Hocking et al., 2016; Lassri et al., 2016).

Van der Kolk (2005) connected attachment theory to DT through traumatology. In their work, van der Kolk and his colleagues showed that the impact of early childhood trauma on the brain had an impact on attachment (van der Kolk et al., 2005). The traumatology framework, with the advancement of medical technology such as Magnetic Resonance Imaging (MRI), opened the door for more study of the impact of trauma on attachment in children at various stages of development. When infants were given the opportunity to trust their care givers and

their environment, they developed the ability to deal with stressful situations and a complex vocabulary to describe their feelings. The neurobiological impact of trauma interferes with the development of language (Prasad, Kramer, & Ewing-Cobbs, 2004). Children with DT may not develop the ability to identify or express their feelings and cannot communicate with caregivers to solve their problems or regulate their emotions (Teague, 2013). Researchers have also revealed a connection between anxious attachment and increases in amygdala activity which is like the exaggerated development of the amygdala found in abused children (Vrticka et al., 2011). In addition, researchers have made connections between attachment styles and cortisol activity. In one study, insecurely attached children did not show significant differences in cortisol levels, which suggested that attachment may be related to HPA axis suppression in response to stress (Rogue et al, 2011). The inclusion of the study of attachment within the traumatology framework has resulted in the accepted understanding across the research that attachment and neurobiology are intertwined (Rogue et al., 2011; Perlman, 2016; Vrticka et al., 2011).

Researchers who study attachment and maltreatment have also considered differences and similarities of different types of trauma on attachment (Barnum & Perrone-McGovern, 2017; Muller et al., 2012; Unger & DeLuca, 2014. Child sexual trauma has been linked to low attachment security. Participants of a study who had been exposed to child sexual trauma demonstrated lower attachment security, lower self-esteem and an overall lower sense of well-being (Barnum & Perrone-McGovern, 2017). When comparing psychological abuse, physical abuse, and exposure to family violence, researchers found that while all three contributed to attachment insecurity, psychological abuse showed a more robust effect (Muller et al., 2012; Unger & DeLuca, 2014). The traumatology framework and attachment theory intersect regarding

childhood neglect. Neglect may have the most severe impact of all the types of abuse as it has been shown to impact attachment and neurobiological development with devastating physical and emotional outcomes (Dorsey, Sourland, & Wagner, 2014; Tottenham & Sheridan, 2010). Childhood neglect has been associated with adult anxiety and anxious-ambivalent and fearful dismissing attachment styles (Erokzan, 2016; Schimmenti & Bifulco, 2015; Venet et al., 2007).

Attachment theory has also been explored regarding school performance for children with maltreatment histories. Children with secure attachments enter their school years with the ability to confidently explore their environment and can develop appropriate social relationships. They develop a sense of self-worth that allows them to trust that others will attend to their needs. In addition, children with secure attachment demonstrate the ability to soothe themselves when they are afraid, and ask for help from other adults in times of need (Erokzan, 2016). Children with insecure attachments enter school without the ability to establish relationships (Dawson et al., 2014). They see others as untrustworthy and do not consider that they can ask for and receive help (de Vries, et al., 2016). They often struggle with peer relationships and have been shown to have lower cognitive ability (Pasco Fearon et al., 2010). Aghayousefi et al., (2016) found a negative correlation between avoidant and anxious attachment styles and academic performance. They also found that emotional and social adjustment had a significant relationship with students' academic performance. Studies have also connected school phobia to insecure attachment as an infant (Bar-Haim et al., 2007). In an extensive review of the literature, Ramsdal, Bergvik, & Wynn (2015) found that attachment was associated with high school graduation through four paths. Children with insecure attachment do not have parents who teach them to establish effective relationships. Next, children with insecure attachment do not establish relationships with non-parental care-givers. This type of relationship has been

associated with cognitive development. Third, insecure attachment interferes with emotional regulation. Poor regulation has been associated with externalizing behavior that may interfere with learning. And finally, children with insecure attachment lack the ability to communicate with adults and comply with requests which may interfere with their ability to perform on assessments. Difficulty in one of these areas could impair academic ability. Children with insecure attachment often struggle in all areas and thus are more likely to drop out of high school (Ramdsal et al., 2015).

Insecure attachment was shown to be a mediator in internalizing and externalizing behaviors across the research regardless of the age of the participants (Pasco Fearon et al., 2010). Studies using adult participants who were abused as children showed that the adult externalizing behaviors are often mediated by attachment (Pasco Fearon et al., 2010; Madigan et al., 2016). Studies were also conducted using young children and adolescents (Dawson et al., 2014; deVries et al., 2016). Preoccupied and dismissing attachment styles in childhood have been shown to predict externalizing behavior into adulthood (Dawson et al., 2014) and was found in children as early as 36 months (Wang et al., 2016). In adolescents, attachment styles impact externalizing behaviors through cognitive distortion (deVries et al., 2016). Cognitive distortion may be caused by insecure attachment creating defensive exclusion of information and negative expectations of self in relationships. This can interfere with perspective taking and cause inaccurate thoughts or beliefs about their own or others' behaviors. This leads to aggression and other forms of antisocial behavior (Helmond et al., 2014).

The research also showed that attachment insecurity may have a dose response relationship with externalizing behavior similar to the ACES study (Anda et al., 2010; Kochanska & Kim, 2013). When children have insecure attachments to both parents, they are more likely to experience externalizing behavior into adulthood. It is important to note that secure attachment to one parent may offset the potential for externalizing behavior. This has important ramifications when considering what teachers can do to support children with insecure attachment in the classroom (Kim & Cicchetti, 2010).

Childhood maltreatment and attachment have both been associated with self-regulation in the literature, further intertwining attachment theory with the traumatology framework (Drake et al., 2014). Within the attachment framework literature, self-regulation is connected to the concept of conscientious behavior. Conscientious behavior has been broadly defined in the research as the ability to be organized, careful, and self-possessed in dealing with others (Drake et al., 2014). Insecure attachment interferes with conscientious behavior through the destruction of the internal working model (Hocking et al., 2016). Children who have secure attachment can confidently explore their environment. They know they can move away from their primary care-giver and return for support when needed (Bowlby, 1982). This give and take when repeated many times over years, allows a child to learn from their attachment that they can explore their environment and mimic the support they received form their care givers in the form of self-regulation (Pearlman et al., 2016). Children who are insecurely attached attempt to explore their environment while simultaneously seeking support from their care-giver. Through repeated and failed attempts to explore or find care-giver support, children with insecure attachment do not develop the ability to regulate their emotions (Madigan et al., 2016). Without self-regulation, children struggle with task persistence, behavioral self-control, and planning. Children with

weak self-regulation skills may gain little intrinsic reward and be provided with fewer extrinsic rewards in school which in turn may reduce motivation for learning and create school disengagement (Drake et al., 2014). Teachers may be important in the development of self-regulation through attachment for their students with DT (Kobak et al., 2012).

Traditional Classroom Management Strategies and their Influence on Children with DT

Classroom management strategies (CMS) have been defined in the research as the actions teachers take in their classrooms to create an environment that supports academic and social emotional learning (Korpershoek et al., 2016). Typically, teachers respond to behavior problems in their classrooms with reactive strategies such as discipline (Peters, 2012). Reactive CMS including discipline, suspension, and authoritarian imposition of classroom rules may increase externalizing and internalizing behaviors for children with DT (Bender, 2012; Mullet, 2014; Romano et al., 2015). Children with DT may have increased amygdala activity thereby creating a freeze/flight/fight response in the form of aggressive, defiant of extremely withdrawn behavior (Siegel & Bryson, 2012). Research is recently being explored that shows that responding authoritatively to a child who is demonstrating amygdala driven behavior may increase the demonstration of those behaviors and thus, make the behavior worse, not better (Mullet, 2014). Teachers may default to reactive strategies because they lack knowledge and therefore lack trust in the effectiveness of positive and preventative strategies (Peters, 2012; Stough et al., 2015). In addition, it has been shown that teachers CMS often mimic the administrators and the whole school approach to discipline (Velasco, Edmundson, & Slate, 2012).

Whole school approaches to discipline have been largely exclusionary and reactive for the past 20 years. Exclusionary school climates are those in which teachers or administrators remove students from class or school for a determined period for minor infractions as well as for

major ones without consideration of an individual child's history (Fonseca, 2010). Schools adopted exclusionary school climates in the 1990s in response to Congress passing the Gun Free Schools Act (Molsbee, 2008). Many school districts revitalized their commitment to exclusionary practices after the Elementary and Secondary Education Act (ESEA) was reauthorized in 2007 and became known as the No Child Left Behind Act (NCLB). NCLB required more accountability from school districts by increasing the rigor of standardized tests and calling for higher student achievement on those tests (Molsbee, 2008). This may have encouraged teachers and administrators to redouble their efforts at removing children from the learning environment so that they would not distract other students from their studies (McCray & Beachum, 2014).

The effort to make schools safe may have come at the expense of the students with DT (Molsbee, 2008). Contrary to the intention of exclusionary discipline, there is abundant research that shows that suspensions and expulsions may increase drop-out rates, decrease graduation rates, negatively influence attendance, and impede overall academic performance (Balfanz et al., 2014; Fabelo et al., 2011). However, there is debate in the literature regarding the impact of exclusion on academic performance. While there is evidence that exclusionary practices have an influence on drop out and graduation rates (Balfanz et al., 2014; Fabelo et al., 2011), there is little peer reviewed research that shows a direct correlation between exclusionary practices and academic performance (Ryan & Goodram, 2013). Balfanz et al. (2014) conducted a longitudinal study in Florida with a cohort of ninth graders. The results showed the number of suspensions received in ninth grade was associated with increased likelihood of dropping out of high school. Fabelo et al. (2011) conducted a similar study in Texas and found that students who were suspended or expelled were more likely to be retained in a grade or dropout of school. Rousch &

Skiba (2004) analyzed the 2002-2003 data collected by the state of Indiana and found that schools with higher rates of suspension performed lower on the state administered standardized tests. Because there could be other confounding variables influencing test scores, the authors conducted a more comprehensive analysis controlling for poverty rate, percentage of African American students, total school size, school type, and school location. After controlling for these factors, Rousch & Skiba (2004) found that out-of-school suspension was negatively related to school achievement. This study has been criticized for failure to control for the number of children with learning disabilities included in the data (Ryan & Goodram, 2013).

There is agreement among some of the researchers that suspensions and expulsions have a direct impact on attendance (Balfanz et al., 2014; Fabelo et al., 2011). The students cannot attend school if they are suspended. In addition, Balfanz et al. (2014) found that almost half of the students suspended were chronically absent outside of missing school due to suspension. Thus, being suspended decreased student attendance and may contribute to overall lower academic outcomes (Balfanz et al., 2014; Green et al., 2012).

There are few peer-reviewed studies in the literature, which examine the impact of exclusion on children with DT (Eckenrode, Laird, & Doris, 1993). Children with DT may suffer a kind of double jeopardy in exclusionary schools. Because of impaired self-regulation, children with DT are likely to demonstrate acting out and anti-social behaviors (Lovallo et al., 2013). One of the most frequently reported reasons for suspending children is for acting out or insubordination (Molsbee, 2008; Skiba, 2014). Children with DT may have higher absenteeism than their non-maltreated peers. Results of a study conducted to examine the relationship between maltreatment and academic performance found that there is an immediate impact on absenteeism for children at the point of maltreatment (Leiter, 2007). Thus, children with DT may

be absent as a result of being mistreated and more likely to act out and be suspended resulting in further absences.

Researchers have shown that exclusionary practices may be biased against children receiving special education services and students from low socioeconomic backgrounds (Skiba et al., 2014). Balfanz et al. (2014) found that students who were African-American, receiving special education or from low socio-economic status were disproportionately suspended from school (Balfanz et al., 2014). Fabelo et al., (2011) and Losen, Martinez, & Gillespie (2012) also found that more than half of the children who qualified for special education services were suspended or expelled at least once in middle school or high school. Thus, children with DT may be over suspended in exclusionary schools because of over representation in special education and low socioeconomic groups, thereby preventing them from attending the very place that could potentially mediate the impact of their trauma (Bender, 2012; Romano et al., 2015). Intergenerational trauma is another type recently being discussed in the literature regarding exclusionary discipline and treatment in schools (Brokenleg, 2012).

Intergenerational trauma is trauma that is experienced by a group or generation of people that is handed down to the children through nature and nurture (Song, Tol, & Jong, 2014; Yehuda et al., 2014). Native American children, African American children, and many children living in intergenerational poverty or abuse may experience intergenerational trauma (Barron & Abdallah, 2015). Children with intergenerational trauma often feel hopeless. They may experience the weight of the grief of previous generations without the acknowledgement of the problem or language to express it (Brokenleg, 2012; Bombay, Matheson, & Anisman, 2014). They have expressed the feeling that there is something wrong with them, that they are to blame for the state of their family or people yet they are unable to grieve (Barron & Abdallah, 2015).

Native Americans have been shown to be over represented in high school discipline data and in juvenile justice records (Brokenleg, 2012). Research shows that children with intergenerational trauma respond to narrative therapy rather than the CBT that is common in most schools' tier II interventions (Ford et al., 2012). In addition, children with intergenerational trauma need to be taught resilience to overcome their trauma (Song, Tol, & Jong, 2014). There is no evidence that teachers are taught about this type of trauma or that PBIS and other school wide positive discipline programs consider the unique needs of these children.

In a meta-analysis of the research on CMS, Korpershoek et al. (2016) found that effective CMS is built upon positive teacher-student relationships and establishing a positive school climate, also known as preventative strategies. Preventative CMS such as establishing positive teacher-student relationships and the negotiation of classroom rules, rather than authoritarian imposition of rules, has been shown to improve academic and social emotional development in students (Bradshaw, Mitchell & Leaf, 2012).

School Wide Positive Behavioral Interventions and Supports (SWPBIS) is a preventative CMS program that has been widely implemented as an alternative to exclusionary practices (Flannery, Fenning, Kato, & McIntosh, 2014). SWPBIS is a progressive approach to school discipline marked by a tiered intervention system. The first tier is universal precautions. The school wide emphasis placed on the development of a positive student-teacher relationship may have a stronger impact on at-risk and high-risk students than children with no risk for academic failure or behavior problems (Bradshaw, Waasdorf, & Leaf, 2014). The second tier and third tier are interventions provided to students who demonstrate need for more individual and specific support than the tier I interventions (Bradshaw, Mitchell, & Leaf, 2012). Nocera et al. (2014) studied the implementation of SWPBIS in a middle school designated as highest need based on

the number of students qualifying for free and reduced lunches and a student population consisting of more than 40% minorities. Results showed that the total number of suspensions over a three-year period declined by 39%. Suspensions reported for special education students declined by 51%. However, teachers admitted that the program was not effective with the students who demonstrated most significant behavioral problems. Similar reductions in suspensions were found in a study of elementary schools (Bradshaw et al., 2012; Horner et al., 2009). In addition, studies conducted in high schools using SWPBIS have shown decreases in office discipline referrals and increased graduation rates (Flannery et al., 2014; Winton, 2012).

While SWPBIS may decrease suspensions, and improve graduation rates, it may not provide enough support for children with DT (Nocera et al., 2014; Romano et al., 2015). A study was conducted to examine the impact of SWPBIS on students with elevated risk based on a latent profile analysis of social-emotional and behavioral risk (Bradshaw et al.,2014). The authors reported that their study involved systematic teacher training of tier I supports. The researchers reported that the students with the most need were dealt with in tier II and III. Thus, the decrease in office referrals may have been the result of Tier I teachers being trained in behavioral intervention strategies. At tier II and III, the students were being provided with more intense counseling and wrap around services, but teachers were still excluding them from classrooms. In addition, counseling services in schools is predominantly based in cognitive behavior theory (Oliver & Reschley, 2010). Children with DT who are provided with counseling at tier II or III are being asked to process their behaviors using language and reasoning which requires a functioning hippocampus and prefrontal cortex, both of which may be impaired from trauma exposure (Delima & Vimpani, 2011). Thus, the research conducted on the effectiveness

of SWBPIS may show reduced discipline referrals but there is little indication that they help children with the cause of their discipline problems (Milo et al., 2010).

Social and emotional learning (SEL) programs have been shown to promote self-control, social awareness, and relationship skills (Durlak et al., 2011; McBride, Chung, & Robertson, 2016). There was evidence in the literature connecting SEL programs to increased student engagement, aggression, social competence and school engagement (Conduct problems Prevention Research Group, 2010). There is disagreement in the research on SEL regarding the impact of SEL on academic achievement (Sklad, Diekstra, DeRitter, & Ben, 2012; Durlak et al., 2011). One study found that students who participated in the SEL program failed fewer classes after participation (McBride et al., 2016). In a meta-analysis of the research, however, it was found that academic achievement may be influenced by SEL programs indirectly through the development of learning behaviors that have been shown to influence achievement (Durlak et al., 2011). In addition, some programs have been shown to prevent behavior problems such as substance abuse and bullying (Zins & Elias, 2006). SEL programs have been shown to provide safe learning environments (Hawkins, Smith & Catalano, 2004), which may benefit children with DT. Evidence was found in the literature that SEL increased school safety and academic rigor in schools in high crime neighborhoods (McBride et al., 2016; McCoy, Roy, & Sirkman, 2013). High crime neighborhoods and poverty have been associated with high incidences of childhood trauma (Hearn Escaravage, 2014).

Positive teacher-student relationships and creating a classroom environment where students can feel safe is paramount to positive school performance (Kim & Cicchetti, 2010; McCormick et al., 2015; Mullet, 2014) for children with DT, who are often at risk for academic failure and behavior problems (DeBellis et al., 2013; Greeson et al., 2014). However, recent

research shows that preventative CMS may only be part of the solution (Bethell, Newacheck, Hawes, & Halfon, 2014; Black & Fernando, 2014; Diamond & Lee, 2010). Classroom strategies that take into consideration, attachment, the neurobiological source of the externalizing and internalizing behaviors of children with DT, and the development of resiliency are necessary to improve academic achievement and social emotional development (Korinek & DeFur, 2016; Perry, 2009). Teachers may resist the use of trauma-informed CMS for the same reason they resist preventative CMS, lack of training and knowledge (Oliver & Reschley, 2012; Stough et al., 2015).

Trauma-informed Classroom Strategies for Dealing with Internalizing and Externalizing Behaviors

Childhood trauma effects neurobiological development, the establishment of healthy attachments, and the development of appropriate socio/emotional skills. Classroom strategies that reduce internalizing and externalizing behaviors for children with DT go one step further than preventative CMS because they take into consideration the neurobiological source of the behaviors in the classroom. Classroom strategies and school programs that consider the impact of trauma on neurobiological development are considered trauma-informed strategies (Shamblin et al., 2016). A review of the literature has shown that effective trauma-informed schools programs include strategies for improving all the areas of impact through the development of self-regulation, executive function, resiliency, and mindfulness (Bethell et al., 2014; Diamond & Lee, 2011; Black & Fernando, 2014).

A growing body of research suggests that the development of resiliency is an effective antidote to DT. Maier et al. (2006) examined the response, as measured by medial pre-frontal cortex activity, to controllable and uncontrollable stress in rats. One group could control their

exposure to stress administered via shock. Another group was unable to reduce or avoid the administered shock. The group that could control the extent of the shock demonstrated the presence of control in the medial prefrontal cortex that in turn actively inhibited stress induced activation of limbic structures. Thus, the rats that experienced some control over their exposure to trauma developed the ability to control their response to future shocks, thereby making them resilient. Children in schools where discipline is arbitrarily handed down without input from the students, as is often the case in exclusionary school climates, may not be provided an opportunity to exert control over the stressor of being suspended (Molsbee, 2008).

Resiliency, as it relates to children in schools may be defined as the ability to solve problems, demonstrate self-control, and perceive to have some control (personal agency) over stressful situations (Bethell et al., 2014; Moffitt, 2011; Rutter, 2013). Bethell et al. (2014) examined the prevalence of adverse childhood experiences and association between them and the factors influencing child development and lifelong health. After adjusting for confounding variables, they found that children with adverse childhood experiences had higher rates of chronic disease and lower rates of school engagement as compared to the national average. They also administered a survey to measure resilience defined as the ability to stay calm and in control when faced with a challenge. The results indicate that children with adverse childhood experiences who considered themselves resilient demonstrated higher rates of school engagement.

Self-control is considered in the research as a contributor to resiliency development. Moffitt (2011) examined self-control and its influence on adult outcomes in a longitudinal study of over 1,000 participants. The findings indicate that the children who developed self -control over time showed better health outcomes and less substance abuse and criminality than the

participants who did not develop self-control. Self-control could be enhanced in schools through the development of executive function skills (Diamond & Lee, 2011; Riggs, Greenberg, Kushe', & Pentz, 2006). A study was conducted to measure the effect of the Promoting Alternative Thinking Strategies program on the development of executive function in young children. The Promoting Alternative Thinking Strategies Program was designed to increase executive function though the practice of conscious strategies for self-control including verbal mediation and inhibitory control. The teachers in the participating schools were trained to build children's competencies in self-control, recognizing and managing feelings, and interpersonal problem solving. After a year of program implementation, the participating children showed better inhibitory control and cognitive flexibility than control children. Children who showed greater inhibitory control at post-test showed fewer internalizing or externalizing behavior problems one year later. (Riggs et al., 2006).

Resilience may also be enhanced through interaction with a supportive environment (Ungar, 2011; Ungar, 2013). The study of the impact of supportive relationships on children's development and ability to develop resilience in the face of stress can be traced back to Anna Freud's Hampstead War Nursery studies (Freud & Burlingham, 1942). In her work, Dr. Freud found that the children who had parent contact in the nurseries developed better overall adjustment behaviors than the children who were without parents in the nurseries. More recently, a study of 324 college students who had been exposed to significant childhood maltreatment found that the students with greater support from friends demonstrated higher levels of resilience (Howell & Miller-Graff, 2014). Jaffee et al. (2007) examined resilience in children using longitudinal data of twin pairs and their families. Resilient children in this study were defined as those who engaged in normative levels of antisocial behavior despite having

been maltreated. The results showed that the male participants with above average IQ and whose parents had few symptoms of antisocial personality were more likely to be resilient versus non-resilient to maltreatment. Children whose parents had substance abuse problems and lived in high crime neighborhoods were less likely to be resilient versus non-resilient to maltreatment (Jaffee et al., 2007). For children, whose parents are frequently absent, substance abusing, or violent, teachers may be a source of stable relationships in a child's life. Teachers may need training to be able to provide the relationships that contribute to resiliency. Studies where strategies for developing resilience in children were explicitly taught by teachers have shown positive results. Children with DT who develop resilience have fewer externalizing behavioral concerns (Perry & Daniels, 2016; Shamblin et al., 2016). In both the Perry & Daniels study (2016) and the Shamblin et al. (2016) studies, however, the teachers were provided with the training they needed to explicitly teach skills for developing resilience.

Another approach to improving behavior for children with DT through the development of resilience is based on attachment theory (Bowlby, 1982). There is a body of research regarding the importance of children with DT developing secure relationships with attachment figures outside the home such as teachers and that these attachment figures contribute to the development of resilience (Drake et al., 2010; Howell & Miller-Graff, 2014). Kim & Cicchetti (2010) suggest that children with DT learn emotional regulation through the attachments they make with teachers and apply those skills to social interactions. Thus, they recommend teaching empathy and perspective taking may create a pathway to resilience.

The use of mindfulness in schools has gained recent attention in the literature (Burke, 2010; Suttie, 2007). Mindfulness is described as awareness that is developed through intentional practice of sustained attention to the present moment (Black & Fernando, 2104). Studies have

found that school aged children showed some improvement in student behavior after participating in several weeks of a mindfulness program (Black & Fernando, 2014; Bogels et al., 2008). For example, in a study of the implementation of a mindfulness-based curriculum on teacher ratings of student behavior, the authors found that teachers reported improved classroom behavior including paying attention, self-control, and engagement in class activities (Black & Fernando, 2014). A study of children with externalizing behaviors showed that the children reported improvement in attention, behavioral control, and happiness. It's important to note that the parents participated in the training as well and reported increased child awareness and attunement (Bogels et al., 2008). However, the research on the use of mindfulness programs on children who have experienced trauma is limited and the results are mixed. In a study of adolescents who were receiving treatment for substance abuse including mindfulness, bright light exposure, and cognitive therapy, results showed that substance abuse increased during intervention (Lee et al., 2008). There was no mention in the study about the cause of the adolescents' substance abuse. The results were more positive in a study that provided a holistic arts program for the development of resilience for a group of young children in need. The participants were children in child protective services or child mental health services. The results showed that the children reported lower emotional reactivity after participating in the program (Coholic, Eys, & Lockheed, 2012). In addition, a study was conducted specifically to investigate the effectiveness of mindfulness on the amelioration of the negative effects of trauma on low income minority students (Sibinga et al., 2016). The results showed that psychological functioning was improved and externalizing behavior was reduced for middle school students. Unique to this body of research, were findings that implementation of mindfulness in schools

may improve teacher perception of their job and their students through their participation in the mindfulness activities (Black & Fernando, 2014).

The results of this body of literature suggest that teachers who are trauma-informed may support children by explicitly teaching skills that develop resiliency, executive function, mindfulness, and emotional regulation, but they can also serve as protective factors by establishing trusting relationships and engaging in preventative classroom strategies with their students (Howell & Miller-Graff, 2014; Wright, 2014).

Teacher Training and Trauma-Informed Classrooms

The creation of trauma-informed schools and classrooms is a relatively new concept in education and in the literature (Hodas, 2006). Despite one of the earliest calls directly to schools to become educated about the effect of trauma on learning and behavior occurring in 1993 (Eckenrode et al., 1993), information regarding schools responding to the impact of childhood trauma on learning and behavior has only recently been reported in mainstream press (Stevens, 2012). A Google Scholar search for articles on trauma-informed schools between the dates of 1993 and 2002 yielded 17,900 results. A Google Scholar search for articles on trauma-informed schools between the dates of 2002 and 2017 yielded 60,000 results.

There remains disagreement in the literature regarding the definition of trauma-informed. In 2007, the National Childhood Traumatic Stress Network (NCTSN), coined the term trauma-specific to refer to treatment services that directly address complex trauma and facilitate recovery through therapy (NCTSN, 2008). Trauma-informed was a term reserved for organizations that provided trauma-specific services (Cole, 2009). More recently, Blodgett (2015) identified three phases of trauma support. Trauma-sensitive is the first phase and indicates an organization's staff understand the impact of trauma on children. Trauma-informed

is the second phase and is applied when organizational practices are put in place to mediate the impact of trauma for identified children. Phase three is trauma-focused care. Trauma-focused implies that the organization and the staff are designed and trained from the bottom up to consider the presence and impact of trauma in every sector of the operation. The Substance Abuse and Mental Health Services describes trauma informed as a four-tiered approach. Organizations must realize the impact of trauma on development and the prevalence of trauma, recognize the symptoms of trauma, respond to individuals in a trauma-informed way, and avoid re-traumatization through ongoing training of personnel and reviewing or restructuring the processes used by the organization (SAMSHA, 2014). While none of these definitions were designed specifically for use in schools, SAMSHA's definition is the one being used in the current study because it takes a tiered approach that is like the tiered intervention systems already in place in most schools.

Prior to 2010, there was little research conducted on programs implemented in schools for maltreated children (Eckenrode et al., 1993; Prather & Golden, 2009). Most of the research on trauma-informed care focused on clinical practice with mention of schools (Cicchetti, 2004; Cook et al., 2005; Ko et al., 2008; Nadeem et al., 2011), however, few have been implemented in schools and may not be appropriate to be implemented in schools (Ford et al., 2012). For example, in 2006, studies were conducted validating the effect of Dyadic Developmental Psychotherapy (DDP; Becker-Weidman, 2006). This was somewhat of a breakthrough for therapists who understood that attachment disruption was a type of trauma (Mercer, 2014). DDP was based on attachment theory and provided in an outpatient clinical setting. The therapist created a safe place and established an attachment with the child so that traumatic memories or experiences could be explored without creating dysregulation. The program included strategies

of touch, tone, eye contact, and cognitive restructuring through psycho-dramatic re-enactments (Becker-Weidman, 2006). Some criticism has been offered regarding the lack of randomized control trials conducted in examining the effectiveness of DDP (Turner-Halliday, 2014), and some have rejected the cradling method use as a form of restraint (Mercer, 2014). This program was not intended for use in schools but it did add to the research the need for safe attachments to heal childhood trauma.

The Neurosequential Model of Therapeutics (NMT) was developed from the traumatology framework with an understanding of the importance of attachment (Perry, 2009). The basic premise of NMT is that for a child to access higher functions of cognitive ability such as language, the lower neural networks such as the amygdala and the HPA axis must be well regulated. NMT was implemented and studied in two therapeutic preschools (Barfield, 2012). The results were positive; however, it should be noted that the studies had important limitations. The participants were all white and from a rural Midwestern town. In addition, the sample size was small and difficult to generalize to a public preschool population. Recently, Perry developed a program designed specifically for schools, Neurosequential Model for Education (NME; Walter, 2017). The program is identical in philosophy to NMT, but designed for implementation in schools by teachers rather than psychologists. The early reports are positive. NME has shown increased teacher education about the brain and trauma and assisted students with self-regulation skills. However, at the time of this review, no peer reviewed studies were published.

The Cognitive Behavioral Intervention for Trauma in Schools (CBITS) was designed for implementation by trained counselors in schools (Nadeem et al., 2011). It was designed to be implemented by school personnel in a 45-minute period, and disseminated with user-friendly materials. CBITS has been shown to improve PTSD symptoms in children who participate in the

program while at school (Nadeem et al., 2011; Perry & Daniels, 2016). However, there is evidence that parent engagement and school priorities may influence the success of implementation (Langley et al., 2010).

The Attachment, Self-Regulation, and Competency (ARC) Framework is grounded in the traumatology framework and addresses three domains of functioning impacted by DT; self-regulation, attachment, and developmental competencies (Arvidson et al., 2011). This program was studied during implementation in a residential treatment center for complexly traumatized youth. Pilot data indicated that the use of restraints was reduced and a decrease in externalizing and internalizing behaviors was noted (Hodgdon et al., 2013). There is no evidence that this program has been implemented in schools. Many of these clinical programs implemented in schools are predominantly carried out by school counselors or program providers, not by teachers in the school (Barfeild, 2012; Hodgdon, 2013).

There has been some research conducted on programs that, while not described as trauma-informed, may support children with DT in schools (Mullet, 2014). For example, Restorative Justice is a program that was designed to provide an alternative to exclusionary discipline (Evans, Lester, & Anafara, 2013). Administrators in schools establish behavior response teams that meet and review inappropriate behavior. Both the student and the recipient of the inappropriate behavior are present. A type of active listening takes place where the student hears how the teacher feels about the behavior. The student can respond and explain the motivation for the behavior. Students have the opportunity to repair relationships with teachers and staff, and the teachers have an opportunity to know and see the student in a new way. There is a focus on establishing relationships (Morrison, Blood, & Thorsborne, 2005). In a review of the literature on Restorative Justice, empirical support for the program was found (McCloskey

2010). A discussion of this program as potentially effective for children with childhood trauma was also found (Mullet, 2014).

Manuals, papers and books have been published outlining plans for trauma-informed schools (Cole et al, 2009; NCTSN, 2008; Wolopow et al, 2011). The National Childhood Traumatic Stress Network (NCTSN) published a toolkit for educators (NCTSN, 2008). This resource outlines the psychological and behavioral impact of trauma on the different levels of school children. There are some suggestions for teachers in the form of strategy lists. The Massachusetts Advocates for Children published a report and policy agenda that outlines the neurobiological impact of trauma on attachment and development (Cole et al., 2009). In addition, it describes ways to make school environments trauma-sensitive. There is an entire chapter devoted to recommendations for teacher training. Members of the Office of the Superintendent of Public Instruction in Washington State published a resource manual that, like others, outlines the neurobiological impact of trauma on development and attachment, and describe the components of a trauma-informed school (Wolopow et al., 2011). The authors of this book, however, did something none of the others did, they put the chapter on teacher care and training at the beginning of the book. The importance of teachers taking care of their own responses to trauma is discussed at length.

There are basic characteristics of trauma-informed care that these publications have in common. Many of these plans and programs include some variation of the development of self-regulation, resilience, mindfulness, and attachment (Cole et al., 2009; NCTSN, 2008). Most call for schools to review policies and procedures for discipline and to develop screening tools and processes for providing support to children with trauma exposure (Cole et al., 2009, Wolopow et al., 2011). The characteristic most common across a review of the literature on trauma-informed

school programs, however, was the emphasis on the need for teacher training and education (Cole et al., 2009; Craig, 2009, Shamblin et al., 2016). However, there was no specific discussion of the needs of special education teachers evident in any of these publications.

As the traumatology framework develops heuristic value and the neurobiological impact on learning and behavior becomes better defined (Bucker et al., 2012; Cheng et al., 2014; van der Kolk, 2005), researchers are beginning to investigate the implementation of trauma-informed programs in schools (Perry & Daniels, 2016; Phifer & Hull, 2016; Walkley & Cox, 2013). Three peer-reviewed articles were found during this literature review that studied trauma-informed programs designed for implementation in schools (Dorado, et al., 2016; Perry & Daniels, 2016; Shamblin et al., 2016). Dorado et al. (2016) studied the implementation of Healthy Environments and Response to Trauma in Schools (HEARTS), a program modeled after the ARC program in the San Francisco Unified School District. The intention of the program was to reverse the school to prison pipeline. The program mimics the response to intervention tiers of support common in most public schools. Results of the study indicated support for the HEARTS program in schools. The authors found that there was a decrease in behavioral problems associated with loss of instructional time. There was a decrease in the trauma-related symptoms in students who received HEARTS therapy. It is important to note, however, that the HEARTS counseling for the children who were receiving tier III interventions was conducted by a counselor who was not employed with the school district.

Perry & Daniels (2016) studied the implementation of one program in three in New Haven, CT. The study had three were three main components. The first involved professional development (PD) for the teachers. The second involved identifying students who may have significant trauma exposure, and the third component was to develop and implement practices in

the schools to meet the needs of the identified students. The scope of this study did not include any quantitative student outcomes regarding improvements in academic achievement of a decrease in internalizing and externalizing behaviors. PD was provided to teachers before the implementation of the program. The results of a survey given to teachers in one for the pilot schools showed that 97% of the teachers found the training to be informational. They also expressed some satisfaction with their ability to support students with trauma in their classroom. The authors of the study discussed one limitation of their study regarding the PD for the teachers. They were unable to address one of the common themes expressed by the teachers in the survey. The teachers explained that they were interested in participating in ongoing PD and support throughout the school year.

The only other peer reviewed study found at the time of this review was a three-tiered intervention program implemented in a preschool setting (Shamblin et al., 2016). The program implemented in the study was similar to the HEARTS program, however particular attention was paid to establishing relationships with the teachers. Teachers were taught strategies for managing behavior in the classroom. In addition, they were encouraged to build teams among faculty members to address their own needs in response to trauma. Significant improvement in teacher hopefulness was noted. The results indicated that the changed attitude of the teachers may have contributed to improved student behavior. Overall, the results of these studies showed that trauma-informed programs in schools may decrease externalizing and internalizing behaviors in children with trauma exposure (Phifer & Hull, 2016). The teachers felt a high level of self-efficacy in implementing trauma-informed practices when they were provided with ongoing support. It is important to note that while each of the studies commented on the needs of the teachers, none of the studies were designed to focus on the training needs of teachers.

Despite a small number of peer reviewed studies on implementation of trauma-informed school programs, the results are similar to the plethora of research on SWPBIS and other whole school initiatives. They often fail because of lack of fidelity to the program and lack of support for teachers (Bradshaw et al., 2012). Teachers may not be getting enough support from administrators and not enough professional development therefore they fail to implement the program with fidelity. When the program does not seem to be effective in changing student behavior, teachers may revert to punitive and authoritarian practices (Maring & Koblinsky, 2013). In addition, it has been shown that teachers may default to exclusion from a lack of efficacy around supporting children whose problems in school may be a result of external factors such as abuse and neighborhood violence (Gibbs & Powell, 2012).

Research was found in the literature regarding teachers' perspectives on their training needs. Maring & Koblinsky (2013) investigated the feelings of teachers working with students in high violence neighborhoods. The authors of this study found that the teachers experienced challenges and adapted to the challenges with individual coping strategies. The teachers also revealed that they engaged in avoidance behaviors regarding the behaviors of difficult students. The results of this study are supported in the literature by other studies indicating that teacher training adds confidence and self-efficacy that allows the teachers to better manage the externalizing behaviors of students (Dicke et al., 2015; O'Neill & Stephenson, 2012; Peters, 2012).

There is some research in the literature regarding the training needs of special education teachers (Oliver & Reschley, 2010; Stough et al., 2015). Neither of the two studies found discussed special education teachers who worked with children with trauma. Only one study was found that was designed to gain an understanding of teacher perspectives on providing

support to elementary school students who were exposed to trauma (Alisic, 2012). The results of the semi-structured interview showed that the teachers expressed a need for more professional development and struggled to meet the needs of their traumatized students. However, this study was conducted using a sample of general education teachers in an elementary school. There was no mention of the needs of special education teachers.

Research indicates that as many as 80% of the children in a special education have been exposed to trauma (Blodgett, 2015). It has been suggested that special education teachers have an opportunity to influence their general education colleagues by providing them with support in managing the behaviors of their special education students during their time in inclusion or mainstream classes (Oliver & Reschley, 2010). Although the research shows that special education teachers frequently have students with trauma in their classrooms, and although research shows that teachers who receive adequate training feel better equipped to manage their students with challenging externalizing behaviors (Dicke et al., 2015), a gap was found in the literature regarding the training needs of special education teachers working with children with DT (Oliver & Reschley, 2010). Thus, the present study examined the perspectives of special education teachers regarding their training needs when working with children with DT.

Summary

Teachers lack sufficient knowledge and training in trauma-informed practices in both teacher preparation programs (Stough et al., 2015) and in PD opportunities offered during their teaching tenure (Shamblin et al., 2016) to respond to the internalizing and externalizing behavioral challenges of students with DT. Children with DT have atypical neurobiological development and insecure attachment (Delima & Vimpani, 2011; Barnum et al., 2017). Thus, they may have difficulty with self-regulation and therefore are likely to demonstrate unique

internalizing and externalizing behavior problems in school (Greeson et al., 2014; Hanson, 2014). Research indicates that teachers can play a role in reducing internalizing and externalizing behaviors by helping children with DT regulate the toxic level of stress hormones (Howell & Miller-Graff, 2014). Children with DT may benefit from explicit teaching of self-regulation, mindfulness, and resiliency in school (McMahon, 2015; Rutter, 2013). More research is needed to determine the needs of teachers when implementing trauma-informed strategies in their classrooms (Alisic, 2012; Perry & Daniels, 2016). In addition, special education teachers may have a need for immediate training as they likely face many children in their classrooms who have experienced trauma (Blodgett, 2015). No studies were found in this review of the literature regarding the training needs of special education teachers in the implementation of trauma-informed strategies. The present study aimed to respond to the call in the literature for more research on the training needs of teachers (Perry & Daniels, 2016). This study contributed to the gap in the literature in this area by examining the perceptions and experiences of special education teachers who have had a minimum of one training session on trauma-informed classroom strategies.

Chapter 3: Research Method

The problem to be examined in this qualitative case study was the lack of SE teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom (Alisic, 2012; Phifer & Hull, 2016). The purpose of this qualitative exploratory case study was to examine SE teachers' perceptions regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. In this chapter, an explanation of the research method and design used will be provided. The population of SE teachers who participated and the sampling method used to select them will be reviewed. The semi-structured interview protocol and other data to be reviewed will be discussed. The procedures for data collection, processing and analysis will be explained in detail. This chapter includes a discussion of the assumptions, limitations, and delimitations. Finally, this chapter will include ethical assurances and a summary.

This qualitative case study was focused on the present challenges and lack of training that special education teachers are facing regarding internalizing and externalizing behaviors of their students with DT. The following research questions supported this qualitative case study because the focus of the study was on the individual experiences and perceptions of each of the participants in a real-life setting (Yin, 2011).

Research Question 1. What are teachers' perceptions of the training they have received in responding to behavioral challenges of students with DT?

Research Sub-Question A. What are teachers' training needs regarding internalizing behavioral challenges of students with DT?

Research Sub-Question B. What are teachers' training needs regarding externalizing behavioral challenges of students with DT?

Research Design

The study of teachers' perceptions and experiences is subjective and can best be examined through a constructivist research philosophy using qualitative design and methods (Miles et al., 2014). The objectivist approach using quantitative methodology seeks to test theory using closed questions. The aim of this study was to serve as a basis for further research and to develop meaning from the data, not derive definitive evidence, thus quantitative methods would not be appropriate (Mayer, 2015). Constructivist research seeks to gather understanding through multiple participant perspectives (Oleinik, 2011). Case study design allows for consideration of a contemporary phenomenon within a real-life context (Yin, 2011). In addition, this study involved individual teachers working with a myriad of different children in different classrooms which provided varied details and nuances of human behavior. Case study research allows for the study of the human condition. It does not require specific behaviors to occur in response to specific prompts, as might be the case with quantitative methodologies (Flyberrg, 2006). In addition, the current study was designed to learn from the research, not provide proof of a phenomenon occurring. Case study is well known as a design that allows for learning through research (Flyberrg, 2006). In order to better understand the training needs of teachers, it was beneficial to speak to the teachers who are in the actual classrooms working with children with DT. Because this study presented a particular situation (the training of SE teachers in trauma-informed care), and was intended to inform other situations (teachers working with children with DT) it was best examined using an instrumental case study (Yin, 2011).

While narrative analysis also allows for study in a real-life context, there is consideration of the cultural context of the participants (Esin et al., 2014). In this study, the cultural context of the special education teachers was not relevant to the research questions. Ethnography, another qualitative design, was not appropriate for this study because researchers using ethnography study a cultural group in a natural setting over a prolonged period of time (Vogt et al., 2012). The current study examined the participant's perceptions of a program. Time did not elapse to collect the information needed to answer the research questions.

Following case study protocol, research questions were developed to collect information on the problem and purpose of the study. SE teachers were selected to participate using purposive sampling based on previous exposure to trauma-informed classroom training. A semi-structured face-to-face interview was conducted with each participant. Training materials from past trainings were reviewed. The interviews were recorded and then transcribed. The data was analyzed for themes and coded by hand. Transcriptions were member checked. The themes that emerged from the data will be discussed.

The research questions are best supported by qualitative case study because the focus of the study is on the individual experiences and perceptions of each of the participants in a real-life setting (Yin, 2011). This study was focused on the present challenges and lack of training that the teachers are facing regarding internalizing and externalizing behaviors of their students with DT. The case study design allowed for learning from the experiences of the participating teachers.

Population/Sample

The population for this study was individual special education teachers currently working in elementary, middle, and high schools in New Jersey who work with children with DT in the classroom. The population was comprised of special education teachers because research shows that a significant number of children in special education have been exposed to childhood trauma (Blodgett, 2015). The participants were selected from schools in New Jersey to reduce the travel time and costs for the research. In addition, every effort was made to conduct the interviews face-to-face rather than remotely. Collecting participants from the home state of the researcher.allowed for all but one interview to be conducted face-to-face.

After obtaining site permission from the participating school systems and NCU IRB approval, the participants were recruited through contact with principals and superintendents in public schools in NJ who provided their SE teachers with at least one hour of training in trauma-informed care. A recruitment script (Appendix A) was distributed to the schools that have participated in trauma-informed training. All site permissions (system and school) were obtained in order to receive NCU IRB Committee approval. Participation in the study was voluntary.

The sample size for the proposed study was determined by the amount of data required to achieve saturation (Mason, 2010). Ten to fifteen is shown to be an appropriate sample size for qualitative interview methodologies unspecified to design, however, there were not 15 teachers who have had at least an hour of training in New Jersey (NJ) who agreed to participate in the study. The seven study participants were selected based on their participation in previous training in trauma-informed care. Because depth and quality of the data collected from the participants, rather than the number of interviews, determined its value and saturation, 6 participants were initially interviewed (Mason, 2010). To test for saturation, another participant was interviewed.

This study examined the perceptions of special education teachers who have received some training on trauma-informed care in school, thus the sample was comprised of special education teachers. To reduce the limited diversity that can occur with homogeneous sampling, participants were selected from elementary, middle and high schools which provided an increased opportunity for finding participants as well as increasing transferability (Oleinik, 2011).

Materials/Instrumentation

The instrument used in this case study was a semi-structured interview protocol (Appendix C). The number of questions and the question content followed the protocol set by a previous researcher who used case study design in the study of teacher training needs (Alisic, 2012). That interview consisted of 20 questions divided into four sections with follow up questions. The interview in this case study consisted of 18 questions broken into three sections; general questions, experience and strategies, and training needs (Appendix C). The questions were designed to collect information to answer the research question and both sub questions. The questions are arranged into four categories. The first few questions were designed to establish rapport and to collect demographic information such as the participants' name, age, gender, and years as a teacher. The next sets were designed to collect information related to the research question and were about the experiences the participants have had prior to the interview. The third set of questions are designed to collect information on the training needs of the participants. Other questions will be designed to collect data that align with the research questions. The entire interview protocol can be found in appendix C. A description of internalizing and externalizing behaviors in the classroom was provided prior to asking the questions. The number of questions was based on a need to collect adequate information. In

addition, it is important to leave room for follow-up questions and conversation. In semi-structured interviews, follow-up questions and time for the participant to expand on their answers provided rich information (Irvine, Drew, & Sainsbury, 2012). The semi-structured interview protocol was approved by the dissertation chair and subject matter expert. The themes were identified through a large amount of hand coding (Sahin et al., 2016). Credibility was established through member checking of the interview transcripts. Dependability was established by maintaining a journal that transparently demonstrated my efforts at data collection and analysis. Participants signed a confidentiality agreement as required by the NCU IRB Committee. In addition, all recorded material and the accompanying transcripts were checked for accuracy by Lara Gorton, a volunteer research assistant.

Study Procedures

The proposed case study received approval from NCU's Institutional Review Board (IRB) prior to data collection. The study involved minimal risk to participants. The data is securely stored in accordance with IRB requirements. All recorded transcripts were maintained locally on a password-protected computer. They have been loaded to a password protected cloud based storage system. Informed consent was obtained from the participants prior to the interview (Appendix D). Ethical consideration was provided to the participants by assigning a letter to each and coding other identifiable information to protect the participants from being connected to sensitive information (Newman & Kaloupek, 2009). The participants of this study were volunteers who are currently teaching in a school and have received at least one hour of training on trauma-informed care. After the participants were selected, they were scheduled for a face-to-face or phone interview. Face-to-face is preferred but was not possible for one study participants (Irvine, Drew, & Sainsbury, 2012). For that participant, the interview was

conducted in a secure "Gotomeeting" room. The recording was downloaded onto a secure computer. The face-to-face interviews took place at a local library in a private room that afforded some privacy for the participant. The participants were asked to be able to dedicate a maximum of two hours for the interview. Most interviews lasted about one hour. In addition to collecting interview data, each participant was asked to provide any information they have received from previous training in trauma-informed care.

Data Collection and Analysis

A semi-structured interview protocol was used to capture the teachers' perceptions as they unfolded throughout the interview (Agee, 2009; Turner, 2010). Follow-up questions were asked to further explore a participant's initial response (Turner, 2010). Semi-structured interviewing is more appropriate than structured interviewing because it allows the researcher to better manage irrationalities or repressed attitudes through the building of trust and the careful use of nonverbal expressions (Branthwaite & Patterson, 2012). Each interview began with an explanation of the purpose of the interview and the study. The researcher explained that she is seeking her doctorate in education and that she has worked as a teacher and administrator. The researcher also explained to each participant that the questions that were asked might sensitive and personal in nature. The researcher informed them that if they were uncomfortable with any question, they had the option of refusing to respond, and/or that the interview would terminated if they indicated discomfort or distress from the process. The researcher reiterated the consent and research issues to the participants and asked them to give oral consent on tape, in addition to the written form, to participate in the study.

The researcher took notes during the interview and the interview sessions were recorded. Following each interview, the recordings were uploaded onto a secure, password-protected computer. Each file was labeled with a letter to protect the privacy of the participants and emailed to a private professional transcriber. Each interview recording and the interviewer's notes were transcribed verbatim by the interviewer and Sarah Neal, a research assistant with transcription experience. When the transcriptions were returned, the recordings were listened to again and any corrections to the interview files will be made. Trustworthiness was ensured through the application of member checking. Participants reviewed the data and verified accuracy in writing prior to data analysis (Mayer, 2015).

An interpretive approach was used to analyze the data. Interpretive analysis allowed the researcher to understand the subjective meanings that subjects use to describe their experiences and was aligned to case study design using semi-structured interviews (Yin, 2011). In this process, the researcher was cautious not to misrepresent the data, but to validate their understanding within the data. The researcher demonstrated understanding by using language taken directly from the participants to describe their experiences as accurately as possible (Turner, 2010). These experiences were reported using quotes as examples, to provide accurate descriptions of participants' behaviors, thoughts, and feelings in relation to the contexts in which they occurred (Miles et al., 2014). Hand coding and the identification of themes was used to analyze the transcribed data (Miles et al., 2014).

Inductive analysis, a process by which the researcher allows the themes to evolve through careful coding of the data rather than apply preconceived ideas about the topic was used. (Hseih & Shannon, 2005). Native terms and quotes using a line-by-line, or open coding, technique was employed (Olenik, 2011). Every line of each transcript was analyzed and coded with one or more

themes. To develop themes, participant's words were used as codes to depict their thoughts and perceptions. Each code was reviewed to determine commonalities and establish the themes. In addition, to ensure triangulation of data, the number of times participants identified each of the main codes was counted in all of the transcripts. For verifiability, an experienced methods expert will review the quotes to confirm the accuracy of their assignment to the themes and sub-themes identified.

Assumptions

There were assumptions made regarding the proposed research design and method. It was assumed that the interview would take approximately two hours to complete. This was an assumption based on similar interview protocols conducted in the research (Erol & Akin, 2015). The interviews were conducted with a test subject prior to formal data collection. If the test interview took more than 2 hours to complete, the interview questions would have been reviewed. It is important to maintain enough interview questions so that the appropriate data is collected to support the research questions (Turner, 2010). The interviews for this study, however, lasted approximately one hour or less. All questions were covered in every interview. Some participants spoke longer than others, accounting for the slightly different lengths of each interview.

Another assumption made was regarding sample size. Francis et al. (2010) suggests that 8-10 participants can provide saturation when using interview protocol in a qualitative study. If the researcher was unable to secure enough participants in NJ who have attended at least an hour of trauma-informed training for saturation, the researcher would have consider expanding her geographic area and conducting interviews remotely using face time, telephone, or Gotomeeting.

Participant honesty was another assumption being made. This is an issue of controversy in survey and interview methodology (Bredart, Marrall, Abetz-Webb, Lasch, & Acquadro, 2014). One method for increasing truthfulness of responses is to ask follow-up questions and to restate questions using synonymous language (2014). It has also been suggested that participants may be more forthcoming in phone interviews (Turner, 2010). If there was concern regarding the honesty of the responses provided by a participant, follow-up questions would have been asked via phone. Member checking of transcripts also increased honesty in reflection by participants (Bredart et al., 2014).

Limitations

There are a few limitations inherent in the proposed study. The first is potential threats to credibility. In qualitative study, it is important to be transparent in all phases of the research so that anyone reviewing the research could understand and repeat the study (Yin, 2011). Transparency will be ensured by making all data available for inspection and maintaining a careful audit trail using activity logs and methodological logs (Mills, Durepos, & Wiebe, 2010). Another facet of credibility is consideration of interviewer bias. When conducting a semi-structured interview in qualitative research, it is important for the interviewer to maintain emotional detachment and avoid comments that lead the participant toward a response (Turner, 2010).

Honesty of participants must also be considered. Each participant was a volunteer who was provided with an opportunity to decline participation at any point in the process. In addition, participants were encouraged at the beginning of the interview to be as honest as they could. Rapport and assurances of confidentiality increased participant truthfulness (Shenton, 2004).

Another potential limitation to the proposed study was transferability. The participants of this study were teachers who have a minimum of one hour of training in trauma-informed care. Thus, generalizability to teachers with no training may be limited. However, the purpose of this study was to inform educators regarding the training needs of teachers who work with children with DT. An absolute match of reader to participant characteristics is not needed for the reader to derive some information from the study (Yin, 2011). The participants were all special education teachers. However, the concern of managing the internalizing and externalizing behaviors of children in the classroom is not unique to special education, and the interview questions were specific to the behaviors of the students and not the location, general education teachers may be informed by the results of the study (Amankwaa, 2016).

Finally, a third limitation of the study was triangulation. There were two methods of data collection, participant interviews and document review. However, the participants were teachers in different grade levels and from different districts. This expanded site triangulation can increase the reliability of the data collected (Shenton, 2004).

Delimitations

Delimitations in the proposed study included the decision to interview only special education teachers. Research indicates that classroom management is an area lacking in special education preparation (Oliver & Reschley, 2010). In addition, a recent study showed that as many as 80% of the children in special education have DT (Blodgett, 2015). Special education teachers may experience many students who demonstrate externalizing and internalizing behaviors in their classroom (Jaffe, 2015).

Another delimitation was the choice to collect data from two sources, interview and document review. While that may limit triangulation, research shows that interviews conducted with participants from varying school districts, who teach at various grade levels and have been exposed to different professional development may add credibility for the reader (Shenton, 2004). In addition, the document review included a review of all the documents related to the trauma-informed training attended by the participants. This review added depth to the responses of the participants and scope to the data.

Ethical Assurances

Informed consent was collected by each participant who volunteered to be interviewed (Appendix D). Confidentiality was maintained by assigning each participant a pseudonym. All identifiable information was coded. Each participant was assigned a number that will correspond to their transcripts to protect the participants from being connected to sensitive information (Oleinik, 2011). IRB approval was obtained before any research was conducted. Site permission was obtained before volunteers were solicited in each school district (Appendix B). The research volunteers signed a confidentiality agreement.

There were no known conflicts of interest for the researcher. The data collection did not take place in the researcher's place of employment. The interviewer has 27 years of experience in education. In addition, she worked in a variety of special education settings as a teacher and is currently working as a director of special education. The interviewer has taught every grade level from 2-12 in suburban and urban settings. The Interviewer's experience was helpful when establishing trust and common language with the participants. The trust and rapport developed with the participants increased the truthfulness and depth of their responses (Amankwaa, 2016). Every effort was made to resist making assumptions based on participant responses (Turner,

2010). Recording the interviews, member checking, and third party review of data and themes helped to minimize interviewer bias. In addition to testing the semi-structured interview protocol, the interviewer practiced her interview skills on individuals unrelated to the research project.

Summary

The problem to be examined in this proposed qualitative case study was the lack of SE teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom (Alisic, 2012; Phifer & Hull, 2016). The purpose of this qualitative exploratory case study was to examine SE teachers' perception regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom.

Following case study protocol, research questions were developed to collect information on the problem and purpose of the study. SE teachers were selected to participate using purposive sampling based on previous exposure to trauma-informed classroom training. A semi-structured face-to-face interview was conducted with each participant. Training materials from previously attended training were reviewed. The interviews were recorded and then transcribed.

Credibility, transferability, and dependability were ensured and maintained. Data triangulation of the data occurred through the use of two methods of collection, document review and semi-structured interview. The purpose of the study was to inform educators. Although special educators will comprise the sample, teachers and educators in many roles and many grades may relate to the study results. The data was coded and analyzed for themes by hand. Member checking increased trustworthiness of the data.

Ethical concerns were addressed thought receipt of IRB approval prior to collection of data. Site permission and informed consent were obtained. The participants were assured confidentiality and as volunteers were reminded that they may terminate their participation at any time throughout the data collection process. The researcher was free from any known biases and endeavored to maintain a transparent audit of every step of the research process in secure journals. Transparency and credibility are the keys to qualitative research that stands the test of peer review.

Chapter 4: Findings

The problem examined in this qualitative case study was the lack of SE teacher training in trauma-informed care needed to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom (Alisic, 2012; Phifer & Hull, 2016). The purpose of this qualitative exploratory case study was to examine SE teachers' perception regarding their lack of training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. The aim of the study was to inform teachers and administrators of the needs of teachers working with children with DT in their classrooms. In this chapter, the trustworthiness of the data will be discussed. The results will be revealed and organized around the research questions. The findings will be evaluated and interpreted within the study context and the profession of special education teaching. The chapter concludes with a summary of the key points.

Trustworthiness of Data

Credibility, triangulation, transparency, and transferability are all needed to increase the trustworthiness of a study (Shenton, 2004). The present study meets the criteria for credibility because steps were taken to assure that the phenomenon under investigation was accurately recorded. The interview questions were derived from a previous qualitative case study in the same area of study (Alisic, 2012).

There were two requirements to be by the participants in the study. The first was that participants needed to be special education teachers. The second requirement was that they had to have received a minimum of one hour of training prior to the interview. The participants were asked to provide the training materials from their training to provide a background and assist with identifying attitudes and beliefs of the participants (Shenton, 2004). The documents that

were reviewed included two power point slide decks, an infographic regarding the domains of function for children with DT, and a worksheet identifying strategies for managing children with DT in the classroom. Three of the participants were trained in the same workshop so they shared the same slide deck. One participant provided a link to an audio interview she listened to.

The participants were recruited by an email sent out by their curriculum supervisor or by responding to a post on a national organization's Facebook page (Appendix E). The flyer explained that participation was voluntary and that part pants needed a minimum of one hour of training in trauma-informed education. None of the participants were coerced or compensated. They came forward voluntarily. If they met the criteria for training, all volunteers were accepted. They expressed their interest directly to the researcher. The participants were informed at the start of each interview that they were not known to their supervisors or administrators or to each other. Each participant read and signed their consent and were told that their interviews would be assigned a letter that corresponded to their name (Appendix D). The key for the letter assignments is stored in a password protected program (Oleinik, 2011). In addition, the participants were told that if they became emotional or uncomfortable at any time during the interview, that they could terminate or the researcher could terminate the interview. Basic demographic information was asked at the beginning of the interview to put the participants at ease. Rapport was easily established during each interview. The ease of the rapport and the promise of confidentiality were conducted to increase the honesty of the participants' responses (Shenton, 2004). Iterative questioning was employed in a few cases where the interviewer was not certain that the participants were providing accurate information or their responses were lacking appropriate detail (Diefenbach, 2009).

All the participants were asked at the beginning of each interview if they had a social or professional relationship with the interviewer. All respondents answered no to the question. None of the participants work with or near the interviewer. While a rapport was established to increase honesty, the interviewer maintained professional objectivity and reduced the potential for bias by referring often to the interview questions and keeping the interview connected to the research questions (Turner, 2010).

Transparency was ensured by making all data available for inspection and maintaining a careful audit trail using activity logs and methodological logs (Mills, Durepos, & Wiebe, 2010). Emails containing message information and dates were used for communication with all participants and with the site supervisors. The coding and theme identification sheets are all dated and available for review. Member checking was conducted by each of the participants. They were provided with a copy of their transcript, asked to read it, and then sign a form verifying the accuracy of the transcription. All participants verified their transcripts.

Transferability was increased by the scope of backgrounds and grade levels taught by the participants. The participants in this study were special education teachers from two different school districts in NJ. The teachers were from the elementary, middle and high school level. They taught various types of classes including self-contained, resource center pull out, and inclusion. They taught a variety of subjects including English, math, social studies, and science. While they were all from school districts in central NJ, an absolute match of reader to participant characteristics is not needed for the reader to derive some information from the study (Yin, 2011). Managing the internalizing and externalizing behaviors of children in the classroom is not unique to special education, and the interview questions were specific to the behaviors of the

students and not the location, thus, general education teachers may be informed by the results of the study (Amankwaa, 2016).

Results

The seven participants for this research study were selected from two different school districts in New Jersey (see Table 1 for participant demographics). The participants were all special education teachers and they all had a minimum of 1 hour of training on trauma-informed schools. All individuals interviewed for this study currently work as special education teachers in public schools. Semi-structured interviews were digitally recorded and the recordings were transcribed verbatim by a professional transcriber. The interviews lasted 30-50 minutes.

The responses were analyzed to identify themes that were used to address one research question and two sub-questions about the lack of training in trauma-informed education and the challenges of working with children with DT in a special education classroom. The analytic procedure was based on the summative analysis approach which allows for maximum individual contribution while minimizing individual subjectivity (Rappaport, 2010). In addition, all the training materials provided to the researcher were reviewed for content.

At the beginning of the interview each participant was asked their age, current position, experience in teaching, and the years that they have been teaching. Although they were told it was optional, all participants chose to provide their age. The main purpose of these preliminary questions was to obtain basic information, which was needed to assist the researcher in data analysis and interpretation. The experience of the participants varied from one year to over 25 years. The ages of the individuals varied from 21 to 63 years old. The type of programs taught spanned the typical program offerings on a public school. When investigating the needs of teachers, it is important to collect information from a wide range of individual ages, experiences,

and grade levels taught (Alisic, 2012). The participants' demographics are summarized in table 1.

Table 1

Participants' Demographics

		Number of Participants	Percentage
Age	21-30	2	29%
	31-65	5	71%
Gender	Female	7	100%
	Male	0	0%
Job Description	Resource Room (RR)	1	14%
	Inclusion (ICS)	4	58%
	Self-Contained	1	14%
	RR/ICS	1	14%
Grade level	Elementary	1	14%
	Middle School	3	43%
	High School	3	43%
Years of Experience	1-15	4	58%
	15-30	3	42%
Hours of training in Trauma-informed care	1-8	6	86%
	9-20	1	14%

The following research question was addressed:

Research Question 1. What are teachers' perceptions of the training they have received in responding to behavioral challenges of students with DT?

Research Sub-Question A. What are teachers' training needs regarding internalizing behavioral challenges of students with DT?

Research Sub-Question B. What are teachers' training needs regarding externalizing behavioral challenges of students with DT?

As expected, participants' answers in this study varied according to their age, years of experience, grade levels taught, and amount of training in trauma-informed care in schools.

Research Question 1: What are teachers' perceptions of the training they have received in responding to behavioral challenges of students with DT? The teachers' exposure to trauma-informed care training varied from 1-8 hours of training. In response to this question, the themes that emerged were what they took from the training that they used in their classroom and what needs remained for them when working with children with DT in their classrooms.

***Theme 1*: Trauma Impacts Students in the Classroom.** Few of the respondents could articulate the strategies that they learned from training that helped them in their classrooms, however many described an understanding of what it means to have trauma and how it impacts children in school. Participant D (PD) could give a basic title of the training she received but not any details of what she took away from the training. Participants C and E spoke of learning the definition of trauma and how it impacts learning and behavior. Participant C stated, "…Just the background in trauma-sensitive...what trauma is…a definition of it." Participant E stated, "Just everything about trauma…" Participant F mentioned shifting perspective when she stated, "…to be accepting of all students, not really knowing where they are coming from…" Regarding her thoughts on the training she received, participant G stated, "Quite frankly, validation that everything I was doing was correct."

***Theme 2*: Support for Children with DT in the Classroom.** Every participant articulated the need for more training. They mentioned the need for more training for themselves, their colleagues, and their administrators. PG spoke about the need for her colleagues needed "to be more tolerant….and allow life to happen." PE stated, "the gen. ed.

teachers really need to know because a lot of them have them in their classrooms and just don't even have a clue on what to do." PF stated "…and this is something we are still kind of closed-minded on, and this is something we need to be more accepting of." Four participants mentioned the need for a better understanding of the impact of trauma on children. PF stated "I feel like I need a part 2 to that training. I need to know how to deal with these kids." PD, who works in a school that has set a goal to become trauma-sensitive stated that the school needed "just an understanding or clarity between the discipline policy and trauma sensitive. That is a huge problem." PA spoke about many teachers in her school feeling that "nothing was getting done" in her classroom regarding the inappropriate behaviors in the classroom. She felt that if the teachers who felt nothing was getting done "had a deeper appreciation and maybe get some strategies…" they would be more understanding of students with DT. A few of the participants expressed a need for understanding administrators. PC stated, "…you want them to be flexible in their punishment…you want them to have a heart and you want to trust that they will make the best decision." Every participant expressed a desire for in-person training and coaching over online training and reading books. PC stated, "There was some great in-service stuff going on and I hope they continue that."

Research Sub-Question A: What are teachers' training needs regarding internalizing behavioral challenges of students with DT? In response to this question, the themes that emerged were strategies that the teachers used to support the internalizing behaviors of their students, things that got in the way of their efforts, and things that were in place in their schools that were helpful.

***Theme 3*: Strategies to Support the Internalizing Behaviors of Children with DT in the Classroom**. PB explained that she works to identify triggers, a strategy explained in her trauma-informed care training. However, she didn't use the term trigger and did not attribute the strategy to her training. Her explanation was "she would…blank stare in a certain direction. That's how we knew she was processing something." All the participants explained relationship building strategies such as "I protected her", "You can't say anything negative to these kids", "What do you need from me?", "Responsive, consistent, and fair". PA stated several strategies that would be considered trauma-informed such as "gentle talking", coloring opportunities, or "Allowing them to disconnect from the activity for a while." A review of the documentation from her training revealed that coloring, time-in (another way of describing allowing students to disconnect for a time), and relationship building language ("gentle talking") were strategies that came from the training slide deck. When asked directly where she got the idea she stated "Those are just things I employed myself. I didn't necessarily learn them." One participant mentioned parent involvement as a useful strategy with internalizing behavior. PF stated, "I started talking to her mom...If I never talked to her mother, I would have never known what happened."

***Theme 4:* The Challenge of Managing the Internalizing Behaviors of Children with DT.** A few of the respondents stated that they were not given enough information on the children they were working with. PF stated, "we're never really told what happened to the kid." About using the Response to Intervention (RTI) supports, also known in NJ as the Intervention and Referral Service (I&RS), PC stated "…we get frustrated because there is no follow-up…you don't ever hear about it." PF described a student who was very withdrawn in class. One day she stopped coming to class. She stated, "nothing was ever said, and then …she just popped in one day, and we were like 'We haven't seen you in six months…We were never told why she was

out." PD stated "…but don't give us the nitty gritty…I feel like there is no support…and I still don't get a response back." PC stated," I would like a little more information. I'd like the teachers to be included a bit more." PA mentioned the lack of training as being in the way of supporting her students.

***Theme 5*: Support for the Internalizing Behaviors of Children with DT.** Every respondent mentioned the availability of a school counselor, case manager, or social worker as an available support to help them with their students' internalizing behaviors. PD stated "I call…. the case manager. That's my line of defense."

Research Sub-Question B. What are teachers' training needs regarding externalizing behavioral challenges of students with DT? In response to this question, the themes that emerged were strategies that the teachers used to support the externalizing behaviors of their students, things that got in the way of their efforts, and things that were in place in their schools that were helpful.

***Theme 6*: Strategies to Support the Externalizing Behaviors of Children with DT in the Classroom**. Like the responses in theme 3, the participants mentioned strategies that can be considered trauma-informed but they did not attribute them to their training. PG stated "…removing a child from the situation around the stairs, do edibles, or redirecting and allowing something different…. I have theraballs, I have breathing strategies." A few of the participants mentioned removal from class. PB explained "Once, I cleared the room, but that was…a kid who should have never been in-district." A few participants also mentioned some form of acceptance and letting the children work through their issues. PF stated "…if I tried to stand by him or talk to him and redirect, it would become louder…. I just kind of let him do his thing." PA described "brain breaks" that she solicited from her students at the beginning of the year.

The participants provided many relationship building strategies for externalizing behaviors. PB stated "If you build a relationship with them, you can get anything out of them you want." PD described "…having quiet conversations with him." PA stated, "I do a lot of talking…just say 'Hey what's going on?" One participant introduces a stuffed dog to her class every year. She models how to talk to "Roger" about their problems.

***Theme 7*: The Challenge of Managing the Externalizing Behaviors of Children with DT.** Like the responses about internalizing behaviors, the participants discussed lack of understanding of the behaviors of their students on the part of their colleagues. PG stated, "I think a lot of behavior happens… because people battle the children because they think they are being disrespectful." PA noted that she has been criticized for poor classroom management during an observation because her principal did not recognize the trauma-informed strategies she was putting into place. One participant shared that she felt that the externalizing behaviors were more challenging than internalizing behaviors and that sometimes "you just can't reach them. They won't let you in." One participant suggested that children with externalizing behaviors should stay in one classroom all day so they don't have to move "from one person to another." She went on to explain that not everyone understood the kids with externalizing behaviors.

The participants spoke a lot about the use of counselors and case managers when explaining how they managed internalizing behaviors. However, there was little mention of counselors during the discussion of externalizing behaviors. There was discussion about discipline. They spoke of discipline as something that they circumvented for their students. Some of the participants explained variations of "protecting" their students from the discipline policies and practices in their school. PE stated "I try not to write students up. I've just felt that it's not really conducive to the situation." PF stated, "I feel like kids get suspended over the

stupidest things, like dress code…or they get pulled out of school for…in-school suspension because they missed too many days…Really?"

***Theme 8*: Support for the Externalizing Behaviors of Children with DT.** Only one participant mentioned an evidence based school-wide program for supporting children with DT. PA stated, "They're bringing in restorative practices very, very heavily." She also stated "But we have not been trained…. It really wasn't expressed to us in a way that teachers were very receptive…there were union issues because they did it wrong." A few respondents mentioned that having another person in the class for inclusion was a comfort. It allowed them to manage the behavior while the other teacher could continue the lesson. In addition, one teacher stated, "I'm thankful there is another person in the classroom so if it were to ever get out of control, there's another body in there to help me." This same participant also mentioned that she found assistant teachers helpful when managing the externalizing behaviors of her students.

In direct opposition to three of the participants who mentioned discipline as something that was in the way for teachers, one teacher mentioned that punishment was something she felt supported her in her work with her students. Her school was moving toward trauma-informed care so they removed the school-wide point system. She stated that "I believe in the point system we had. I believe it worked, it kept kids in some sort of control over themselves." She also stated, "I don't have extensive training on this…. the boy that I spoke about that was always shouting out…if he's left to do that and never have a consequence, that's not the real world."

***Theme 9:* The Challenges of Managing Both Internalizing and Externalizing behaviors of children with DT.** There were many instances where participants mentioned difficulties of working with children with DT and not specifically about whether the behaviors were internalizing or externalizing. PB stated "…in an in-class support setting, the numbers,

because your kind of wearing a lot of different hats…it's not conducive to diving in and dealing…" She also mentioned that "teaching was getting in the way. I'm trying to get these kids through…because I think that's more important than…what you are trying to accomplish in English class that day." A few respondents explained that the lack of understanding of special education was in the way of providing support to children with DT. Regarding her general education colleagues that worked in an inclusion model PC stated "…they might not allow you do the accommodations that you need…. they just don't understand inclusion in general. PE stated, "the gen.ed. teachers really need to know because a lot of them have them in their classrooms and just don't even have a clue on what to do." Regarding her administrator, PA stated "I do think there's a patience that isn't there…he comes from general education. I think he would do very well if he had …a Masters in special ed."

Evaluation of Findings

Teachers are often confronted with the challenges of internalizing and externalizing behavior of children with DT in the classroom (Blodgett, 2015; Duke, Pettingell, McMorris, & Borowski, 2010). The concept of trauma-informed school climates is new (Phifer & Hull, 2016). Thus, little is known about the experience and perceptions of the teachers working in classrooms with children with DT (Phifer & Hull, 2016). The findings from this research revealed teachers' perceptions of the training they received on trauma-informed care and the things they still need to support children with DT in their classrooms. As discussed in the literature, the participants all acknowledged the importance of understanding the impact of trauma on the learning and behavior of children (Bucker et al., 2012; Cho et al., 2012). They also unanimously expressed the need for more training for themselves and for their colleagues and administrators (Alisic, 2012, Wolopow et al., 2011). In addition, none of the participants remembered learning about

trauma during their training to become special education teachers. One teacher mentioned that she had learned about trauma, but follow-up questioning revealed that it was information on traumatic brain injuries.

In the preliminary interview questions, participants identified their experience in the teaching profession, the types of classes they have taught, and the amount of training in trauma-informed care they received. From their responses, it became clear that the teachers with more training in trauma-informed care were more able to articulate the strategies that are considered trauma-informed such as relationship building, mindfulness, and self-regulation (Cole et al., 2009; NCTSN, 2008). This was consistent across years of experience teaching.

The research findings considering the theoretical framework revealed that teachers with a small amount of training (1-2 hours) could understand the impact of trauma on behavior, but were not able to specifically state strategies for working with children with DT in the classroom. Teachers with more than 2 hours of training could provide trauma-informed strategies that helped them manage externalizing and internalizing behaviors in the classroom. The classroom strategies offered by the teachers with more training were more preventative than reactive. They had a deeper understanding of the atypical brain development of children with DT and could develop strategies that reduced their behaviors in their classrooms (D'Andrea et al., 2012).

There were some anomalies in the responses of the participants that are outside the theoretical framework. One participant who has been teaching for 16 years and 1had one and a half hours of training was in support of a one-size-fits all school-wide behavior plan. Her school had removed a point system that had been in place for her entire career in that building. The administrator removed the point system and has not yet replaced it with a trauma-informed protocol for responding to the behavior needs of all children. Teachers may feel unsupported in

times of transition to a new program (Bradshaw et al., 2012). When teachers perceive that they are not getting enough support from administrators and not enough professional development they express concerns about inconsistency. When the program does not seem to be effective in changing student behavior, teachers may revert to punitive and authoritarian practices (Maring & Koblinsky, 2013). Although she has only been teaching for one year and had 6 hours of training in trauma-informed care, another participant expressed a similar situation happening in her school where they were committed to becoming trauma-informed and had adopted Restorative Practices. This participant, however, understood that her colleagues were complaining about inconsistency in administrative response because the program training was not complete and was being handled poorly. Another unexpected result was that most of the participants who spoke of trauma-informed strategies in the classroom, did not attribute their learning of them to the training, even though the training materials provided indicated that those strategies had been introduced during training.

The findings of this study extend the conclusions reached by previous studies in this area. The research in the literature regarding the training needs of special education teachers found that they do not receive the same amount of training in classroom management as their general education colleagues (Oliver & Reschley, 2010; Stough et al., 2015). However, neither of the two studies found discussed special education teachers who worked with children with trauma. This study builds the work of Olivery & Reschley in that the special education teachers who participated expressed a need for more training in trauma-informed care in schools. Only one study was found in the review of literature that was designed to gain an understanding of teacher perspectives on providing support to elementary school students who were exposed to trauma (Alisic, 2012). The results of the semi-structured interview showed that the teachers expressed a

need for more professional development and struggled to meet the needs of their traumatized students. However, this study was conducted using a sample of general education teachers in an elementary school. This study has similar findings and contributes to the literature by expressing the perceptions of special education teachers regarding their need for training in trauma-informed care in schools.

The analysis of the data for this study shows the need for more training for special education teachers in trauma-informed care in schools. The participants in this study consistently expressed a need for their general education peers and administrators to have more training in trauma-informed care. They spoke of the need for a deeper understanding of the impact of trauma on learning and behavior. In addition, they described feeling misunderstood by their non-trauma-informed colleagues.

Summary

The perceptions of special education teachers on their training needs regarding trauma-informed care in school was the primary focus of this study. To collect data for the research, the investigator asked participants to provide answers to the research question in a semi-structured interview. The questions in the interview were designed to clarify participants view of the training they had already received in trauma-informed care in school and what they needed to support their work with children with DT in the classroom. The findings from this research are the basis for knowledge that can inform administrators and teachers regarding the need for trauma-informed care in schools.

Demographic information about the participants included their age, teaching experience, levels and classes taught, and hours of training in trauma-informed care. Based on the responses to questions asked, data showed that there were differences in responses based on the amount of

trauma-informed training rather than the years of teaching experience. Important themes that emerged during analysis were: things that teachers needed to support their work with children with DT in their classroom, things that the participants found helpful to them in their work, and things that were in the way of their work with children with DT in the special education classroom.

As expected, the teachers with more training in trauma-informed care had more understanding of their students' behaviors and could provide more specific strategies for managing internalizing and externalizing behavior in the classroom. All the participants expressed a need for more training for themselves and their colleagues. They all found counselors and case managers to be something that helped them manage their students with DT. Most expressed a wish that their administrators and general education colleagues had more understanding of the impact of trauma on children's learning and behavior.

Chapter 5: Implications, Recommendations, and Conclusions

One out of four children in a school classroom have experienced trauma (Duke, et al., 2010). The likelihood of children in a SE classroom who have experienced trauma may be as high as 80% of all classified students in a district (Blodgett, 2015). There is evidence, however, of the training needed by SE teachers to support children with trauma in the classroom (Alisic, 2012). The purpose of this qualitative exploratory case study was to examine SE teachers' perceptions regarding their training in trauma-informed care to adequately address the internalizing and externalizing behavior problems of children with DT in the classroom. This research was accomplished from an exploratory case study approach using semi-structured interviews. Qualitative case study design allowed for consideration of a contemporary phenomenon within a real-life context (Yin, 2011). This study involved individual teachers working with a myriad of different children in different classrooms which provided varied details and nuances of human behavior.

The sample for this study was limited to seven individuals who were working as special education teachers in public schools in New Jersey. The findings and conclusions from this research relied predominantly on the researcher's knowledge and experience and were limited to the respondents' perceptions of their need for training in trauma-informed strategies for managing the internalizing and externalizing behaviors of their students with DT. The research data were limited to words in the form of audio recordings from participant interviews. Protecting participant confidentiality was the highest priority throughout this study. To ensure privacy, each participant was provided with an informed consent forms that contained accurate information about the minimal risks and benefits of the research for them. The informed consent

is presented in detail in Appendix A. All signed letters were collected and stored securely at the researcher's location.

In this chapter, the implications and recommendations that may inform teachers and administrators of the need for more training in trauma-informed care of students with DT will be discussed. The implications and recommendations are also intended to inform further research in the needs of special education teachers who are confronted with the challenges of managing students with DT in their classrooms. The first part of this chapter begins with the analyses of the implications that are organized around one research question and two sub-questions. During the semi-structured interviews, the participants were asked 12-13 questions that support the research question and two sub-questions and that represent the foundation of this research. Considering the participants' responses and the researcher's own knowledge and experience, a set of recommendations was generated for practice and for future research. The chapter ends with conclusions intended to summarize the most important points of the chapter's findings.

Implications

The findings of this study were intended to help teachers and administrators better understand the training needs of SE teachers regarding managing the internalizing and externalizing behaviors of children with DT in the classroom. Recent research on the atypical neurobiological development of children with prolonged exposure to adverse experiences is causing administrators and teachers to re-consider the training needs of the teachers working with these children in the classroom (Phifer & Hull, 2016). After analyzing the participants' responses to the research question and two sub-questions, several findings suggested the need for more training regarding the needs of children with DT in the classroom. The following is a discussion of the implications of the study (Dorado et al., 2016).

Research Question: What are teachers' perceptions of the training they have received in responding to behavioral challenges of students with DT? Participants' perceptions of their training needs varied based on the amount of training they had received prior to the interview, their individual experiences in the classroom, and the support they received from other members of their school community including administration and school counselors. From the analysis of the data collected from the participants' responses to this question, the following two major findings emerged: 1) Participants could identify the unique needs of children with DT in the classroom, and 2) Participants recognized the need for more training regarding managing the internalizing and externalizing behaviors of children with DT in the classroom. They articulated the need for more training for themselves, but also for general education teachers and administrators. The qualitative research approach and limited number of interviewed participants have implied an interpretation to the question, which is that the training they received helped them understand the unique needs of children with DT and that more training is needed to support their work with these children in the special education classroom. A quantitative research approach with more participants from school districts in other parts of the country may produce different outcomes.

The implications of the first finding are that with a minimum of one hour of training regarding the impact of childhood trauma on learning and behavior, SE teachers can define developmental trauma and understand that children with DT have atypical neurobiological development that impacts their behavior in school (Alisic, 2012). SAMSHA (2014) outlined four components of becoming trauma-informed; realizing the prevalence of trauma, recognizing how it changes neurobiological development, responding in trauma-informed ways, and resisting re-traumatization. Realizing the prevalence is the first phase of becoming trauma-informed. In

this phase, employees of the organization (in this case, teachers) learn that approximately 64% of Americans have been exposed to adverse childhood experiences (D'Andrea et al., 2012). In the second phase, employees understand that prolonged exposure to adverse childhood experiences changes neurobiological development and negatively impacts adult health outcomes (Anda et al., 2010; Cichetti et al., 2010). In the third phase, employees learn to respond to their clients (in this case, students) with evidence-based trauma-informed strategies. And finally, in the last phase, systems are in place to resist re-traumatization. Comparing the participant's responses to this framework places all the participants of this study in the second phase of becoming trauma-informed. They understood the prevalence of adverse childhood experiences in the population they served and they could articulate that the exposure impacted their ability to learn and behave. Blodgett (2015) provided three definitions to describe the journey to becoming trauma-informed; trauma-sensitive, trauma-informed, and trauma-focused. Trauma-sensitive indicates a basic understanding of the prevalence of childhood trauma and that it impacts neurobiological development. Trauma-informed is the phase in which strategies and processes are in place specifically to address the unique needs of children with trauma exposure. Trauma-focused indicated system wide efforts to improve outcomes for children with DT. Blodgett's definitions, when applied to the participants' responses in this study, places all of them in the trauma-sensitive category. They understand that prolonged exposure to adverse childhood experiences changes the neurobiology of many children. They also understand that the atypical development results in challenging internalizing and externalizing behaviors in the classroom. However, they have not been exposed to many trauma-informed strategies for effectively managing the behaviors. Teachers who are trauma-sensitive may provide proactive classroom management strategies to create a classroom climate that supports relationship development, however, they

default to reactive strategies when the behavior requires assistance from other members of the school community (Korpershoek et al., 2016, Stough et al., 2015). In addition, research indicates the need for explicit teaching of executive function, self-regulation, and resiliency to improve outcomes for children with DT (Diamond & Lee, 2011; Jaffee et al., 2011, Ungar, 2013). The participants' responses in this study showed that after a single session of professional development, most of the teachers remained unaware of these concepts and their positive impact on the outcomes of their students with DT.

Participants' perceived the need for more training regarding managing the internalizing and externalizing behaviors of children with DT in the classroom. Some of the participants recognized the need for training for themselves. Some felt that they could apply the information from their single training to their classrooms because of their years of experience with children with special needs. All the participants expressed the need for their general education teachers and administrators to have more training on the impact of trauma on development and how that atypical development impacts the internalizing and externalizing behavior of children in the classroom. When programs such as PBIS are applied in individual classrooms and without systemic fidelity in a whole school approach, their effectiveness was diminished (Bradshaw et al., 2012). The data in this study indicates that the special education teachers working with children with DT need support from colleagues and administrators outside their classroom. Whole school training is needed to ensure appropriate support of children with DT in public schools (Shamblin et al., 2016).

Research Sub-Question A: What are teachers' training needs regarding internalizing behavioral challenges of students with DT? Participants perceived that more training was needed to effectively manage the internalizing behaviors of children with DT in

their classroom. The participants' responses to this sub-question have led to the following findings: 1) Participants recognized the internalizing behaviors of their students and had some trauma-informed strategies for managing these behaviors in the classroom, and 2) Participants perceived the need for more training for their general education colleagues. The findings were as expected as they followed the participants' perceptions for the need for more training in trauma-informed care in general (Alisic, 2012). The interpretations of this sub-question were limited by sample size.

One of the implications of the findings from this research sub-question is that one to six hours of training may provide special education teachers with the ability to recognize the internalizing behaviors of children with DT. Most respondents could identify internalizing behaviors in their students. Some employed trauma-informed strategies to reduce the impact of the behavior on the learning environment. Most respondents, however, lacked the ability to connect the strategies they used to manage the internalizing behaviors of their students with trauma-informed care. Many supplemented their understanding of the causes of internalizing behaviors with individual coping strategies. The implication of this finding is consistent with studies in the literature indicating that more training would provide a deeper understanding of the effective strategies for managing internalizing behavior and increase teacher confidence in working with children with DT (Maring & Koblinsky, 2013; O'Neill & Stephenson, 2012).

Another implication of the findings for this research sub-question supports the finding for the general research question. The perceptions of the teachers in this study are that their general education teachers need more training in understanding the internalizing behaviors of children with DT. Most of the participants' responses to this sub-question indicated that the strategy most often employed for internalizing behavior was the use of the school counselor, social worker, or

school psychologist. They did not call their administrators because they did not want the children disciplined. A consistent complaint from the participants was that they assumed that their students were getting support from the school counselor but that they consistently failed to be provided with any follow-up information. Trauma-informed care of students must be a whole school initiative (Shamblin et al., 2016). Systems must be in place to support the children and the teachers (Bradshaw et al., 2012). All members of the system require more training regarding managing the internalizing behavior of students with DT in the classroom.

Research Sub-Question B. What are teachers' training needs regarding externalizing behavioral challenges of students with DT? Participants perceived externalizing behaviors to be more challenging to manage in the classroom than internalizing behaviors. From the participants' responses to this research sub-question, the two findings that emerged mirrored the findings for the first research sub-question: 1) Participants recognized the externalizing behaviors of their students and had some trauma-informed strategies for managing these behaviors in the classroom, and 2) Participants perceived the need for more training for their general education colleagues. The limited number of participants, schools and school districts in this study presented limitations to the interpretation of this study. Investigation into the strategies and systems in place for managing externalizing behavior in more schools in broader geographical areas might yield different outcomes.

There was a difference between the perceptions of the participants regarding support for managing the internalizing and externalizing. Where they responded that they often called for a counselor or social worker to assist them in supporting the internalizing behaviors of their students with DT, most responded that they did not call for counselors as often for support with externalizing behaviors. Most of the participants explained that if they alerted others to the

externalizing behaviors, their students would be disciplined. They indicated that they understood that discipline would not improve their students' behavior. This finding is supported in the literature (Milot et al., 2010). Previous studies have shown that because the motivation for externalizing behavior in children with DT is likely an over-charged amygdala, punishment and discipline may be re-traumatizing rather than effective in reducing the behavior (Hanson et al., 2014; Mullet, 2014). SE teachers need support in managing the externalizing behaviors of their students (McCloskey, 2010). The implication of this finding is that a whole school approach to trauma-informed care is needed to support the externalizing behavior of students with DT (Alisic, 2012; Phifer & Hull, 2016).

Recommendations for Application

From the results and findings of this study, the proposed recommendations are intended for practical application regarding the training needs of SE teachers regarding the management of internalizing and externalizing behavior for children with DT. The practical applications are directed to the two school districts in NJ who invited their SE teachers to participate in this study. The benefits of the recommendations for practical applications to the broader education community are limited due to the small number of school districts represented and the small number of individuals who participated in this study. To support teachers in managing the internalizing and externalizing behaviors of children with DT in their classrooms, the following actions are recommended: (1) More training for SE teachers to manage the internalizing and externalizing behaviors of students with DT; (2) More training for general education teachers regarding the externalizing and internalizing behavior of students with DT, and; (3) Creation of a whole school systematic approach to trauma-informed care is needed to improve the behavioral outcomes for children with DT.

The SE teachers who participated in this study had from one to six hours of training prior to their interviews. From the main findings of this study, most of the participants indicated that because of their training, they could define developmental trauma and that they understood the impact of childhood trauma on internalizing and externalizing behaviors in school. Some of the participants could articulate that they understood the importance of relationship for children with DT. However, only one of the participants referenced specific trauma-informed strategies such as mindfulness, self-regulation, and executive function. The need for more training for SE teachers was evident directly by the participants stating that they wanted more training and indirectly by their inability to articulate specific evidence-based strategies for supporting their students with DT in the classroom. A full day of professional development on trauma-informed education will provide teachers with an understanding of the prevalence of childhood trauma in their population (Shamblin et al., 2016). It will also help attendees understand that exposure to childhood trauma impacts neurobiological development which impact behavior and learning. Teachers need more than 1-6 hours of training to be able to implement evidence-based strategies that address the neurobiological impact of childhood trauma on students' learning and behavior (Perry & Daniels, 2016). Special Eucation teachers need more training to incorporate specific evidence-based trauma-informed strategies in their classroom.

The findings of this research indicated that general education teachers need more training in managing internalizing and externalizing behavior of children with DT. The participants of this study expressed concern for the lack of tolerance and understanding of the externalizing and internalizing behaviors of their students with DT. Children who experience early childhood trauma may be more concentrated in SE classes (Blodgett, 2015), however, they are in the general education classes as well. (Duke et al., 2010). In addition, some of the participants

served as inclusion teachers and worked with their students in the general education setting. General education teachers need more training regarding the impact of DT on behavior so that they can work more effectively with their SE colleagues.

Perceptions are not reality, yet they impact teacher efficacy (Phifer & Hull, 2016). The participants in this study perceived the need for more support from the administrators and systems in place in their schools. School-wide reform has proven to be more effective than individual teacher training (Bradshaw et al, 2012; McCloskey, 2010). SE teachers do not operate in a vacuum. They are a part of a larger community. As such, they cannot operate with success in isolation (Cole et al., 2009). In addition, many SE teachers serve their students as co-teachers in the general education setting. It is important for both SE and general education teachers to understand and agree on strategies and protocols when managing their students behavioral and learning needs. SE teachers are occasionally confronted with internalizing or externalizing behavior that requires assistance from a school counselor, social worker, or administrator. Consistent, relationship building approaches have been shown to improve academic outcomes for children with DT (Perry, 2009). If a student needs to come out of a classroom, the trauma-informed strategies in place in the classroom must be continued outside of the classroom. SE teachers need to be a part of a larger community that understands the unique needs of children with DT (Alisic, 2012).

Recommendations for Future Research

To help special education teachers support the unique internalizing and externalizing behaviors of students with DT, further qualitative and quantitative study is recommended. While the current study involved participants across many grade levels, this study was limited in scope and size. Qualitative study of the perceptions of SE teachers regarding their training needs for

providing trauma-informed care in their classrooms is recommended with a larger sample size across different geographic and demographic areas. Follow-up research studies on the perceptions of SE teachers in other states are recommended to supplement the findings of this study. A quantitative approach with a larger participant sample involving school districts from varied demographic and geographic areas is recommended for greater transferability of findings to the broader field of education.

The participants in this study had a maximum of 6 hours of training in trauma-informed care. Only one participant could articulate trauma-informed strategies such as executive function development and mindfulness. More qualitative research is needed regarding the perceptions of SE teachers regarding their ability to implement these trauma-informed strategies after training. It would also be beneficial to examine teachers' implementation of trauma-informed strategies after 12 or more hours of professional development.

More research is recommended to examine the perceptions of general education teachers and administrators regarding managing the internalizing and externalizing behaviors of children with DT (Alisic, 2012). While there has been qualitative study of the implementation of specific trauma-informed programs in school districts (Perry & Daniels, 2016; Shamblin et al., 2016), more study of the perceptions of the teachers and administrators implementing the programs is needed.

Qualitative research involving the requirements for trauma-informing an entire school system, rather than single classrooms is also suggested (Shamblin et al., 2016). A mixed method study was conducted to examine a whole school approach to trauma-informed care (Dorado et al., 2016). Findings indicated that a whole school multi-tiered approach is effective when implementing trauma-informed care. This study, however, was conducted in one location

in California. More mixed method studies examining whole school implementation in other school districts in other states using other programs is recommended.

Future research, which often relies on the findings of past studies, requires clarification of the phenomenon from past qualitative research. This study was limited in sample size, type of teacher, and hours of training. Thus, new research addressing teachers' perceptions from quantitative and mixed method approaches is needed to expand the findings of this qualitative study.

Conclusions

Children with DT demonstrate internalizing and externalizing behaviors that present a challenge to their SE teachers (Hanson et al., 2014; Lovallo et al., 2013). The purpose of this qualitative case study was to examine the perceptions of SE teachers regarding their training needs for managing the internalizing and externalizing behaviors of students with DT. This was accomplished through the administration of semi-structured interviews. The interpretations of the participants' responses to the research question and two sub questions were based on analysis of the themes form the data and the researcher's knowledge and experience.

The major implications of the findings are that SE teachers need more training in managing the internalizing and externalizing behaviors of their students with DT, and that general education teachers and administrators need training to understand the unique learning and behavioral needs of students with DT. The research regarding the need for trauma-informed teachers and schools is relatively new (Phifer & Hull, 2016). Thus, teachers have not been provided much training on managing the internalizing and externalizing behaviors of their students. In addition, SE teachers need support from their general education teachers and administrators to provide appropriate care for their students with DT.

To improve the academic and behavioral outcomes for students with DT, the systems within which SE and general education teachers operate need to be trauma-informed. Occasionally, the internalizing or externalizing behavior of students with DT requires them to be removed from the classroom. School counselors, social workers, general education teachers, and administrators need to continue the trauma-informed treatment that was in place in the classroom when the student is removed. Further research on the perceptions of SE teachers is needed to inform administrators and teacher preparatory programs of their training needs regarding the management of the internalizing and externalizing behaviors of children with DT.

References

Aideuis, D. (2007). Promoting attachment and emotional regulation of children with complex trauma disorder. *International Journal of Behavioral Consultation and Therapy, 3*(4), 546-555. http://dx.doi.org/10.1037/h0100822

Ainsworth, M.D. (1969). Object relations, dependency, and attachment: A theoretical review of the infant-mother relationship. *Child Development, 40*, 969-1025.

Ainsworth M.D, Blehar, M., Waters, E., Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Hillsdale NJ: Lawrence Erlbaum Associates.

Ainsworth, M.D. & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist, 46*(4), 333-341. doi:10.1037/0003-066X.46.4.333

Agee, J. (2009). Developing qualitative research questions: a reflective process. *International Journal of Qualitative Studies in Education, 22*(4), 431-447. doi: 10.1080/09518390902736512

Ali, A.M. & Yusof, H. (2011). Quality in qualitative studies: The case of validity, reliability, and generalizability. *Issues in Social and Environmental Accounting, 5*(1), 25-64. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=3&sid=7be12f3c-a4a1-4228-89e5-b87fd804827b%40sessionmgr104&hid=111

Alink, L. A., Cicchetti, D., Kim, J., & Rogosch, F. A. (2012). Longitudinal associations among child maltreatment, social functioning, and cortisol regulation. *Developmental Psychology, 48*(1), 224-236. doi:10.1037/a0024892

Alisic, E. (2012). Teachers' perspectives on providing support to children after trauma: A qualitative study. *School Psychology Quarterly, 27*(1), 51-59. doi:10.1037/a0028590

Amankwaa, L. (2016). Cheating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity, 23*(3), 121-127. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=3ebdff3_8-da37-447b-9135-1855d65a7dbf%40sessionmgr4006&vid=3&hid=4203

Anda, R.F., Butchart, A., Felitti, V.J., & Brown, D.W. (2010). Current issue: Building a framework for global surveillance of the public health implications of adverse childhood experiences. *American Journal of Preventive Medicine*, 3993-98. doi:10.1016/j.amepre.2010.03.015

Anda, R.F., Felitti, V.J., Bremner, J.D., Walker, J.D., Whitfield, C., Perry, B.D., & ... Giles, W.H. (2006). The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *European Archives Of Psychiatry and Clinical Neuroscience, 256*(3), 174-186. doi: 10.1007/s00406-005-0624-4

Andersen, S. L., Tomada, A., Vincow, E. S., Valente, E., Polcari, A., & Teicher, M.H. (2008). Preliminary evidence for the sensitive periods in the effect of childhood sexual abuse on regional brain development. *The Journal of Neuropsychiatry and Clinical Neurosciences, 20*(3), 292-301. doi:10.1176/appi.neuropsych.20.3.292

Aronoff, J. (2012). Parental nurturance in the standard cross-cultural sample: Theory, coding, and scores. *Cross-Cultural Research, 46* (4), 315–347. doi:10.1177/1069397112450851.

Aghayousefi, A., Saravani, S., Roghayeh, Z., Razeghi, F.S., Saeed, P. (2016). Prediction of students' academic performance based on attachment styles and different levels of adjustment. *Iranian Journal of Psychiatry and Clinical Psychology, 21*(4), 308-316. http://ijpcp.iums.ac.ir/article-1-2527-en.html

Bajaj, B. & Pande, N. (2015). Mediating the role of resilience in the impact of mindfulness on life satisfaction and affect as indices of subjective well-being. *Personality and Individual Differences. 93*, 63-67. doi:10.1016/j.paid.2015.09.005

Baldwin, D.V. (2013). Primitive mechanisms of trauma response: An evolutionary perspective on trauma-related disorders. *Neuroscience & Biobehavioral Reviews, 37*(8), 1549-1566. http://dx.doi.org.proxy1.ncu.edu/10.1016/j.neubiorev.2013.06.004

Balfanz, R., Byrnes, V., & Fox, J. (2014) Sent home and put off-track: The antecedents, disproportionalities, and consequences of being suspended in the ninth grade. *Journal of Applied Research on Children: Informing Policy for Children at Risk, 5(*2),1-18. Retrieved from: http://digitalcommons.library.tmc.edu/childrenatrisk/vol5/iss2/13

Bandura, A., Barbaranelli, C. Caprara, G.V., & Pastorelli, C. (1996). Multi-faceted impact of self-efficacy beliefs on academic functioning. *Child Development, 76*, 1206-1222. doi: 0009-3920/96/6703-0038$01.00]

Barfield, S., Dobson, C., Gaskill, R., & Perry, B.D. (2012). Neurosequential model of therapeutics in a therapeutic preschool: Implications for work with children with complex neuropsychiatric problems. International Journal of Play Therapy, 21(1), 30-44. doi: 10.1037/a0025955

Bar-Haim, Y., Dan, O., Eshel,Y., & Sagi-Schwartz, A. (2007). Predicting children's anxiety from early attachment relationships. *Journal of Anxiety Disorders, 21*, 1061–1068. doi:10.1016/j.janxdis.2006.10.013

Barnum, E.L. (2017). Attachment, self-esteem, and subjective well-being among survivors of childhood sexual trauma. *Journal of Mental Health Counseling, 39*(1), 39-55. doi: 10.17744/mehc.39.1.04

Barron, I., & Abdallah, G. (2015). Intergenerational trauma in the occupied Palestinian territories: Effect on children and promotion of healing. *Journal of Child & Adolescent Trauma, 8*(2), 103-110. doi:10.1007/s40653-015-0046-z

Becker-Weidman, A. (2006). Treatment for children with trauma-attachment disorders: Dyadic developmental psychotherapy. *Child and Adolescent Social Work Journal, 23*(2), 147-176.

Bebe, B., Jaffe, J., Markese, S., Buck, K., Chen, P.C., …Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction. *Attachment & Human Development, 12*(1-2), 3-141. doi: 10.1080/14616730903338985

Beller, E.K. (1955). Dependency and independence in young children. *Journal of Genetic Psychology, 87*, 25-35. https://doi.org/10.1080/00221325.1955.10532913

Bethell, C.D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs, 33*(12), 2106-2115. doi: 10.1377/hlthaff.2014.0914

Bender, K. (2012). The mediating effect of school engagement in the relationship between youth maltreatment and juvenile delinquency. *Children & Schools, 34*(1), 37-48. doi: 10.1093/cs/cdr001

Black, D.S. & Fernando, R. (2014). Mindfulness training and classroom behavior among lower-income and ethnic minority elementary school children. *Journal of Child Family Studies, 23,* 1242-1246. doi:10.1007/s10826-013-9784-4

Blodgett, C. (2015). *No school alone: How community risks and assets contribute to school and youth success*. Retrieved from: http://ext100.wsu.edu/ahec/research/

Bogels, S., Hoogstad, B., van Dun, L., de Schutter, S., & Restifo, K. (2008). Mindfulness training for adolescents with externalizing disorders and their parents. Behavioural and Cognitive Psychotherapy, 36, 193-209. doi:10.1017/S1352465808004190

Bowlby, J. (1982). *Attachment and loss. Vol. 1: Attachment (2nd ed.*). New York: Basic Books.

Bradshaw, C.P., Mitchell, M.M, & Leaf, P. (2012). Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions, 12*(3), 133-148. doi:10.1177/1098300709334798

Bradshaw, C.P., Waasdorp, T.E., & Leaf, P.J. (2015). Examining variation in the impact of school-wide positive behavioral interventions and supports: Findings from a randomized controlled effectiveness trial. *Journal of Educational Psychology, 107*(2), 546-557. doi:10.1037/a0037630

Brandell, J.R. (2010). Contemporary psychoanalytic perspectives on attachment. *Psychoanalytic Social Work, 17*, 132-157. doi: 10.1080/15228878.2010.512265

Branthwaite, A., & Patterson, S. (2012). In search of excellence: The influence of Peter Cooper on qualitative research. *International Journal of Market Research, 54*(5), 635-658. doi: 10.2501/IJMR-54-5-635-658

Bredart, A., Marrel, A., Abetz-Webb, L., & Acquadro, C. (2014). Interviewing to develop patient-reported outcome (PRO) measures for clinical research: Eliciting patients' experience. *Health and Quality of Life Outcomes*. doi:10.1186/1477-7525-12-15

Briggs-Gowan, M.J., Carter, A.S., Clark, R., Augustyn, M., McCarthy, K.J., & Ford, J.D. (2010). Exposure to potentially traumatic events in early childhood: differential links to emergent psychopathology. *Journal of Child Psychology and Psychiatry, 51*(10), 1132-1140. doi:10.1016/j.comppsych.2011.12.006

Brokenleg, M. (2012). Transforming cultural trauma into resiliency. Reclaiming Children and Youth, 21(3), 10-16. http://reclaimingjournal.com/

Bombay, A., Matheson, K., & Anisman, H. (2014). The intergenerational effects of Indian residential schools: Implications for the concept of historical trauma. *Transcultural Psychiatry, 5*(3), 320-338. doi:10.1177/1363461513503380

Bucker, J., Kapczinski, F., Post, R., Cereser, K.M., Szobot, C., Yatham, L.N., …Kauer-Sant Anna, M. (2012). Cognitive impairment in school-aged children with early trauma. *Comprehensive Psychiatry, 53*, 75 - 764. http://dx.doi.org/10.1016/j.comppsych.2011.12.006

Burke, C.A. (2010). Mindfulness-based approaches with children and adolescents: A preliminary review of current research in an emergent field. *Journal of Child and Family Studies, 19*(2), 133–144. doi: 10.1007/s10826-009-9282-x

Caparara, G.V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G.M., Barbarelli, C., & Bandura, A. (2008). Longitudinal analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement. *Journal of Educational Psychology, 100*(3), 525-534. doi: 10.1037/0022-0663.100.3.525

Carpenter, L.L., Carvalho, J.P., Tyrka, A.R., Wier, L.M., Mello, A.F., Mello, M.F., & ... Price, L.H. (2007). Decreased adrenocorticotropic hormone and cortisol responses to stress in healthy adults reporting significant childhood maltreatment. *Biological Psychiatry, 62*, 1080-1087. doi:10.1016/j.biopsych.2007.05.002

Carter, E.W. (2011). Self-determination interventions for students with and at risk for emotional and behavioral disorders: Mapping the knowledge base. *Behavioral Disorders, 36*(2), 100-116. doi: 10.1002/pits.21651

Cheng, E.R., Park, H., Robert, S.S., Palta, M., & Witt, W.P. (2014). Impact of county disadvantage on behavior problems among US children with cognitive delay. *Research & Practice, 104*(11), 2114-2121. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=e2b77e8b-d5c0-49b1-a634-17f7f7acb8fb%40sessionmgr4006&vid=2&hid=4203

Cho, H., Wehmeyer, M.L., & Kingston, N.M. (2012). The effect of social and classroom ecological factors on promoting self-determination in elementary school. *Preventing School Failure, 56*(1), 19-28. doi: 10.1080/1045988X.2010.548419

Cicchetti, D. (2004). *An odyssey of discovery: Lessons learned through three decades of research on child maltreatment,* Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=edswss&AN=000225018300015&site=eds-live

Cloitre, M., Stolbach, B.C., Herman, J.L., van der Kolk, B., Pynoos, R., Wang, J., & Petkova, E. (2009). A developmental approach to complex PTSD: childhood and adult cumulative trauma as predictors of symptom complexity. *Journal of Traumatic Stress*, 22(5), 399-408. doi:10.1002/jts.20444

Cole, S., Gregory, M., Eisner, A., Suarez, A., & Cho, E. (2009). *Helping traumatized children learn: Supportive school environments for children traumatized by family violence*. Massachusetts Advocates for Children: Massachusetts. Retrieved from: http://traumasensitiveschools.org/tlpi-publications/

Cook, A., Spinazzola, J., Ford, J., Lanktree, C., Blaustein, Cloitre M., DeRosa, R., … van der Kolk, B. (2005). Complex trauma in children & adolescents. *Psychiatric Annals, 35*(5), 390-400.

Coholic, D., Eys, M., & Lougheed, S. (2012). Investigating the effectiveness of an arts-based and mindfulness-based group program for the improvement of resilience in children in need. *Journal of Child and Family Studies, 21*(5), 833-844. doi: 10.1007/s10826-011-9544-2

Conduct Problems Prevention Research Group. (2010). The effects of a multiyear universal social-emotional learning program: The role of student and school characteristics. *Journal of Consulting and Clinical Psychology, 78*, 156-168. doi:10.1016/j.biotechadv.2011.08.021

Craig, S.E. (2008). *Reaching and teaching children who hurt: Strategies for your classroom.* Baltimore, MD: Paul H. Brookes Publishing.

D'Andrea, W., Ford, J., Stolbach, B., Spinazzola, J., & van der Kolk, B.A. (2012). Understanding interpersonal trauma in children: What we need is a developmentally appropriate trauma diagnosis. *American Journal of Orthopsychiatry, 82*(2), 187-200. doi: 10.1111/j.1939-0025.2012.01154x

Danese, A. & McEwen, B.S. (2010). Adverse childhood experiences, allostasis, allostatic load, and age-related disease. *Physiology & Behavior, 106,* 29-39. doi:10.1016/j.physbeh.2011.08.019

Dannlowski, U., Stuhrmann, A., Beutelmann, V., Zwanzger, P., Lenzen, T., Groegard, D., Domschke, K. … Kugel, H. (2012). Limbic scars: Long-term consequences of childhood maltreatment revealed by functional and structural magnetic resonance imaging. *Biological Psychiatry, 71*(4), 286-293. doi:10.1016/j.biopsych.2011.10.021

Dawson, A.E., Allen, J. P., Marston, E.G., Hafen, C.A., & Schad, M.M. (2014). Adolescent insecure attachment as a predictor of maladaptive coping and externalizing behaviors in emerging adulthood. *Attachment & Human Development, 16,* 462–478. doi: 10.1080/14616734.2014.934848

DeBellis, M.D. (2001). Developmental traumatology: The psychobiological development of maltreated children and its implications for research, treatment, and policy. *Development and Psychopathology, 13*(3), 539.

DeBellis, M.D., Woolley, D.P., & Hooper, S.R. (2013). Neuropsychological findings in pediatric maltreatment: Relationship of PTSD, dissociative symptoms, and

abuse/neglect indices to neurocognitive outcomes. *Child Maltreatment,18*(3), 171-183. Retrieved from: http://cmx.sagepub.com.proxy1.ncu.edu/search?author1=De%20Bellis,%20MD&fulltext=Neuropsychological%20Findings%20in%20Pediatric%20Maltreatment:%20Relationship%20of%20PTSD,%20Dissociative%20Symptoms,%20and%20Abuse/Neglect%20Indices%20to%20Neurocognitive%20Outcomes&pubdate_year=2013&volume=18&firstpage=171&submit=yes

De Bellis, M. D., Hooper, S. R., Woolley, D. P., & Shenk, C. E. (2010). Demographic, Maltreatment, and Neurobiological Correlates of PTSD Symptoms in Children and Adolescents. Journal of Pediatric Psychology, 35(5), 570-577. doi:10.1093/peps/jsp116

Delima, J. & Vimpani, G. (2011). The neurobiological effects of childhood maltreatment: An often overlooked narrative related to the long-term effects of early childhood trauma? *Family Matters, 89*, 43-54. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=1b30f4_86-d2bd-4909-9559-ea1f2f507448%40sessionmgr4005&vid=2&hid=4205

DePrince, A.P., Windier, K.M., & Combs, M.D. (2009). Executive function performance and trauma exposure in a community sample of children. *Child Abuse & Neglect, 33*, 353-361. doi:10.1016/j.chiabu.2008.08.002

de Vries, S.A., Hove, M., Stamps, G.M., & Escher, J.J. (2016). Adolescent-parent attachment and externalizing behavior: The mediating role of individual and social factors. *Journal of Abnormal Child Psychology*, *44*(2), 283-294. doi:10.1007/s10802-015-9999-5

Diamond, A., & Lee, K. (2011). Interventions shown to aid executive function development in children 4–12 Years old. *Science, 333*(6045), 959–964. http://doi.org/10.1126/science.1204529

Diefenbach, T. (2008). Are case studies more than sophisticated storytelling? Methodological problems of qualitative empirical research mainly based on semi-structured interviews. *Qual Quant, 43*, 875-894. doi: 10.1007/s11135-008-9164-0

Dicke, T., Parker, P. D., Holzberger, D., Kunter, M., & Leutner, D. (2015). Investigating longitudinal changes in beginning teachers' efficacy and emotional exhaustion: can they be predicted by professional knowledge? *Contemporary Educational Psychology, 41*, 62-72. Retrieved from: http://dx.doi.org.proxy1.ncu.edu/10.1016/j.tate.2015.01.013

Dobson, K. S., & Dozois, D. J. A. (2001). Historical and philosophical bases of the cognitive-behavioral therapies. In K. S. Dobson (Ed.), *Handbook of cognitive-behavioral therapies* (2nd ed., pp. 3–39). New York: Guilford Press.

Drake, K., Belsky, J., & Pasco Fearon, R.M. (2014). From early attachment to engagement with learning in school: The role of self-regulation and persistence. *Developmental Psychology, 50*(5), 1350-1362. doi:10.1037/a0032779

Duke, N.N., Pettingell, S.L., McMorris, B.J., & Borowski, I.W. (2010). Associations with multiple types of adverse childhood experiences. *Pediatrics, 125*(4), 778- 786. doi:10.1542/peds.2009-0597

Durlak, J.A., Weissberg, R.P., Dymnicki, A B., Taylor, R. D., & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-

based universal interventions. *Child Development, 82,* 405-432. doi:10.1111/j.1467-8624.2010.01564.x

Eckenrode, J, Laird, M., & Doris, J. (1993). School performance and disciplinary problems among abused and neglected children. *Developmental Psychology, 29*(1), 53-62. doi:10.1037/0012-1649.29.1.53

Edmunds, J.M., Brodman, D.M., Ringie, V.A., Read, K.L., Kendall, P.C., & Bedas, R.S. (2017). Examining adherence to components of cognitive behavioral therapy for youth anxiety after training and consultation. *Professional Psychology: Research and Practice, 48*(1), 54-61. doi: 10.1037/pro0000100

Erozkan, A. (2016). The link between types of attachment and childhood trauma. *Universal Journal of Educational research, 4*(5), 1071-1079. doi:10.13189/ujer.2016.040517

Esin, C., Fathi, M., Squire, C. (2014). Narrative analysis: The constructionist approach. *Sage Research Methods*, Retrieved from: http://srmo.sagepub.com.proxy1.ncu.edu/view/the-sage-handbook-of-qualitative-data-analysis/n14.xml?rskey=zg86Wi

Elzinga, B.M., Roelofs, K., Tollenaar, M.S., Bakvis, P., van Pelt, J., & Spinhoven, P. (2008). Diminished cortisol responses to psychosocial stress associated with lifetime adverse events: A study among healthy young subjects. *Psychoneuroendocrinology, 33*(2), 227-237. doi:10.1016/j.psyneuen.2007.11.004

Esquivel, G.B., Doll, B., & Oades-Sese, G.V. (2011). Introduction to the special issue: Resilience in Schools. *Psychology in the Schools, 48*(7), 649-651. doi: 10.1002/pits.20585

Evans, K.R., Lester, J. N., & Anfara Jr., V.A. (2013). Restorative justice in education: What we know so far. *Middle School Journal, 44*(5), 57-63.Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=21&sid=76138408-01da-4738-8a7f-a47143aa6276%40sessionmgr111&hid=108

Fabelo, T., Thompson, M.D., Plotkin, M., Carmichael, D., Marchbanks, M.P.III, & Booth, E.A. (2011). *Breaking schools' rules: A statewide study of how school discipline relates to students' success and juvenile justice involvemen*t. Council of State Governments Justice Center: New York. Retrieved from: http://csgjusticecenter.org/youth/breaking-schools-rules-report/

Feierman, J., Kleinman, R.M., Lapp, D., Luse, M.N., Rieser, L., & Schwartz, R.G. (2013). Stemming the tide: Promising legislation to reduce school referrals to the courts. *Family Court Review*, 51(3), 409-417. doi:10.1111/fcre.12037

Finkelhor, D., Turner, H.A., Shattuck, A., & Hamby, S.L. (2013). Violence, crime, and abuse exposure in a national sample of children and youth: An update. *Journal of American Medical Association Pediatrics, 167*(7), 614-621. doi:10.1001/jamapediatrics.2013.42

Flannery, K. B., Fenning, P., Kato, M. M., & McIntosh, K. (2014). Effects of school-wide positive behavioral interventions and supports and fidelity of implementation on problem behavior in high schools. *School Psychology Quarterly*, *29*(2), 111-124. doi:10.1037/spq0000039

Fonseca, S. (2010). Are schools safe and nurturing spaces of learning? *Our Schools / Our Selves, 19*(3), 87-106. Retrieved from:

http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=29&sid=478c7aaa-f062-4b8a-b6ec-3479190a2eef%40sessionmgr198&hid=120

Font, S. & Maguire-Jack, K. (2013). Academic engagement and performance: Estimating the impact of out-of-home care for maltreated children. *Children and Youth Services, 35*, 856-864. Retrieved from: http://dx.doi.org/10.1016/j.childyouth.2013.02.010

Ford, J.D., Chapman, J., Connor, D.F., & Cruise, K.R. (2012).Complex trauma in secure juvenile justice settings. *Criminal Justice & Behavior, 39*(6), 694-724. doi: 10.1177/0093854812436957

Francis, J. J., Johnston, M. J., Robertson, C. R., Glidewell, L., Entwistle, V., Eccles, M. P., & Grimshaw, J. M. (2010). What is an adequate sample size? Operationalizing data saturation for theory-based interview studies. *Psychology and Health, 25*(10),1229-1245. doi: 10.1080/08870440903194015

Franklin, T.T, Holger, R., Weiss, I.C., Graff, J., Linder, N., Michalon, A., Vizi, S….Mansuy, I. (2010). Epigenetic transmission of the impact of early stress across generations. *Biological Psychiatry, 68*, 408-425. doi:10.1016/j.biopsych.2010.05.036

Freud A, & Burlingham, D. (1942). *Young children in war-time: A year's work in a residential war nursery*. London: George Allen & Unwin.

Gabowitz, D., Zucker, M., & Cook, A. (2008). Neuropsychological assessment in clinical evaluation of children and adolescents with complex trauma. *Journal of Child and Adolescent Trauma, 1*, 163-178. doi: 10.1080/19361520802003822

Gibbs, S., & Powell, B. (2012). Teacher efficacy and pupil behaviour: The structure of teachers' individual and collective beliefs and their relationship with numbers of pupils

excluded from school. *British Journal of Educational Psychology, 82*(4), 564-584. doi:10.1111/j.2044-8279.2011.02046.x

Green, J., Liem, G.D., Martin, A.J., Colmar, S., Marsh, H. W., & McInerney, D. (2012). Academic motivation, self-concept, engagement, and performance in high school: Key processes from a longitudinal perspective. *Journal of Adolescence, 35*, 1111-1122. doi:10.1016/j.adolescence.2012.02.016

Greeson, J.K., Briggs, E.C., Layne, C.M., Belcher, H.M., Ostrowski, S.A., & Kim, S. (2014). Traumatic childhood experiences in the 21st century: Broadening and building on the ACE studies with data from the national childhood traumatic stress network. *Journal of Interpersonal Violence, 29*(3), 536-556. doi: 10.1177/0886260513505217

Godbout, N., Daspe, M., Lussier, Y., Sabourin, S., Dutton, D., Hebert, M. (2016). Early exposure to violence, relationship satisfaction in adolescents and emerge in adults: The role of romantic attunement. *Psychological Trauma, Theory, Research, Practice, and Policy, 9*(2), 127-137. doi: 10.1037/tra0000136

Guba, E.G., & Lincoln, Y.S. (1989). *Fourth generation evaluation*. Sage Publication: Thousand Oaks, CA

Hanson, J. L., Nacewicz, B.M., Sutterer, M. J., Cayo, A.A., Schaefer, S.M., Rudolph, K.D., & ... Davidson, R.J. (2015). Behavioral problems after early life stress: Contributions of the hippocampus and amygdala. *Biological Psychiatry, 77*(4), 314-323. doi:10.1016/j.biopsych.2014.04.020

Hardaway, C.R., Larkby, C.A., & Cornelius, M.D. (2014). Socioemotional adjustment as a mediator of the association between exposure to community violence and

academic performance in low income adolescents. *Psychology of Violence, 4*(3), 281-293. doi:10.1037/a0036375

Harlow, H. F., & Zimmermann, R.R. (1959). Affectional responses in the infant monkey. *Science, 130*, 421-432. doi: 10.1111/j.1469-7610.1962.tb02047.x

Hawkins, J.D., Smith, B.H., & Catalano, R.F. (2004). Social development and social and emotional learning. In Zins, J.E., Weissberg, R.P., Wang, M.C., & Wal- berg, H.J. (Eds.), Building academic success on social and emotional learning: What does the research say? (pp. 135–150). New York: Teachers College Press.

Helmond, P., Overbeek, G., Brugman, D., & Gibbs, J. C. (2014). A meta-analysis on cognitive distortions and externalizing problem behavior: associations, moderators, and treatment effectiveness. *Criminal Justice and Behavior, 42*, 245–262. https://doi.org/10.1177/0093854814552842

Hodas, G. R. (2006). Responding to childhood trauma: The promise and practice of trauma informed care. *Pennsylvania Office of Mental Health and Substance Abuse Services*, 1-77. Retrieved from: http://www.childrescuebill.org/VictimsOfAbuse/RespondingHodas.pdf

Hodgdon, H.B., Kinnibaugh, K., Gabowitz, D., Blaustein, M., & Spinazzola, J. (2013). Development and Implementation of trauma-informed programming in youth residential treatment centers using the ARC framework. *Journal of Family Violence, 28*, 679-692. doi: 0.1007/s10896-013-9531-z

Hocking, E.C., Simons, R.M., & Surette, R.J. (2016). Attachment style as a mediator between childhood maltreatment and the experience of betrayal trauma as an assault. *Child Abuse & Neglect, 52*, 94-101. doi: 10.1016/j.chiabu.2016.01.001

Horner, R. H., Sagai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3), 133-144. doi: 10.1177/1098300709332067

Howell, K.H. & Miller-Graff, L.E. (2014). Protective factors associated with resilient functioning in young adulthood after childhood exposure to violence. *Child Abuse & Neglect, 38,* 1985-1994. doi:10.1016/j.chiabu.2014.10.010

Irvine, A., Drew, P., & Sainsbury, R. (n.d). 'Am I not answering your questions properly?' Clarification, adequacy and responsiveness in semi-structured telephone and face-to-face interviews. Qualitative Research, 13(1), 87-106. Retrieved from: http://qrj.sagepub.com.proxy1.ncu.edu/content/13/1/87

Jaffee, S. R., McFarquhar, T., Stevens, S., Ouellet-Morin, I., Melhuish, E., & Belsky, J. (2015). Interactive effects of early and recent exposure to stressful contexts on cortisol reactivity in middle childhood. *Journal of Child Psychology and Psychiatry, 56*(2), 138-146. doi:10.1111/jcpp.12287

Jones, K.L. & Smith, D.W. (1973). Recognition of the fetal alcohol syndrome in early infancy. *The Lancet, (302)*, 999-1001. Retrieved from: http://dx.doi.org.proxy1.ncu.edu/10.1016/S0140-6736(73)91092-1

Kahlke, R.M. (2014). Generic qualitative approaches: Pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods, 13*, 37-52. Retrieved from: http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/19590/16141

Kim, J., & Cicchetti, D. (2010). Longitudinal pathways linking child maltreatment,

emotion regulation, peer relations, and psychopathology. *Journal of Child Psychology and Psychiatry, and Allied Disciplines, 51*(6), 706-716. doi:10.1111/j.1469-7610.2009.02202.x

Koback, R., Little, M., Race, E., & Acosta, M. (2001). Attachment disruptions in seriously emotionally disturbed children: Implications for treatment. *Attachment and Human Development, 3*(3), 243-258. http://dx.doi.org/10.1080/14616730110096861

Kochanska, G.; Kim, S. (2013). Early attachment organization with both parents and future behavior problems: From infancy to middle childhood". *Child Development, 84*(1), 283–296. doi:10.1111/j.1467-8624.2012.01852.x.

Korinek, L. & deFur, S.H. (2016). Supporting student self-regulation to access the general education curriculum. *Teaching Exceptional Children, 45*(5), 232-242. doi: 10.1177//004005915626134

Korpershoek, H., Harms, T., de Boer, H., van Kuijk, M., & Doolaard, S. (2016). Management strategies and classroom management programs on students' academic, behavioral, emotional, and motivational outcomes. *Review of Educational Research, 86*(3), 643-680. doi:10.3102/0034654315626799

Landrum, B., & Garza, G. (2015). Mending fences: Defining the domains and approaches of quantitative and qualitative research. *Qualitative Psychology, 2*(2), 199-209. doi:10.1037/qup0000030

Langley, A. K., Nadeem, E., Kataoka, S. H., Stein, B. D., & Jaycox, L. H. (2010). Evidence-based mental health pro- grams in schools: Barriers and facilitators of successful

implementation. *School Mental Health,* 2, 105–113. Doi: https://doi.org/10.1007/s12310-010-9038-1

Lassri, D., Luyten, P., Cohen, G., & Shahar, G. (2016). The effect of childhood emotional maltreatment on romantic relationships in young adulthood: A double mediation model involving self-criticism and attachment. *Psychological Trauma: Theory, Research, Practice, and Policy*, *8*(4), 504-511. doi:10.1037/tra0000134

Lee, L., Semple, R. J., Rosa, D., & Miller, L. (2008). Mindfulness- based cognitive therapy for children: Results of a pilot study. *Journal of Cognitive Psychotherapy, 22*, 15–28. doi: 10.1891/0889.8391.22.1.15

Leiter, J. (2007). School performance trajectories after the advent of reported maltreatment. *Children and Youth Services Review, 29*, 363-382. doi: 10.1016/j.childyouth.2006.09.002

Liew, J., Johnson, A.Y., Smith, T.R., & Thoemmes, F. (2011). Parental expressivity, child physiological and behavioral regulation and child adjustment: Testing a three path mediation model. *Early Education and Development, 22*(4), 549-573. doi: 10.1080/10409289.2010.481551

Losen, D., Hodson, C., Keith II, M.A., Morrison, K., & Belway, S. (2015). Are we closing the school discipline gap? University of California. Los Angeles. Retrieved from: http://escholarship.org/uc/item/2t36g571

Lovallo, W.R., Farag, N.H., Sorocco, K.H., Acheson, A., Cohoon, A.J., & Vincent, A. S. (2013). Early life adversity contributes to impaired cognition and impulsive behavior: studies from the Oklahoma Family Health Patterns Project. Alcoholism, Clinical And *Experimental Research, 37*(4), 616-623. doi:10.1111/acer.12016

Madigan, S., Brumariu, L.E., Villani, V., Atkinson, L., & Lyons-Ruth, K. (2016).

Representational and questionnaire measures of attachment: A meta-analysis of relations to child internalizing and externalizing problems. *Psychological Bulletin, 142*(4), 367-399. doi: 10.1037/bul0000029

Maring, E. & Koblinsky, S. (2012). Teachers' challenges, strategies, and support needs in schools affected by community violence: A qualitative study. *Journal of School of Health, 83*(6), 379-388. doi:10.1111/josh.12041

Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews . *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 11*(3). Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/1428/3027

Maier, S.F., Amat, J., Baratta, M.V., Paul, E., & Watkins, L.R. (2006). Behavioral control, the medial prefrontal cortex, and resilience. *Dialogues in Clinical Neuroscience, 8*(4), 397-406. doi: 10.1016/j.ynstr.2014.09.003

Mayer, I. (2015). Qualitative research with a focus on qualitative analysis. *International Journal Of Sales, Retailing & Marketing, 4*(9), 53-67. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=3&sid=b21ce74f-ee1e-49cd-9dba-cec09bf204ed%40sessionmgr4007&hid=4108

McBride, A.M., Chung, S., & Robertoson, A. (2016). Preventing academic disengagement through a middle school-based social and emotional learning program. *Journal of Experiential Education, 39*(4), 370-385. doi: 10.1177/1053825916668901

McClelland, M.M. & Cameron, C.E. (2012). Self-regulation in early childhood: Improving conceptual clarity and developing ecologically valid measures. *Child Development Perspectives, 6*(2), 136-142. doi:10.1111/j.1750-8606.2011.00191.x

McCray, C.R. & Beachum, F.D. (2014). Countering plutocracies: increasing autonomy and accountability through culturally relevant leadership. *School Leadership & Management, 34(4),* 392-413. doi:10.1080/13632434.2014.943171

McCoy, D.C., Roy, A. L., & Sirkman, G.M. (2013). Neighborhood crime and school climate as predictors of elementary school academic quality: A cross-lagged panel analysis. *American Journal of Community Psychology, 52*(1–2), 128–140. doi: 10.1007/s10464-013-9583-5

McCormick, M.P., Capella, E., O'Connor, E.E., & McClowry, S.G. (2015). Context matters for social-emotional learning: Examining variation in program impact by dimensions of school climate. *American Journal of Community Psychology, 56*, 101-119. doi: 10.1007/s10464-015-9733-z

McLafferty, M., Armour, C., O'Neill, S., Murphy, S., Ferry, F., & Bunting, B. (2016). Suicidality and profiles of childhood adversities, conflict related trauma and psychopathology in the Northern Ireland population. *Journal of Affective Disorders, 200*, 97-102. doi: 10.1016/j.jad.2016.04.031

McMahon, B. (2015). Seeing Strengths in a Rural School: Educators' Conceptions of Individual and Environmental Resilience Factors. *Journal for Critical Education Policy Studies (JCEPS), 13*(1), 238-267. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=b8d30b20-d0c7-47c6-9a28-76b5879ba1ac%40sessionmgr114&hid=121

Mercer, J. (2014). Examining dyadic developmental psychotherapy as a treatment for adopted and foster children: A review of the research. *Research on Social Work Practice, 24*(6),

715-724. doi: 10.1177/1049731513516514

Metsapelto, R., Pakarinen, E., Kiru, N., Poikkeus, A., Lerkkanen,M., & Nurmi, J. (2014). Developmental dynamics between children's externalizing problems, task-avoidant behavior, and academic performance in early school years: A 4-year follow-up. *Journal of Educational Psychology, 107*(1), 246-257. doi: 10.1037/a0037389

Midgley, N. (2007). Anna Freud: The Hampstead war nurseries and the role of the direct observation for psychoanalysis. *International Journal of Psychoanalysis, 88*, 939-959. doi: 10.1516/ijpa.2007.939

Miles, M.B., Huberman, A.M., & Saldana, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook.* Los Angeles, CA: Sage Publications

Mills, A. J., Durepos, G. & Wiebe, E. (2010). *Encyclopedia of case study research*. Thousand Oaks, CA: SAGE Publications Ltd. doi: 10.4135/9781412957397

Milot, T., Ethier, L.S., St.Laurent, D., & Provost, M.A. (2010). The role of trauma symptoms in the development of behavioral problems in maltreated preschoolers. *Child Abuse & Neglect, 34*, 225-234. doi:10.1016/j.chiabu.2009.07.006

Molsbee, S. (2008). Zeroing out zero tolerance: Eliminating zero tolerance policies in Texas schools, *Texas Tech Law Review, 40,* 325–334. Retrieved From:http://www.lexisnexis.com.proxy1.ncu.edu/hottopics/lnacademic/?shr=t&csi=139170&sr=TITLE("ZEROING OUT ZERO TOLERANCE ELIMINATING ZERO TOLERANCE POLICIES IN TEXAS SCHOOLS") and date is 2008

Morrison, B., Blood, P., & Thorsborne, M. (2005). Practicing Restorative Justice in School Communities: Addressing the Challenge of Culture Change. *Public Organization Review, 5*(4), 335-357. doi:10.1007/s11115-005-5095-6

Morton, B.M. (2015). Barriers to academic achievement for foster youth: the story behind the statistics. *Journal of Research in Childhood Education, 29*, 476-491. doi: 10.1080/02568543.2015.1073817

Muller, R.T., Thornback, K., & Bedi, R. (2012). Attachment as a mediator between childhood maltreatment and adult symptomology. Journal of Family Violence, 27, 243-255. doi: 10.1007/s10896-012-9417-5

Mullet, J. H. (2014). Restorative Discipline: From Getting Even to Getting Well. Children & Schools, 36(3), 157-162. doi:10.1093/cs/cdu011

Murali, R., & Chen, E. (2005). Exposure to violence and cardiovascular and neuroendocrine measures in adolescents. *Annals of Behavioral Medicine: A Publication of The Society Of Behavioral Medicine, 30*(2), 155-163. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=15&sid=f005de8f-7798-4c3a-a1a9-c254407d5139%40sessionmgr4005&hid=4203

National Child Traumatic Stress Network Schools Committee (NCTSN). (2008). *Child Trauma Toolkit for Educators.* Los Angeles, CA & Durham, NC: National Center for Child Traumatic Stress. Retrieved from: http://rems.ed.gov/docs/NCTSN_ChildTraumaToolkitForEducators.pdf

Nadeem, E., Jaycox. L.H., Kataoka, S.H., Langley, A.K.,& Stein, B.D. (2011). Going to scale: Experiences implementing a school-based trauma intervention. *School Psychology Review, 40*(4), 549-568. Retrieved from:

http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/detail/detail?vid=1&sid=a3b4f782-e3b5-49ae-a94f-b5ceae68a4ae%40sessionmgr114&hid=108&bdata=JnNpdGU9ZWRzLWxpdmU%3d#db=ehh&AN=70503519

Newman, E. & Kaloupek, D. (2009). Overview of research addressing ethical dimensions of participation in traumatic stress studies: Autonomy and beneficence. *Journal of Traumatic Stress, 22*(6), 595-602. doi: 10.1002/jts.20465

Nocera, E. J., Whitbread, K. M., & Nocera, G. P. (2014). Impact of School-wide Positive Behavior Supports on Student Behavior in the Middle Grades. *Research in Middle Level Education Online, 37*(8), 1-14. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/detail/detail?sid=76138408-01da-4738-8a7f-a47143aa6276%40sessionmgr111&vid=19&hid=108&bdata=JnNpdGU9ZWRzLWxpdmU%3d #db=ofs&AN=96539486

Oleinik, A. (2011). Mixing quantitative and qualitative content analysis: Triangulation at work. *Quality and Quantity, 45*(4), 859-873. doi:http://dx.doi.org/10.1007/s11135-010-9399-4

Oliver, R.M. & Reschley, D.J. (2010). Special education teacher preparation in classroom management: Implications for students with emotional and behavioral disorders. *Behavioral Disorders, 35*(3), 188-199. doi:10.4324/9780203817032.ch17

O'Neill, L., Guenette, F., & Kitchenham, A. (2010). 'Am I safe here and do you like me?' Understanding complex trauma and attachment disruption in the classroom. *British Journal of Special Education, 37*(4), 190-197. doi: 10.1111/j.1467-8578.2010.00477.x

Opdenakker, R. (2006). Advantages and disadvantages of four interview techniques in qualitative research. *Forum: Qualitative Social Research, 7*(4), 1-13. Retrieved from: http://www.qualitative-research.net/fqs/

Pasco Fearon, R.P., Bakermans-Kranenburg, M.J., van Ijzendoorn, M.H., Lapsley, A., & Roisman, G. I. (2010). The significance of insecure attachment and disorganization in the development of children's externalizing behavior: a meta-analytic study. *Child Development, 81*(2), 435-456. doi:10.1111/j.1467-8624.2009.01405.x

Patton, M.Q. (2014). *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. Sage Publications: Thousand Oaks, CA.

Perlman, M.R., Dawson, A.E., Dardis, C.M., Egan, T. & Anderson, T. (2016) The Association Between Childhood Maltreatment and Coping Strategies: The Indirect Effect Through Attachment. *The Journal of Genetic Psychology, 177(*5), 156-171. doi: 10.1080/00221325.2016.1220912

Perry, B. D. (2009). Examining Child Maltreatment Through a Neurodevelopmental Lens: Clinical Applications of the Neurosequential Model of Therapeutics. *Journal of Loss & Trauma*, *14*(4), 240-255. doi:10.1080/15325020903004350

Perry, D., & Daniels, M. (2016). Implementing Trauma-Informed Practices in the School Setting: A Pilot Study. *School Mental Health, 8*(1), 177. doi:10.1007/s12310-016-9182-3

Peters, J. H. (2012). Are they ready? Final year pre-service teachers' learning about managing student behaviour. *Australian Journal of Teacher Education*, *37*(9), 18-42.

Retrieved from: http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ995232

Phifer, L.W. & Hull, R. (2016). Helping students heal: Observations of trauma-informed practices in the schools, *School Mental Health, 8*, 201-205. doi:10.1007/s12310-016-9183-2

Pitney, W. A. (2004). Strategies for Establishing Trustworthiness in Qualitative Research. *Athletic Therapy Today*, *9*(1), 26-28. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=ee952633-5b47-4380-b5b4-4ba88ca3efd7%40sessionmgr101&vid=3&hid=108

Poehlmann, J. (2005). Representations of attachment relationships in children of incarcerated mothers. *Child Development, 76*(3), 679-696. Retrieved from: http://dx.doi.org.proxy1.ncu.edu/10.1111/mono.12020

Prasad, M.R.., Kramer, L.A., & Ewing-Cobbs, L. (2004). Cognitive and neuroimaging findings in physically abused preschoolers. *Archives of Disease in Children, 90*, 82-82. doi: 10.1136/adc.2003.045583

Prather, W., & Golden, J.A. (2009). A behavioral perspective of childhood trauma and attachment issues: Toward alternative treatment approaches for children with a history of abuse. *International Journal of Behavioral and Consultation Therapy, 5*(1)., 56-74. Retrieved from: http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ861353

Ramsdal, G., Breivik, S., & Wynn, R. (2015). Parent-child attachment, academic performance, and the process of high-school dropout: A narrative review. *Attachment & Human*

Development, 17(5), 522-545. doi: 10.1080/14616734.2015.1072224

Rapport, F. (2010). Summative analysis: A qualitative method for social science and health research. *International Journal of Qualitative Methods, 9,* 270–290. https://doi.org/10.1177/160940691000900303

Rholes, W.S., Paetzoid, R.L., & Kohn, J.L. (2016). Disorganized attachment mediates the link from early trauma to externalizing behavior in adult relationships. *Personality and Individual Differences, 90,* 61-65. doi: 10.1016/j.paid.2015.10.043

Riggs, N., Greenberg, M., Kusche, C., & Pentz, M. (2006 The mediational role of neurocognition in the behavioral outcomes of a social-emotional prevention program in elementary school students: Effects of the PATHS curriculum. Prevention Science, 7(1), 91-102. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=2&sid=269b536b-f990-4e9e-b30d-002c632616e7%40sessionmgr4002&hid=4203

Romano, E., Babchisin, L., Marquis, R., & Frechette, S. (2015). Childhood maltreatment and educational outcomes. *Trauma, Violence, & Abuse, 16*(4), 418-437. doi:10.1177/1524838014537908

Rogue, L., Verissimo, M., Oliviera, T.E., & Oliviera, R.F. (2011). Attachment Security and HPA axis reactivity to positive and challenging emotional situations in child-mother dyads in naturalistic settings. *Developmental Psychobiology,* 401-411. doi: 10.1002/dev.20598

Rausch, K.M. & Skiba, R. (2006). Discipline, disability, and race: Disproportionality in Indiana Schools. *Education Policy Brief, 4*(10). Retrieved from: http://www.eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED495751

Rutter, M. (2013). Annual research review: Resilience-clinical implications. *Journal of Child Psychology and Psychiatry, 54*(4), 474-487. doi:10.1111/j.1469-7610.2012.02615.x

Ryan, T.G., & Goodram, B. (2013). The Impact of Exclusionary Discipline on Students. *International Journal Of Progressive Education, 9*(3), 169-177.Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=4f373a4f-87ae-44e5-9fed-3408b3ed6b3c%40sessionmgr110&hid=114

Sachs-Ericsson, N., Medley, A.N., Kendall–Tackett, N., & Taylor, J. (2011). Childhood abuse and current health problems among older adults: The mediating role of self-efficacy. *Psychology of Violence, 1*, 106-120. doi: 10.1037/a0023139

Scarborough, A.A. & McCrae, J.S. (2010). School-age special education outcomes of infants and toddlers investigated for maltreatment. *Children and Youth Services Review, 32*(1), 80-88. doi:10.1016/j.childyouth.2009.07.015

Sektnan, M., McClelland, M.M., Acock, A., & Morrison, F.J. (2010). Relations between early family risk, children's behavioral regulation, and academic achievement. *Early Childhood Research Quarterly, 25,* 464-479. doi:10.1016/j.ecresq.2010.02.005

Shamblin, S., Graham, D., & Bianco, J.A. (2016). Creating trauma-informed schools for rural Appalachia: The partnerships program for enhancing resiliency, confidence and workforce development in early childhood education. *School Mental Health, 8*, 189-200. doi: 10.1007/s12310-016-9181-4

Shenton, A.K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22*(2), 63-75. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=ecb35f43-f75e-4208-b3e3-6b523c713120%40sessionmgr4007&hid=4203

Sheridan, M.A., Fox, N.A., Zeanah, C.H., McLaughlin, K.A., & Nelson, C.A.III. (2012). Variation in neural development as a result of exposure to institutionalization early in childhood. Proceedings of the National Academy of Sciences of the United States of America [PNAS], 109(32), 12927-12932. doi: 10.1073/pnas.1200041109

Sibinga, E.M., Webb, M.S., Ghazarian, S.R., & Ellen, J.M. (2016). School-based mindfulness instruction: An RCT. *Pediatrics, 137*(1), 1-10. doi: 10.1542/peds.2015-2532

Siegel, D.J. & Bryson, T.P. (2012). *The Whole Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Brain*. Bantam Publishing: New York, NY.

Skiba, R. J. (2014). The Failure of Zero Tolerance. *Reclaiming Children & Youth, 22*(4), 27-33. Retrieved from: https://reclaimingjournal.com/node/1454

Sklad, M., Diekstra, R., De Ritter, M., & Ben, J. (2012). Effectiveness of School-Based Universal Social, Emotional, and Behavioral Programs: Do They Enhance Students' Development in the Area of Skill, Behavior, and Adjustment? *Psychology in the Schools 49*(9), 892-907. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=4eae5b00-69c8-456b-8769-e2612e5679ab%40sessionmgr103&vid=2&hid=103

Sobsey, D. (2002). Exceptionality, Education, and Maltreatment. *Exceptionality, 10(*1), 29-46. doi: 10.1207/S15327035EX1001_3

Song, S.J., Tol, W., & De Jong, J. (2014). Intergenerational trauma and resilience between Burundian former child soldiers and their children. *Family Process, 53,* 239-251. doi: 10.1111/famp.12071

Spinazzola, J., Ford, J., Zucker, M., van der Kolk, B.A., Silva, S., Smith, S., Blaustein, M. (2005). Survey evaluates complex trauma exposure, outcome, and intervention among children and adolescents. *Psychiatric Annuls, 35*(5), 433-439. Retrieved from: http://search.proquest.com.proxy1.ncu.edu/docview/217052808?pq-origsite=360link

Statman-Weil, K. (2015). Creating Trauma-Sensitive Classrooms. *YC: Young Children, 70*(2), 72-79. Retrieved from: http://eds.a.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=3&sid=6223899e-969e-4bb3-ba7f-bfef491418c7%40sessionmgr4005&hid=4205

Steele, W.B., & Kuban, C.C. (2011). Trauma-informed resilience and posttraumatic growth (PTG). *Reclaiming Children & Youth, 20*(3), 44-46. Retrieved from: https://search.proquest.com/openview/b62ce34eb6732d17f24a43f88cf95ba4/1?pq-origsite=gscholar&cbl=33810

Stevens, J.E. (2012). Lincoln high school in Walla Walla WA tries new approach to school discipline - suspension drop 85%. Retrieved from: http://acestoohigh.com/2012/04/23/lincoln-high-school-in-walla-walla-wa-tries- new-approach-to-school-discipline-expulsions-drop-85/

Sobsey, D. (2002). Exceptionality, Education, and Maltreatment. *Exceptionality, 10(*1), 29-46, doi: 10.1207/S15327035EX1001_3

Stough, L.M., Montague, M.L., Landmark, L.J., Williams-Diehm, K. (2015). Persistent classroom management training needs of experienced teachers. *Journal of the Scholarship of Teaching and Learning, 15*(5), 36-48. doi:10.14434/josotl.v15i5.13784

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach*. HHS Publication No. (SMA) 14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration. Retrieved from: http://store.samhsa.gov/shin/content//SMA14-4884/SMA14-4884.pdf

Suor, J.H., Struge-Apple, M.L., Davies, P.T., Cicchetti, D., Manning, L.G. (2015). Tracing differential pathways of risk: Associations among family adversity, cortisol, and cognitive functioning in childhood. *Child Development, 00*(0), 1-17. doi: 10.1111/cdev.12376

Suttie, J. (2007). Mindful kids, peaceful schools. *Greater Good, 4*(1) 28–31. Retrieved from: http://greatergood.berkeley. edu/greatergood/archive/2007summer/suttie.pdf.

Teague, C.M. (2013). Developmental Trauma Disorder: A provisional diagnosis. *Journal of Aggression, Maltreatment, & Trauma, 22*, 611-625. doi:10.1080/10926771.2013.804470

Teicher, M.H., Andersen, S.L., Polcari, A., Anderson, C.M., Navalta, C.P., & Kim, D.M. (2003). The neurobiological consequences of early stress and childhood maltreatment. *Neuroscience and Biobehavioral Reviews, 27*(x), 33-44. doi:10.1016/S0149-7634(03)00007-1

Tongco, M.D. (2007). Purposive sampling as a tool for informant selection. *Ethnobotany Research & Applications 5*,147-158. Retrieved from: http://hdl.handle.net/10125/227

Tottenham, N., Hare, T. A., Quinn, B. T., McCarry, T. W., Nurse, M., Gilhooly, T., & ... Casey, B. J. (2010). Prolonged institutional rearing is associated with atypically large amygdala volume and difficulties in emotion regulation. *Developmental Science, 13*(1), 46-61. doi:10.1111/j.1467-7687.2009.00852.x

Tottenham, N., & Sheridan, M. A. (2010). A review of adversity, the amygdala and the hippocampus: a consideration of developmental timing. *Frontiers in Human Neuroscience*, 368. doi:10.3389/neuro.09.068.2009

Turner, D.W, III (2010). Qualitative interview design: A practical guide for novice investigators. *The Quantitative Report, 15*(3), 754-760. Retrieved from: http://www.nova.edu/ssss/QR/QR15-3/qid.pdf

Turner-Halliday, F., Watson, N., Boyer, N, Boyd, K.A., Minnis, H. (2014). *Biomed Central Journal, 14*, 347. doi: 10.1186/s12888-014-0347-z

Twardosz, S. (2012). Effects of experience on the brain: The role of neuroscience in early development and education. *Early Education and Development, 23*, 96-119. doi: 10.1080/10409289.2011.613735

Ungar, M. (2011). Community resilience for youth and families: Facilitative physical and social capital in contexts of adversity. *Children and Youth Services Review, 33*, 1742-1748. doi: 0.1016/j.childyouth.2011.04.027

Ungar, M. (2013). Resilience, trauma, context, and culture. *Trauma, Violence, & Abuse, 14*(3), 255-266. doi: 10.1177/1524838013487805

Unger, J.M. & De Luca, R.V. (2014). The relationship between childhood physical abuse and adult attachment styles. *Journal of Family Violence, 29*, 223-234. doi: 10.1007/s10896-014-9588-3

van der Kolk, B.A.(2005). Developmental Trauma Disorder: Toward a rational diagnosis for children with complex trauma histories. *Psychiatric Annuls, 35(5),* 401-409. doi: 10.1002/jts.21826

Velasco, I., Edmonson, S.L., & Slate, J.R. (2012). Principal leadership behaviors and school climate: A conceptual analysis. *Journal of Education Research*, *6*(3), 315-336. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?sid=9dcbff73-72d3-4dca-929b-4f914abbf494%40sessionmgr101&vid=2&hid=103

Vogt, W. P., Gardner, D. C., & Haeffele, L. M. (2012). *When to use what research design.* New York: The Guilford Press

Vrtic̆ka, P., & Vuilleumier, P. (2012). Neuroscience of human social interactions and adult attachment style. *Frontiers in Human Neuroscience, 6,* 212. http://dx.doi.org/10.3389/fnhum.2012.00212

Walkley, M. & Cox, T.L. (2013). Building trauma-informed schools and communities. *National Association of Social Workers, 35*(2), 123-126. doi:10.l093/cs/cdt007

Walter, S. L. (2016). The Neurosequential Model in Education and School Improvement. Retrieved from: https://eric.ed.gov/?id=ED567191

Welsh, E. (2002). Dealing with Data: Using NVivo in the Qualitative Data Analysis Process. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 3*(2).

Retrieved from http://www.qualitative-research.net/index.php/fqs/article/view/865/1880

Whittle, S., Dennison, M., Vijayakumar, N., Simmons, J. G., Yücel, M., Lubman, D. I., & ... Allen, N. B. (2013). New research: Childhood maltreatment and psychopathology affect brain development during adolescence. *Journal of The American Academy of Child & Adolescent Psychiatry*, 52940-952.e1. doi:10.1016/j.jaac.2013.06.007

Wright, T. (2014). Too scared to learn: Teaching young children who have experienced trauma. *Young Children, 69*(5), 88-93. Retrieved from: http://eds.b.ebscohost.com.proxy1.ncu.edu/eds/pdfviewer/pdfviewer?vid=1&sid=478c7aaa-f062-4b8a-b6ec-3479190a2eef%40sessionmgr198&hid=120

Wolopow, R., Johnson, M.M., Hertel, R., & Kincaid, S.O. (2011) *The Heart of Learning and Teaching*. Washington State Office of Superintendent of Public Instruction Compassionate Schools: Washington. http://k12.wa.us/CompassionateSchools/pubdocs/TheHeartofLearningandTeaching.pdf

Yin, R.K. (2011). *Qualitative research from start to Ffinish*. The Guilford Press: New York, NY.

Zilber, T., Tuval-Mashiach, R., & Lieblich, A. (2008). The embedded narrative: Navigating through multiple contexts. *Qualitative Inquiry*, *14*(6), 1047–1069. doi: 10.1177/1077800408321616

Zins, J. E., & Elias, M. J. (2006). Social and emotional learning. In G. G. Bear & K. M. Minke (Eds.), Children's needs III: Development, prevention, and intervention (pp. 1–13). Bethesda, MD: National Association of School Psychologists.

Appendix A: Recruitment Letter

Invitation to participate in a Research Study

Dear (Insert name of the special education teacher)

My name is Melissa Sadin and I am conducting research in partial fulfillment of my Doctorate in Education at Northcentral University (NCU). My topic is the training needs of special education teachers in managing the externalizing and internalizing behaviors of children who have been exposed to trauma in the classroom. I am focusing specifically on special education teachers because research shows that there may be a higher concentration of children who have been exposed to trauma in special education settings.

Your participation in this research includes the following activities:

- One one-hour on-site or off –site interview that will not take place during instructional time.
- A review of the transcripts after the interview to determine accuracy.

If permission is granted, I will need a signed consent form (attached). Please be aware that all information shared will be kept completely confidential. A pseudonym will be assigned to your interview information. Your responses during the interview will only be shared with my dissertation chair and my dissertation review committee. The NCU Internal Review Board may also review the transcripts.

You may terminate your participation in this study at any time without the need to provide a reason.

It is my hope that this research will inform pre-service teacher programs, administrators, and staff developers regarding the need for training on managing the unique behaviors of children with trauma in the classroom. Please consider participating in this important work.

Because my dissertation process is on a tight timeline, I would appreciate a response to my request in 7 calendar days. Please let me know if I can provide any further information. Thank you for your time and attention to this matter. I can be reached at m.sadin1860@email.ncu.edu or at (908) 256-1302. I look forward to hearing from you.

Sincerely,

Melissa Sadin
Doctoral student
Northcentral University

Appendix B: Site Permission

Request for Site Permission to Conduct Doctoral Research

Dear (Insert names of the superintendent of schools and building principal)

My name is Melissa Sadin and I am conducting research in partial fulfillment of my Doctorate in Education at Northcentral University (NCU). When performing research at any site, it is important to have permission to use that site for research purposes. Permission is required to recruit, to interview, to collect data, and to perform all steps in the data collection process that involve a particular site. If your school has its own IRB, please let me know, as permission will need to be attained from them as well.

Permission to conduct this research at your site includes the following activities:

- Posting or distribution of recruitment material
- Access to personnel or rosters for recruitment purposes
- Access to the district or school building's professional development calendar
- On-site or off –site interviews with special education teachers that will not take place during instructional time.

If permission is granted, I will need a formal letter that is signed, dated within the last 6 months, written on letterhead, with the full name and contact information of the superintendent of schools and the building principal. The NCU IRB does accept copies of emails as permission documentation, as long as the email is from an official account from the site and as long as the permission grantor has included full name, title, and contact information.

It is important to note that NCU IRB approval has not yet been obtained, recruitment materials will not be distributed, and no participants will be contacted at this time. The request for permission is the first step, and I will contact the superintendent or designee again with the recruitment materials and a copy of the interview protocol after NCU IRB approval has been obtained.

Because my dissertation process is on a tight timeline, I would appreciate a response to my request in 7 calendar days. Please let me know if I can provide any further information. Thank you for your time and attention to this matter. I can be reached at m.sadin1860@email.ncu.edu or at (908) 256-1302. I look forward to hearing from you.

Sincerely,

Melissa Sadin
Doctoral student
Northcentral University

Appendix C: Semi-Structured Interview Protocol

This guide is designed to allow for the flexibility needed for semi-structured interviews. Semi-structured interviews are as much about listening as they are about asking questions. However, it is important that the interviewer maintain consistency of topic discussion between participants (Opdenakker, 2006). Thus, this outline is intended to guide the interviewer and provide flexibility to follow the conversation to collect rich information, but also maintain a focus on addressing the research questions.

General Questions

1. Do you have a professional or social relationship with me?
2. What is your position in this school? (Grade level, teaching assignment)
3. What is your age?
4. How many years have you been teaching?
5. How hours of training have you received for managing children with DT in your classroom?
6. When/where did you receive this training?
7. What was the content of this training?

Experience and Strategies

8. What is your experience with regard to children and trauma?
9. Can you give an example of a situation where you were confronted with internalizing or externalizing behavior from a child with trauma in your classroom? How did you react?
10. What do you find most challenging about managing the internalizing behaviors of your students?

11. What do you find most challenging about the externalizing behaviors of your students with DT?
12. How has your previous training helped you manage the internalizing behavior of your students with DT in your classroom?
13. How has your previous training helped you manage the externalizing behavior of your students with DT in your classroom?
14. What strategies have you found most helpful? Where did you learn these strategies?
15. Does your school have a protocol with regard to internalizing and externalizing behaviors of children with DT?
16. Do you feel supported by your administration when dealing with the externalizing and internalizing behaviors of children with DT in your classroom? What does that support look like or what type of support would you like to have?

Training Needs

17. What would you like to have more knowledge about or skills developed in regard to managing children with DT in your classroom?
18. What do you think your colleagues need?
19. If you would like more information, in what form should the information be delivered?

Adapted from Alisic, 2012.

Appendix D: Informed Consent

Introduction:

My name is Melissa Sadin. I am a doctoral student at Northcentral University. I am conducting a research study on the training needs of special education teachers for managing the behavior of students with DT in the classroom. I am completing this research as part of my doctoral degree. I invite you to participate.

Activities:

If you participate in this research, you will be asked to:

1. Participate in a semi-structured interview that will last no more than two hours and take place in a location and date and time that is mutually agreed upon.
2. Read the transcripts of your interview and indicate it's accuracy or correct any inaccuracies.

Eligibility:

You are eligible to participate in this research if you:

1. Are a special education teacher.
2. Have participated in at least one hour of training trauma-informed care in schools.

You are not eligible to participate in this research if you:

1. Are not a special education teacher.
2. Have not participated in any training regarding trauma-informed care in schools.

I hope to include 5-10 people in this research.

Risks:

There are minimal risks in this study. Some possible risks include: discomfort in discussion some of the questions.

To decrease the impact of these risks, you can: skip any question or stop participation at any time.

Benefits:

If you decide to participate, there are no direct benefits to you.

The potential benefits to others are: informing pre-service teacher programs, administrators and professional developers of the lack of or need for training to manage the internalizing or externalizing behaviors of children with DT in the classroom.

Confidentiality:

The information you provide will be kept confidential to the extent allowable by law. Some steps I will take to keep your identity confidential are: I will assign you a pseudonym which will be connected to all of your information. Your real name will not be connected to or revealed at any phase of this dissertation process.

The people who will have access to your information are: myself, my dissertation chair, and members of my dissertation committee. The Institutional Review Board may also review my research and view your information.

I will secure your information with these steps: Locking any paper documentation in a locked filing cabinet and locking my computer with a password. I will keep your data for 7 years. Then, I will delete electronic data and destroy paper data.

Contact Information:

If you have questions for me, you can contact me at: m.sadin1860@email.ncu.edu or (908)256-1302.

My dissertation chair's name is Dr. Deborah Nelson. She works at Northcentral University and is supervising me on the research. You can contact her at: dnelson@ncu.edu.

If you have questions about your rights in the research, or if a problem has occurred, or if you are injured during your participation, please contact the Institutional Review Board at: irb@ncu.edu or 1-888-327-2877 ext. 8014.

Voluntary Participation:

Your participation is voluntary. If you decide not to participate, or if you stop participation after you start, there will be no penalty to you. You will not lose any benefit to which you are otherwise entitled.

Audiotaping:

I would like to use a voice recorder to record your responses. You can still participate if you do not wish to be recorded.

Please sign here if I can record you:

_____

Participant's Signature

Additional Costs:

There are no anticipated financial costs to you.

Termination of Participation:

I may stop your participation, even if you did not ask me to, if: your participation causes you undue emotional or physical distress.

If you decide to stop participation, you may do so by stating that you wish to cease participation in the study. If so, I will not use the information I gathered from you.

New Findings:

Sometimes during a study we learn new information. This information may come from our research or from other researchers. If new information might relate to your willingness to participate, I will give you that information as soon as possible.

Signature:

A signature indicates your understanding of this consent form. You will be given a copy of the form for your information.

_____	_____	_____
Participant Signature	Printed Name	Date
_____	_____	_____
Researcher Signature	Printed Name	Date

Appendix E: Recruitment Flyer

m.sadin1860@email.ncu.edu

Appendix F: Confidentiality Agreement

Northcentral University
Non-Disclosure/Confidentiality Agreement

I, Lara Gorton, will help Melissa Sadin with the research study titled The Perceptions of Special Education Teachers Regarding Trauma-informed Care: A Qualitative Case Study.

My role will be to transcribe participant interviews and enter participant data.

In this role:

1. I will not disclose the names of any participants in the study.
2. I will not disclose personal information collected from any participants in the study.
3. I will not disclose any participant responses.
4. I will not disclose any data.
5. I will not discuss the research with anyone other than the researcher(s).
6. I will keep all paper information secured while it is in my possession.
7. I will keep all electronic information secured while it is in my possession.
8. I will return all information to the researcher when I am finished with my work.
9. I will destroy any extra copies that were made during my work.

_____

Assistant Signature Date

_____

Researcher Signature Date

Appendix G: Confidentiality Agreement

Northcentral University

Non-Disclosure/Confidentiality Agreement

I, Kathy Sperduto, will help Melissa Sadin with the research study titled The Perceptions of Special Education Teachers Regarding Trauma-informed Care: A Qualitative Case Study.

My role will be to transcribe participant interviews and enter participant data.

In this role:

10. I will not disclose the names of any participants in the study.
11. I will not disclose personal information collected from any participants in the study.
12. I will not disclose any participant responses.
13. I will not disclose any data.
14. I will not discuss the research with anyone other than the researcher(s).
15. I will keep all paper information secured while it is in my possession.
16. I will keep all electronic information secured while it is in my possession.
17. I will return all information to the researcher when I am finished with my work.
18. I will destroy any extra copies that were made during my work.

_____

Assistant Signature Date

_____

Researcher Signature Date