Examining the Perceived Influence of Professional Development on Teachers’ Trauma-Informed Practices, Attitudes, and Beliefs

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Abstract
The purpose of this qualitative, phenomenological study was to develop an understanding of how teachers’ trauma-informed practices, attitudes, and beliefs are influenced by professional development. The Substance Abuse and Mental Health Services Administration’s key assumptions for trauma-informed care and Guskey’s model of the process of teacher change were used in combination as a framework to study the perceptions of ten elementary teachers and an administrator in a rural elementary school in Western New York. Data were collected through semi-structured interviews with the teachers and the administrator, using analytic memos and professional development training materials. Three key findings emerged from the study. First, the development of knowledge through effective professional development sets the stage for changes to teachers’ practices, attitudes, and beliefs. Second, effective professional development must connect to teachers’ lived experiences. Third, effective professional development is just the beginning of the trauma-informed process. Recommendations for practice for professional development trainers and school leaders include considerations and approaches to trauma-informed professional development. Additionally, this study’s recommendations for future research into trauma-informed professional development include the use of quantitative methodology and the long-term study of trauma-informed approach implementation.

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Examining the Perceived Influence of Professional Development on Teachers’ Trauma-Informed Practices, Attitudes, and Beliefs

By

Mitchell Daly

Submitted in partial fulfillment of the requirements for the degree Ed.D. in Executive Leadership

Supervised by

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St. John Fisher College

August 2020
Dedication

I would like to thank Dr. Marie Cianca and Dr. Caroline Critchlow for their incredible guidance and support throughout this entire process. You have made me a better researcher, writer, and scholar.

There is no other group I would have rather taken this journey with than my Cohort 13 family. Thank you for the learning, laughter, insight, support, and friendship. And to the Weekend Warriors, I could not have hoped for a better team. The three of you have enriched my doctoral experience in countless ways. I consider you lifelong friends.

I would like to thank my parents for encouraging me in every endeavor I have undertaken. Thank you for always being there for me and my family. I love you.

To Sophie, you are my inspiration to always be better. I hope to pass on my love of learning to you as you grow. You are an amazing daughter and your future is so bright. I love you.

Finally, I would like to thank my wife, Rachael. Without you, none of this would have been possible. Thank you for providing me with the support necessary to complete this journey. Your ability to keep our home and family going while I spent countless hours working is a testament to your strength and love. I love you.


Biographical Sketch

Mitchell Daly started his career in education as a first-grade teacher in the Fairport Central School District. He then transitioned into school administration as an assistant principal in the Brockport Central School District.

Mr. Daly received his undergraduate Bachelor of Sciences degrees in Childhood Education and History, in 2005, from St. John Fisher College. He then received a master’s degree in Childhood Literacy, in 2009, from SUNY Brockport. Mr. Daly continued his education at SUNY Brockport, earning a Certificate of Advance Study in Educational Administration in 2012.

Mr. Daly enrolled at St. John Fisher College in the spring of 2018 and began doctoral studies in the Ed.D. Program in Executive Leadership. He pursued his research on teachers’ perceptions of the influence of professional development on their trauma-informed practices, attitudes, and beliefs under the direction of Dr. Marie Cianca and Dr. Caroline Critchlow and received the Ed.D. degree in 2020.
Abstract

The purpose of this qualitative, phenomenological study was to develop an understanding of how teachers’ trauma-informed practices, attitudes, and beliefs are influenced by professional development. The Substance Abuse and Mental Health Services Administration’s key assumptions for trauma-informed care and Guskey’s model of the process of teacher change were used in combination as a framework to study the perceptions of ten elementary teachers and an administrator in a rural elementary school in Western New York.

Data were collected through semi-structured interviews with the teachers and the administrator, using analytic memos and professional development training materials. Three key findings emerged from the study. First, the development of knowledge through effective professional development sets the stage for changes to teachers’ practices, attitudes, and beliefs. Second, effective professional development must connect to teachers’ lived experiences. Third, effective professional development is just the beginning of the trauma-informed process.

Recommendations for practice for professional development trainers and school leaders include considerations and approaches to trauma-informed professional development. Additionally, this study’s recommendations for future research into trauma-informed professional development include the use of quantitative methodology and the long-term study of trauma-informed approach implementation.
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Chapter 1: Introduction

Exposure to traumatic events often leads to internalizing and externalizing behaviors in children that can negatively impact their health and well-being (National Child Traumatic Stress Network [NCTSN], 2008). In school, these behaviors can negatively impact cognitive, academic, social-emotional, behavioral, physical, and relational functioning in students (Perfect, Turley, Carlson, Yohanna, & Saint Gilles, 2015; van der Kolk, 2005). To respond effectively to trauma, awareness must be raised about trauma’s impact (Perfect et al., 2015). School personnel need to have knowledge about the symptoms of trauma and how to work with students who may have experienced traumatic events (Perfect et al., 2015). Providing teachers with professional development and training about trauma and trauma-informed practices is one way to increase their knowledge about these topics.

Given their daily interactions with students, teachers are in a unique position to help address the impact of trauma in schools (NCTSN, 2017). Therefore, teachers should be at the forefront of trauma-informed implementation efforts. Increasing teachers’ knowledge of trauma-informed practices through professional development is a key component of a trauma-informed approach (Chafouleas, Johnson, Overstreet, & Santos, 2016; Dorado, Martinez, McArthur, & Leibovitz, 2016). Developing appropriate professional development necessitates an understanding of how teachers’ attitudes, beliefs, and practices are changed to accommodate a trauma-informed approach in the classroom.
Traumatic experiences can have a lasting impact. To understand the concept of a trauma-informed approach, it is helpful to have a definition of trauma. In its guidance document on a trauma-informed approach, the Substance Abuse and Mental Health Services Administration (SAMHSA) (2014) defined trauma:

> Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being. (p. 7)

The SAMHSA (2014) definition provides a comprehensive description of trauma and its impact. This definition is helpful to educators who work with students who have been exposed to a wide range of potentially traumatic experiences.

The long-term health issues that stem from trauma are significant (Felitti et al., 1998). Felitti et al. (1998) conducted a landmark study on traumas occurring in childhood and labeled such traumas as *adverse childhood experiences* (ACEs). Felitti et al. (1998) classified the following experiences as ACEs: physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, intimate partner violence, mother treated violently, substance misuse within household, mental illness in the household, parental separation or divorce, and an incarcerated household member. In the Felitti et al. (1998) study, adults were asked to respond about their exposure to the adverse childhood experiences listed above. The adult responses were then compared to the respondents’ answers about their medical conditions. The study found that adults who experienced trauma, or were exposed to trauma as children, had a higher risk for negative health outcomes such as heart disease, cancer, lung disease, depression, and a shortened lifespan.
(Felitti et al., 1998). The more ACEs a child suffers, the greater the risk of these outcomes as an adult (Felitti et al., 1998).

In addition to connecting ACEs to health outcomes, Felitti et al. (1998) also looked at the prevalence of ACEs. The study population consisted of 9,508 patients from a health maintenance organization (HMO). They found that 52% of respondents reported at least one ACE, while 13% reported three or more (Felitti et al., 1998). The Felitti et al. study brought about the awareness of the problematic impacts of adverse childhood experiences.

The prevalence of ACEs continues to be researched. The Centers for Disease Control and Prevention (CDC) recently published a study of the prevalence of ACEs, while looking at the years 2011-2014 (Merrick, Ford, Ports, & Guinn, 2018). The study used the Behavior Risk Factor Survey (BRFSS) responses from 248,934 adults across 23 states, from January 2011 through December 2014 (Merrick et al., 2018). The percentage of respondents reporting at least one ACE was 62%, with 25% reporting three or more ACEs (Merrick et al., 2018). The data from Merrick et al. (2018) show that the prevalence of ACEs continues at levels at or above those seen over 15 years prior in the original ACEs study.

The National Survey of Children’s Health from 2016 also collected data on the prevalence of ACEs nationwide (U.S. Census Bureau, 2018). This survey looked at data for over 70,000 children and found just under 47% of children had experienced one or more ACEs. The percentage of respondents who had experienced two or more ACEs was 22%. When data were broken down into age groups, the percentages for 12-17-year-olds were 56% for one ACE, and 30% for two or more ACEs (U.S. Census Bureau,
The high prevalence of ACEs is concerning given the potential impact of these traumas.

The concept of ACEs has been expanded in recent years. While the initial ACEs focused on family-related traumas, community-level stressors have also been shown to impact children’s health and behavior outcomes (Cronholm et al., 2015; Finkelhor, Shattuck, Turner, & Humbly, 2013; Finkelhor, Shattuck, Turner, & Humbly, 2015). Additional traumatic experiences can include low socioeconomic status, peer victimization, peer isolation, poor academic performance, exposure to community violence, racism, unsafe neighborhoods, and a history with foster care (Cronholm et al., 2015; Finkelhor et al., 2013, 2015). A study by Cronholm et al. (2015) measured the prevalence of expanded ACEs, including racism, community violence, bullying, unsafe neighborhoods, and foster care histories. Half of the respondents reported experiencing one to two expanded ACEs, while 13.4% reported having experienced three or more expanded ACEs (Cronholm et al., 2015). The Cronholm et al. study found that expanded ACEs, like traditional or conventional ACEs, are prevalent.

In addition to expanding ACEs, researchers have examined how ACEs differ based on demographics. Higher ACE scores have been reported for study participants who identify as Black, Hispanic, multiracial, bisexual, gay, or lesbian (Merrick et al., 2018). Children who live in poor urban and rural areas may also be at higher risk for ACEs (Burke, Hellman, Scott, Weems, & Carrion, 2011; Shamblin, Graham, & Bianco, 2016).

Research by Cronholm et al. (2015) showed that a more diverse population than the original ACEs study reported experiences of the more traditional ACEs. While
research has shown that some groups are at a greater risk for experiencing ACEs, these experiences are common across all sociodemographic characteristics (Merrick et al., 2018). Adverse childhood experiences have become a global concern, with the CDC and the World Health Organization (WHO) developing a partnership focused on creating a framework to assess the global impact of ACEs (Anda, Butchart, Felitti, & Brown, 2010). While most of the research on ACEs comes from developed countries, the body of research from developing countries is growing (Anda et al., 2010). ACEs are a significant issue that can contribute to the impairment in children, regardless of geography.

It has been shown that prolonged exposure to chronic trauma can result in significant impairment (NCTSN, 2008; van der Kolk, 2005). Significant impairment includes adverse effects on memory, cognition, and attention; decreased focus, organization, and processing; difficulty with problem solving and planning; an increase in feelings of anxiety and frustration; and difficulty maintaining relationships (NCTSN, 2008; van der Kolk, 2005). Those impacted can have difficulty coping with life’s daily stresses, regulating behavior, and controlling emotional expression (SAMHSA, 2014).

The concept of adverse childhood experiences started in the medical field but has expanded into other areas like health care and education. A review of studies from 1990 to 2015 show the negative impact trauma can have on multiple measures of school success (Perfect et al., 2016). Traumatic experiences in childhood can have a negative influence on students’ cognitive functioning, academic performance, and social emotional and behavioral functioning in school (Perfect et al., 2016). Examples of the
negative influence include lower GPA, increased absences, higher rates of school dropout, decreased reading ability, and increased suspensions (NCTSN, 2008).

Additionally, an association exists between ACEs and school success for elementary school students. Blodgett and Lanigan (2018) gathered information from teachers about known student traumas and traumatic experiences. Teachers also reported on the academic, behavior, and attendance issues experienced by these students. Students with attendance problems had higher ACE scores than students with no identified attendance concerns. Behaviorally, students with higher ACE scores had more significant behavior concerns. This was true for students with externalizing behaviors, internalizing behaviors, or both behaviors (Blodgett & Lanigan, 2018). The impact of these symptoms on education indicate a need for teachers to become trauma-informed.

Symptoms of trauma can manifest in the classroom in a variety of ways. The manifestation of symptoms can be physical, behavioral, social, and emotional (Bell, Limberg, & Robinson, 2013). The symptom categories, along with symptom descriptions are listed in Table 1.1. When a child experiences any combination of these symptoms, he or she is left vulnerable to several negative academic consequences (Bell et al., 2013). Professional development may provide teachers with an understanding of trauma-related symptoms that will allow them to recognize issues with their students.
Table 1.1

*Trauma Symptom Categories and Descriptions*

<table>
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<th>Symptom Category</th>
<th>Descriptions</th>
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| Physical         | Recurring physical complaints  
|                  | Weight changes  
|                  | Hyper-vigilance/heightened startle reactions  
|                  | Sleep disorders  
| Behavioral       | Regression to previous developmental behaviors  
|                  | Changes in play  
|                  | Social isolation  
|                  | Increased risk taking  
|                  | Increased aggression  
|                  | Acting to receive positive or negative attention  
| Emotional        | Difficulty regulating emotions  
|                  | Fear  
|                  | Stress  
|                  | Distrust  
|                  | Lack of self-confidence  
| Cognitive        | Loss of focus  
|                  | Learning disabilities/poor skill development  
|                  | Trauma flashbacks  
|                  | Changed attitudes toward people, life, and the future  


To address the increasing needs of students who have experienced trauma, schools and school districts are attempting to implement trauma-informed practices. Early research on pilot districts explored the use of a tiered-implementation model for trauma-informed practice, like that of positive behavior interventions and supports (PBIS) as a method of implementation (Chafouleas et al., 2016; Dorado et al., 2016; Shamblin et al., 2016). This method of implementation allows schools to use existing
tiered frameworks as a basis for integrating their trauma-informed practices. Studies have shown that implementing trauma-informed practices at the universal, selected or targeted, or intensive tiers can produce positive outcomes for students (Chafouleas et al., 2016; Dorado et al., 2016; Shamblin et al., 2016). Professional development is a key piece of implementation of trauma-induced practice within these multitiered systems.

The universal tier, or Tier 1, of implementation of trauma-informed practice refers to school-wide practices. Examples of universal tier interventions are positive school climates, common behavior expectations, staff training, and utilizing a trauma-informed lens for the existing systems such as PBIS, social-emotional learning (SEL) curriculum, and restorative discipline practices (Chafouleas et al., 2016; Dorado et al., 2016). Interventions at the selected/targeted tier, or Tier 2, are more targeted interventions. These interventions include social skill development, strengthening of social supports, reexamining discipline policies, and creating coordinated care teams (Chafouleas et al., 2016; Dorado et al., 2016). These interventions serve to reinforce universal tier interventions while providing added support for students who may not respond to the universal supports.

In addition to the universal and selected/targeted tiers, schools can also implement intensive, Tier 3 interventions. These interventions are put into place to address the needs of students who have experienced trauma and are not responding to Tiers 1 and 2 interventions. Interventions at the Tier 3 level may include individual cognitive behavioral therapy, community care, wraparound services, and crisis support (Chafouleas et al., 2016; Dorado et al., 2016). At this tier, school districts may look to establish relationships with outside agencies and providers to assist students and their families with
the appropriate care (Chafouleas et al., 2016; Dorado et al., 2016). Existing structures provide a basis from which schools and teachers may work, and the tiered intervention system may increase the likelihood of success when implementing trauma-informed practices, but guidance on how to successfully integrate trauma-informed practices is still needed (Chafouleas et al., 2016).

While research has demonstrated a clear impact of traumatic experiences on education, information about teachers’ work with students exposed to trauma is limited (Alisic, Bus, Dulack, Pennings, & Splinter, 2012). Both Chafouleas et al. (2016) and Chafouleas, Koriakin, Roundfield, and Overstreet (2018) recommended that future research focus on professional development for teachers to increase teacher awareness and ensure the sustainability of trauma-informed approaches. Research by Baweja et al. (2016) and Baker, Brown, Wilcox, Overstreet, and Arora (2016) suggested that teachers are open to professional development training and education about trauma.

Openness to supporting trauma-informed practices, however, is associated with an understanding of trauma-informed practices (Baker et al., 2016). Therefore, it may take time and continued support to develop teachers’ openness to adopting trauma-informed practices (Baker et al., 2016). As teachers better understand trauma, its impact, and how symptoms manifest in school, they may be better prepared to adopt and implement trauma-informed practices. School leaders in charge of implementation efforts should be aware of the need for time and continued support.

McIntyre, Baker, and Overstreet (2018) found that professional development specific to trauma-informed practices can have a positive impact on teachers’ knowledge. An increase in knowledge may also contribute to teachers’ perceptions of acceptability of
a trauma-informed approach (McIntyre et al., 2018). While teacher training is a major component of implementing a trauma-informed approach through a multitiered system (Chafouleas et al., 2016; Dorado et al., 2016), the short- and long-term impacts of trainings on school outcomes are still unknown (Chafouleas et al., 2018). Research is needed to determine what types of professional development and support around trauma-informed approaches are leading to change in teacher practice, attitudes, and beliefs. This research could serve as a guide for school leaders as they plan for professional development as part of a trauma-informed approach.

**Problem Statement**

Implementing professional development and training to best aid teachers in implementing trauma-informed practices is imperative for school leaders. At this time, in the year 2020, not much is known about the short- and long-term impacts of trauma-informed training (Chafouleas et al., 2018). Currently, it is not known if teacher attitudes, practices, and beliefs change as a result of training on trauma-informed practices. In addition, there is limited information on the implementation of trauma-informed practices and whether the implementation leads to improved outcomes for students. Learning how professional development influences teachers’ attitudes, beliefs, and practices can serve as a guide to school leaders during future implementation efforts. School leaders could effectively design professional development based on information learned from teachers who have previously experienced professional development and implementation of trauma-informed practice.

The impact of trauma on the lives of those who experience it has been established. Childhood trauma is prevalent, and exposure to trauma can have a significant impact on
children’s health, well-being, behavior, and learning (Felitti et al., 1998; NCTSN, 2008; U.S. Census Bureau, 2018). Trauma has been shown to negatively impact school attendance, in-school behavior, and academic performance; therefore, it is in the best interest of school districts to implement trauma-informed practices (Bell et al., 2013; NCTSN, 2008). However, the ways that trauma-informed practices are currently implemented is still being researched, and they may have a major bearing on how school leaders proceed with implementation in the future.

Teachers’ roles in students’ lives puts teachers in a position to identify and respond to students suffering symptoms of trauma (NCTSN, 2017). Additionally, research on trauma-informed practice implementation in schools highlights the need for teacher training (Chafouleas et al., 2016; Cole, Eisner, Gregory, & Ristuccia, 2013; Dorado et al., 2016; McIntyre et al., 2018). SAMHSA’s (2014) guidelines indicate a need for training to focus on teachers’ realization of trauma, recognition of trauma symptoms, learning responses to trauma, and understanding how to resist re-traumatization of the students. While these guidelines provide some direction, more research is needed to determine what professional development, training, and support is most effective (Chafouleas et al., 2016; Cole et al., 2013; McIntyre et al., 2018).

Lack of understanding relating to how professional development can impact teachers’ attitudes, beliefs, and practices puts school leaders at a disadvantage when planning for implementation. Professional development theory suggests that teachers’ attitudes and beliefs may change after receiving training, after implementing changes, and when seeing results (Guskey, 1986, 2002). Guskey’s (1986, 2002) theory indicates a need to learn from teachers who have experienced professional development and applied
their learning to their practice. Learning from teachers will provide school leaders with much needed information. Teachers could provide valuable insight into what has helped them implement trauma-informed practices and what they continue to need.

**Theoretical Rationale**

The model of the process of teacher change (Guskey, 1986, 2002) was used as a framework for this study. This framework provided a rationale for researching the practices, attitudes, and beliefs of teachers after they had received training on trauma-informed practices and had time to implement these practices in the classroom. Guskey’s (1986, 2002) model and its implications point to the importance of learning from teachers who have been through the process of implementation and have had time to reflect on their practices, attitudes, and beliefs.

Guskey (1986, 2002) posited that changes in the attitudes and beliefs of teachers do not occur prior to the implementation of new practices. Evidence of change in student learning outcomes is often necessary for teachers to have complete buy-in (Guskey, 1984, 1986, 2002). Accordingly, school leaders need to consider how to provide support throughout the process of implementing trauma-informed practices with a focus on teacher change.

In addition to showing that changes in teachers’ beliefs and attitudes occur after a change in practice and in student outcomes, Guskey (1986, 2002) explained three practices of teacher development. The first practice is that change is a gradual and difficult process for teachers. Adopting new practices requires a change in teachers’ competence. Increasing teachers’ competence in a new practice is a difficult undertaking and requires a significant amount of work (Guskey, 1986, 2002). It is imperative that
school leaders plan to support teachers throughout the process of implementing new practices or initiatives.

The second practice is that teachers need regular feedback on student progress (Guskey, 1986, 2002). When implementing a trauma-informed approach, school leaders must consider how they will assess the impact of new practices and how this impact will be communicated to teachers. Teachers must feel as though the changes to their practice are having a positive impact on student outcomes (Guskey, 1986, 2002). Considering data sources and methods of communication about progress is key for school leaders.

Providing continued support and follow-up to initial training is Guskey’s (1986, 2002) third practice. While it is important to provide teachers with initial training about trauma and its effect on students’ learning, ongoing training, support, and feedback may be needed to ensure the adoption of new practices. Teachers are rarely able to take the information from professional development and directly implement it into the classroom without ongoing feedback and support (Guskey, 2002). Continuously monitoring the needs of teachers as they implement trauma-informed practices may help guide school leaders as they plan ongoing support and allocate resources.

To create trauma-informed schools, it is critical for teachers to learn about trauma-informed practices and how they can be implemented in the classroom (NCTSN, 2017). Components of a trauma-informed approach in the classroom are teachers’ ability to promote safe classroom and school climate, create predictability and structure, minimize trauma and loss reminders, build positive relationships with students, use restorative practices for conflict and discipline, and use anti-bullying and anti-suicide programs as necessary (NCTSN, 2017). Leaders who seek to create trauma-informed
schools and classrooms will benefit from understanding the professional development and training needs of teachers as they work to implement these new practices.

The four key assumptions from SAMHSA’s (2014) trauma-informed approach guidance document were utilized in conjunction with Guskey’s (1986, 2002) model of the process of teacher change to guide this study. The four key assumptions are: (a) the realization of trauma’s impact and paths to recovery; (b) the recognition of the symptoms and signs of trauma; (c) a response that includes trauma-informed policies, procedures, and practices; and (d) actively resisting re-traumatization (SAMHSA, 2014). These four assumptions are necessary to consider when determining the effectiveness of the implementation of a trauma-informed approach (Chafouleas et al., 2016; von der Embse, Rutherford, Mankin, & Jenkins, 2018). This study explored if the key assumptions were evident in discussions with teachers about their trauma-informed practices, attitudes, and beliefs.

Chafouleas et al. (2016) explained how the four key assumptions might present in the school setting. Trauma-informed teachers will realize that trauma is prevalent, and it impacts students, while they learn to recognize how symptoms of trauma may manifest in the classroom. Once teachers understand trauma and its symptoms, they can respond in the classroom and through referrals to additional support. Trauma-informed teachers also aim to make decisions that reduce the effects of trauma and avoid re-traumatization of their students (Chafouleas et al., 2016).

The four key assumptions from SAMHSA’s (2014) can be used in conjunction with Guskey’s (1986, 2002) model of the process of teacher change to better understand the impact of trauma-informed professional development. Figure 1.1 shows how
SAMHSA’s key assumptions and Guskey’s (1986, 2002) model of the process of teacher change merge when considering changing teachers’ practices, attitudes, and beliefs relating to a trauma-informed approach.

![Figure 1.1. SAMHSA’s Key Assumptions Merged with Guskey’s (1986, 2002) Model of the Process of Teacher Change. Adapted from “Professional Development and Teacher Change,” by T. R. Guskey, 2002, Teachers and Teacher: Theory and Practice, 8, p. 383. Copyright 2002 by Taylor and Francis Ltd.](image)

In Figure 1.1, the key assumptions serve as a foundation for the process of professional development, implementation, student outcomes, and teacher change. Guskey’s (1986, 2002) model outlines the process by which teachers’ attitudes and beliefs are changed through professional development. Guskey’s (1986, 2002) practices include change as a gradual process, with a need for consistent feedback on student progress. Consistent training, support, and pressure are all part of the implementation process. The combination of SAMHSA’s (2014) key assumptions and Guskey’s (1986, 2002) model allows for the process of teacher change to be viewed through the lens of
trauma-informed practices. Within this model, the outcomes reflect an understanding and implementation of the key assumptions of realization, recognition, response, and resisting re-traumatization.

**Statement of Purpose**

The purpose of this study was to develop an understanding of how teachers’ trauma-informed practices, attitudes, and beliefs are influenced by professional development, ongoing training, and support. Teacher training is a central component of the implementation of a trauma-informed approach in schools. It is imperative that school leaders understand what types of professional development, ongoing training, and other supports are necessary to change or develop teachers’ trauma-informed practices, attitudes, and beliefs.

Learning from teachers who have completed professional development and implemented practices may provide useful information for developing and implementing future professional development. While there are resources outlining practices for implementing a trauma-informed approach, there is little research on the outcomes of these practices. Gathering data on what teachers have experienced will prove to be helpful in determining the best approaches to working with teachers in the future.

**Research Questions**

More studies are necessary to determine the influence of professional development on teachers’ abilities to implement trauma-informed practices in the classroom (Chafouleas et al., 2018). A shift in teacher practice may require a change in attitudes and beliefs about student trauma and trauma-informed practices in the classroom. School leaders who are implementing a trauma-informed approach may
benefit from learning about teachers’ attitudes and beliefs about trauma-informed practices and how those attitudes and beliefs were influenced by professional development. The research study addressed the following questions:

1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?

2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?

3. How do teachers’ perceptions of changes in their practices, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization?

Research Questions 1 and 2 sought to address the theory presented in Guskey’s (1986, 2002) model. Research Question 3 sought to examine if alignment exists between teachers’ attitudes, beliefs, and practices and the key assumptions put forth by SAMHSA (2014).

**Potential Significance of the Study**

The implementation of successful trauma-informed practices is significant to the many children who have or will suffer from the effects of trauma. Trauma has an impact on children’s social, emotional, cognitive, physical, and relational functioning (Perfect et al., 2015; van der Kolk, 2005). These difficulties often manifest negatively in school (Bell et al., 2013). Teachers who are well-versed in trauma-informed practices may be in a better position to be of service to students impacted by trauma. School leaders can
benefit from having better information to reference when planning and implementing trauma-informed practices. Data analysis, findings, and recommendations from this study will provide guidance for schools attempting to implement trauma-informed practices. Understanding what types of professional development teachers need and find helpful will guide school leaders as they allocate resources for training and support. This understanding of teachers’ needs may help create more efficient and effective implementation efforts.

Teachers trained in trauma-informed practices could serve as an important tool in identifying the impact of trauma and connecting students to resources (Baweja et al., 2016). Discovering how professional development and training changes teachers’ beliefs and attitudes about trauma and trauma-informed practices may give school leaders insight into how to properly support teachers during the planning and implementation of trauma-informed practices. Learning from teachers addresses a portion of the gap in the current literature concerning the results of trauma-informed training and practices.

School leaders are recognized as key to the implementation and sustainability of a trauma-informed approach (Blodgett & Dorado, 2016). Therefore, they may benefit from knowing what teachers need regarding training and support. Understanding how much effort to put into establishing buy-in prior to, during, or after initial implementation of a trauma-informed approach will provide school leaders with information about how to proceed with implementation plans.

**Definitions of Terms**

Key terms used throughout this dissertation are defined below. The definitions are from research in the fields of education and trauma-informed care.
Adverse Childhood Experiences (ACEs) – physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, intimate partner violence, mother treated violently, substance misuse within household, mental illness in the household, parental separation or divorce, and an incarcerated household member (Felitti et al., 1998). Expanded ACEs include racism, community violence, unsafe neighborhoods, low socioeconomic status, peer victimization or bullying, peer isolation, and poor academic achievement (Cronholm et al., 2015; Finkelhor et al., 2013, 2015).

School-Wide Positive Behavior Interventions and Supports (SWPBIS) or Positive Behavior Interventions and Supports (PBIS) – an implementation framework for evidence-based prevention and intervention practices, along a multitiered continuum that supports the academic, social, emotional, and behavioral competence of all students (PBIS, 2018).

Multitiered Systems of Support (MTSS) – a framework consisting of principles of response to intervention (RtI) and PBIS that integrates a continuum of system-wide resources, strategies, structures, and evidence-based practices for addressing barriers to student learning and discipline (Utley & Obiakor, 2015).

Professional Development (PD) – systematic efforts to bring about change in the classroom practices of teachers, in their attitudes and beliefs, and in the learning outcomes of students (Guskey, 2002).

Trauma – the result of an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being (SAMHSA, 2014).
**Trauma-Informed** – to realize the widespread impact of mental or physical trauma and understand the potential paths for recovery; recognize the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and respond by fully integrating knowledge about such traumas into policies, procedures, and practices, and seek to actively resist re-traumatization (SAMHSA, 2014).

**Chapter Summary**

Adverse childhood experiences are prevalent across the United States and the world (Anda et al., 2010; Felitti et al., 1998; Merrick et al., 2018). Children who have experienced these traumatic occurrences may exhibit a range of physical, social, emotional, and behavioral symptoms (Perfect et al., 2015; van der Kolk, 2005). These symptoms can manifest in the classroom in ways that significantly impact student learning (Bell et al., 2013; Blodgett & Lanigan, 2018). To address the needs of students who have experienced trauma, educators are attempting to become trauma-informed.

Guidelines for becoming trauma-informed focus on four key assumptions: (a) realizing that trauma exists and is prevalent, (b) recognizing the symptoms of trauma, (c) responding appropriately to the child experiencing the symptoms, and (d) resisting actions that may re-traumatize the child (SAMHSA, 2014). School districts have utilized existing multitiered systems, such as PBIS, to implement trauma-informed practices across the school setting (Chafouleas et al., 2016; Dorado et al., 2016; Shamblin et al., 2016). A key component of implementation is the professional development of teachers tasked with adopting trauma-informed practices (Chafouleas et al., 2016; Cole et al., 2013; Dorado et al., 2016; McIntyre et al., 2018). While guidelines and recommendations exist, research on best practices is limited. There is also limited
research on how trauma-informed professional development influences teachers’ practices, attitudes, and beliefs, as they relate to trauma-informed approaches.

Guskey’s (1986, 2002) model of the process of teacher change is a professional development theory that states that changes in teachers’ attitudes and beliefs occur after professional development, changes in practice, and successful student outcomes (Guskey, 1986, 2002). Guskey’s (1986, 2002) model provides a rationale for learning from teachers who have experienced professional development and implementation of practices and approaches. Guskey’s (1986, 2002) model allows for better understanding of what works for teachers and what impacts their practices, attitudes, and beliefs.

Students who have experienced trauma need teachers who are trauma-informed. A key component of becoming trauma-informed is professional development, however, research on the influence of trauma-informed professional development on teachers’ practices, attitudes, and beliefs is limited. To properly prepare teachers to work with traumatized students, school leaders must understand and provide access to effective professional development on trauma and trauma-informed care. The purpose of this study was to learn how teachers perceived professional development as influencing their trauma-informed practices, attitudes, and beliefs. This study sought to use teacher perspectives to better understand what makes trauma-informed professional development effective and to better guide school leaders responsible for implementing professional development as part of a trauma-informed approach.

Chapter 2 presents a review of the literature pertaining to trauma and its impact in schools, the implementation of a trauma-informed approach, and the impact of trauma-informed professional development on teachers. The literature review explores current
research on trauma-informed practices in schools and how teachers are being trained. Gaps in the literature are identified to demonstrate a need for this qualitative study. The research design, methodology, and analysis are discussed in Chapter 3. Chapter 4 presents a detailed analysis of the results and findings, and the findings, implications, and recommendations for future research and practice are reviewed in Chapter 5.
Chapter 2: Review of the Literature

Introduction and Purpose

Research suggests that over 50% of children will be exposed to at least one traumatic event during their childhood, with as many as 25% experiencing multiple traumas (Felitti et al., 1998; Merrick et al., 2018; U.S. Census Bureau, 2018). Traumatic experiences can have a significant impact on students by impairing their physical, social, emotional, cognitive, and relational functioning (Bell et al., 2013; Blodgett & Lanigan, 2018; Felitti et al., 1998; NCTSN, 2008; Perfect et al., 2015; U.S. Census Bureau, 2018; van der Kolk, 2005). The manifestation of symptoms of trauma in the classroom necessitates a response from schools to address the impact of trauma on students. Recently, school districts have attempted to implement trauma-informed practices across the school setting with promising results (Chafouleas et al., 2016; Dorado et al., 2016; Shamblin et al., 2016).

A common theme in the research on the implementation of trauma-informed practices in schools is the need for teacher professional development and teacher willingness to become trauma-informed (Chafouleas et al., 2016; Cole et al., 2013; Dorado et al., 2016; McIntyre et al., 2018). Research suggests that teachers are open to learning about trauma and trauma-informed practices, but research on teachers’ work with students who have experienced trauma is limited (Alisic et al., 2012; Baker et al., 2016; Baweja et al., 2016). While the implementation of professional development training relating to trauma-informed practices is recommended, the impact of trauma-
informed professional development has yet to be fully examined (Overstreet & Chafouleas, 2016).

The review of the literature begins with an overview of professional development and teacher change. Research relating to the theoretical rationale for this study is also presented. Professional development and teacher change are connected to the concept of trauma-informed practice. Concepts of trauma and adverse childhood experiences are included in the review.

The literature highlights the significant impact trauma can have on the physical, social, emotional, cognitive, and relational functioning of children. The literature also illuminates how symptoms of trauma can manifest in the school setting. The research on using a trauma-informed approach in schools outlines current practices being used to address the issue of childhood trauma in education. The chapter includes studies that detail the process of implementing professional development within a trauma-informed approach, often using existing school structures. These studies examine how schools are utilizing universal, select, and intensive tiers to meet students’ needs.

Finally, teachers’ perceptions of trauma and trauma-informed practices are reviewed. This section focuses on professional development efforts that are a key part of the implementation of a trauma-informed approach. The need for further research regarding the impact of professional development is highlighted. The review highlights the focus of the study, which is to better understand the influence of professional development on teachers’ attitudes, beliefs, and practices relating to trauma. This research study examines the following questions:
1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?

2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?

3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization?

Research Questions 1 and 2 seek to address the theory presented in Guskey’s (1986, 2002) model. Research Question 3 seeks to understand if alignment exists between teachers’ attitudes, beliefs, and practices and the key assumptions put forth by SAMHSA (2014).

**Professional Development and Teacher Change**

Professional development is “about teachers learning, learning how to learn, and transforming their knowledge into practice for the benefit of their students’ growth” (Avalos, 2011, p. 10). Professional development can be thought of as a three-step process. Teachers receive professional development that alters their knowledge, this causes them to alter their practice, and the altered practices lead to a change in student learning (Kennedy, 2016). This process exists within a professional development system (Borko, 2004). There is the professional development program or material that is being presented, the teachers or learners, the facilitator(s) who guide the professional development, and the context in which the professional development is occurring (Borko,
Research has uncovered characteristics of professional development that may lead to changes in teacher knowledge, skill development, and practice (Desimone, 2009). The first component is content focus, which means that professional development focuses specifically on a subject matter and how students learn it. Explicit focus on content can help teachers to alter their understanding, and it can have a significant impact on teacher knowledge (Borko, 2004; Desimone, 2009; Desimone, Porter, Garet, Yoon, & Birman, 2002; Ingvarson, Meiers, & Beavis, 2005). Active learning is a characteristic that allows teachers to engage in observations, discussion, reception of feedback, student work review, or other activities that are alternatives to listening to lectures (Desimone, 2009; Desimone et al., 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001; Ingvarson et al., 2005). Active learning has been shown to have a significant impact on changing teacher practices (Ingvarson et al., 2005). Teachers appear to need engagement with a topic as opposed to just hearing the information as well as active participation with the topic.

Teachers also benefit more from professional development when there is collective participation. Collective participation refers to the inclusion of educators from the same department, school, or grade who experience the professional development together (Desimone, 2009; Desimone et al., 2002). The ability of teachers to share experiences, collaborate with peers, and discuss teaching and learning has a significant impact on teachers’ knowledge and practice (Ingvarson et al., 2005). Collective participation and a sense of community can lead teachers to support one another as they
implement ideas from their professional development (Ingvarson et al., 2005). Teachers rely on each other when learning something new.

Professional development has been shown to be more successful when there is coherence, or an alignment, between the professional development and teachers’ beliefs and knowledge (Desimone, 2009; Desimone et al., 2002). Leaders must therefore develop an understanding of teachers’ beliefs and knowledge to plan aligned professional development. It may be the case that knowledge and beliefs do not currently align with the goals of the leaders, necessitating additional discussions and training. Professional development opportunities cannot be disconnected from each other and must be part of a planned, coherent program (Garet et al., 2001). Furthermore, coherence is increased if the professional development aligns with previous and future professional development and educational policy (Desimone, 2009).

Duration also plays a key role in the success of professional development. Duration refers to both the number of contact hours teachers have with the material and the length of time they are required to engage with the material, such as across an entire school year (Desimone, 2009). Increased contact hours and time span can have a positive effect on teachers by providing added opportunities for active learning (Garet et al., 2001). The positive impact of increased contact hours indicates a need for school leaders to plan intense, sustained professional development.

Professional development may contain more characteristics of effective professional development and be of higher quality if it is sustained over a longer period (Avalos, 2011; Garet et al., 2001). Professional development over time allows for follow up as teachers implement changes into the classroom. Follow-up, such as working with
coaches, provides teachers with the needed guidance and opportunities for feedback and reflection (Ingvarson et al., 2005). Coaching and feedback impacts teacher knowledge and practice (Ingvarson et al., 2005). Learning over a longer period and having a large amount of time to work with professional development content appears to be critical for teachers’ successful adoption and implementation of new practices.

One additional characteristic of effective professional development is the type of professional development. Researchers have classified professional development into two types, traditional and reform (Desimone et al., 2002; Garet et al., 2001). Traditional professional development refers to workshops in which presenters with expertise share information with participants. Traditional professional development usually takes place outside of the school day, and it is removed from the classroom setting. This type of professional development is common, but it has been criticized as ineffective (Garet et al., 2001). The reform types of professional development include mentoring, coaching, and teacher study groups. Reform types of professional development are often embedded into a teacher’s workday or planning time, allowing for more direct connections to teaching (Garet et al., 2001). While reform types of professional development may be considered more effective, this may not be the type of professional development that teachers are receiving.

While high-quality professional development has been shown to be effective, most teachers do not consistently receive this type of professional development (Desimone et al., 2002). To better ensure high-quality professional development, the new practices must be highly supported by the administration and reflect the school’s mission (Han & Weiss, 2005). Support consists of resources for initial training and for sustained
implementation efforts (Han & Weiss, 2005). Providing the time to engage in reform-types of professional development could be another resource made available by leaders.

New practices are more likely to be implemented if they align with teachers’ beliefs about their acceptability and compatibility with student behavior (Han & Weiss, 2005). Teachers are also more likely to successfully implement newly learned practices if they anticipate their effectiveness and if they eventually see changes in their students’ behavior. Professional development that leads to “long-term program sustainability must be based on an effective program with room for adaptation that meets the needs of the school and its students and is feasible to implement” (Han & Weiss, 2005, p. 672). This leads to the question of when and how do teachers’ attitudes and beliefs change in relation to professional development?

Guskey (1986, 2002) developed the model of the process of teacher change to explain how teachers’ attitudes and beliefs are changed through professional development. Guskey (1986, 2002) built upon his previous study of teachers implementing mastery learning (Guskey, 1984) to develop his model. Guskey (1986, 2002) believed that teachers’ attitudes and beliefs change only after teachers have experienced professional development, implemented new practices, and have seen successful results from students. The order of events in Guskey’s (1986, 2002) theory differs from the order described by Desimone (2009), in which changes in teachers’ attitudes and beliefs precede changes in practice. Both Desimone (2009) and Guskey (1986, 2002) described a linear process with the components of professional development, teacher practices, student outcomes, and teacher beliefs and attitudes.
Three practices make up Guskey’s (1986, 2002) model: (a) change is a difficult and a gradual process for teachers; (b) teachers need regular feedback on student progress; and (c) teachers need ongoing training, support, and, at times, pressure (Guskey 1986, 2002). Guskey’s (1986, 2002) model and its practices were a departure from the idea that buy-in is established early in the professional development process. Guskey’s (1986, 2002) model shows that attitudes and beliefs cannot simply be changed by professional development, but, rather, by a process of professional development, support, implementation, and success.

There are criticisms of Guskey’s (1986, 2002) model. Clarke and Hollingsworth (2002) stated that Guskey’s model was too linear to accurately describe the process of teacher change. Clarke and Hollingsworth (2002) developed the interconnected model of professional growth, which presents a more cyclical model of change. In this model, cycles of teacher reflection inform future practice and student outcomes, resulting in additional changes to teachers’ attitudes and beliefs (Clarke & Hollingsworth, 2002). It should be noted that the interconnected model was built upon Guskey’s (1986, 2002) model, and still showed changes in teacher attitudes and beliefs occurring after professional development, changes, and successes (Clarke & Hollingsworth, 2002). Opfer and Peddler (2011) posited that teacher learning can consist of interactions between teachers’ practices, beliefs, knowledge, and experiences, indicating a non-linear explanation of changes. Additionally, Opfer and Peddler (2011) suggested that teachers’ learning may differ based on their preferences for particular professional development approaches or activities and how they interact with the teacher’s orientation to learning. Guskey (1986, 2002), himself, stated that, in some instances, his model may oversimplify
what can be a highly complex process. For example, Guskey (2002) stated that professional development may be able to slightly shift some teachers’ attitudes from cynical to skeptical, and that the process may be more cyclical than he proposed. While the process of teacher change may not always be as linear as Guskey (1986, 2002) stated, changes in teacher beliefs at the end of the process provide a rationale for learning from teachers who have received professional development and have implemented the practices.

While professional development is part of a trauma-informed approach in schools, most of the research on professional development has focused on teachers’ instructional practices. Guskey’s (1986, 2002) model was also developed to explain the change process as it relates to instructional practices (Guskey, 1986, 2002). While Guskey (1986, 2002) did not develop this theory around the implementation of trauma-informed practices, the underlying rationale still applies. Teachers implementing trauma-informed practices may be required to adjust their attitudes, beliefs, and practices. School leaders responsible for teachers’ trainings need to understand how the change process works, so they may adjust their implementation plans accordingly.

**Trauma and Adverse Childhood Experiences**

In its guidance document for a trauma-informed approach, SAMHSA (2014) defined trauma as:

> Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being. (p. 7)
Within this definition, there are three key components: (a) event, (b) experience, and (c) effects (SAMHSA, 2014).

Traumatic events may include the act or threat of physical or psychological harm (SAMHSA, 2014). Trauma may also occur as a result of life-threatening or severe neglect. How individuals experience an event determines if that event was traumatic. The experience of an event can be influenced by a range of factors such as cultural beliefs, social supports, and the developmental stage of the individual. Individuals are impacted differently and assign different meanings to events. They also experience varying levels of physical and psychological disruption. Individual’s feelings, such as “humiliation, guilt, shame, betrayal, or silencing” (SAMHSA, 2014, p. 8), can shape an individual’s experience of the event.

The effects of an event and experience can be long-lasting and adverse (SAMHSA, 2014). Effects of trauma include an “inability to cope with the normal stresses and strains of daily living; to trust and benefit from relationships; to manage cognitive processes, such as memory attention, thinking; to regulate behavior; or to control the expression of emotions” (SAMHSA, 2014, p. 8). The effects of trauma can impact social, emotional, physical, mental, and relational well-being (SAMHSA, 2014; van der Kolk, 2005). While traumatic events can occur at any time, the impact of childhood traumas have been a focus of researchers since the end of the 20th century.

Traumatic experiences trigger a stress response in children (Cole et al., 2005). Prolonged exposure to trauma may cause children to experience an extended stress response. As children continually experience this state of heightened arousal, it becomes increasingly difficult to regulate their responses. The portion of the brain that controls a
The child’s fear response can become overdeveloped. This can lead to stress response behaviors that occur at inappropriate times (Cole et al., 2005). This altered development will have implications for educators working with traumatized students.

The term adverse childhood experiences, or ACEs, was coined by Felitti et al. (1998) in their landmark study on the impact of childhood trauma on negative health outcomes. Felitti et al. (1998) studied the dose-response relationship between ACEs and health risk factors associated with early death in adulthood. The researchers wanted to discover if an increase in exposure to childhood traumas led to an increase in health risk factors later in life. The following experiences were considered ACEs: physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, intimate partner violence, mother treated violently, substance misuse within household, household mental illness, parental separation or divorce, and an incarcerated household member (Felitti et al., 1998). Using questionnaires from patients at the Kaiser Permanente Clinic in San Diego, Felitti et al. (1998) compared the existing medical records with patients’ response to questions about ACEs. The questionnaire had a response rate of 70.5%, resulting in a participant group of 9,508 patients (Felitti et al., 1998).

Analysis of the questionnaire responses found a significant dose-response relationship between ACEs and each of the 10 risk factors for early death which were studied (Felitti et al., 1998). The researchers also discovered a significant relationship between the reporting of one ACE and the reporting of additional ACEs. Significantly fewer patients with no ACEs reported risk factors compared to those who had four or more ACEs. The significance connected to the number of ACEs speaks to the
compounding effect of ACEs, indicating a need to be aware of children with multiple exposures.

In addition to connecting ACEs to health outcomes, Felitti et al. (1998) also looked at the prevalence of ACEs within the population. They found that 52% of respondents reported at least one ACE, while 13% reported three or more. The prevalence of ACEs discovered by Felitti et al. (1998) has been found in more recent studies. It should be noted that population may impact the prevalence of ACEs. In a study of an urban pediatric population, Burke et al. (2011) found the prevalence of participants having one ACE to be 67%. Participants in the Burke et al. (2011) study were primarily minority children from low-income families who were reported on by guardians, while those in the Felitti et al. (1998) study were primarily middle-class, White adults who self-reported.

Since the original ACEs study by Felitti et al., researchers have researched additional childhood traumas, often called expanded ACEs. Finkelhor et al. (2013) researched childhood distress in relation to peer rejection, exposure to community violence, low socioeconomic status, and poor academic performance. Using 2,030 telephone interviews with 10- to 17-year-olds, researchers collected data on conventional ACEs, expanded ACEs, and distress symptoms. The population of this study was more diverse than the original ACEs study, with 15% of respondents being Black and 18% Hispanic. Several of the expanded ACEs showed strong associations with distress, including peer victimization, lack of friends, community violence, and socioeconomic status (Finkelhor et al., 2013).
Cronholm et al. (2015) also researched expanded ACEs, focusing on racism, community violence, unsafe neighborhoods, bullying, and a history of foster care. Phone interviews with 1,784 youth were conducted using questions about both original and expanded ACEs. Just under half of the participants reported one to three conventional ACEs, with 20% experiencing four or more. Of the whole sample, 50% of the respondents reported experiencing one to two expanded ACEs, with 13% having experienced three or more. Additionally, participants experienced several of the expanded ACEs at a high rate. Over 40% of respondents had experienced community violence, while just under 35% had experienced racial discrimination. Of the sample, 27% percent felt their neighborhood was unsafe (Cronholm et al., 2015).

The CDC published a study of the prevalence of ACEs in the United States, while looking at the years 2011-2014 (Merrick et al., 2018). The CDC used 248,934 responses from the BRFSS to calculate percentages of ACE prevalence. The percentage of respondents reporting at least one ACE was 62%, with 25% reporting three or more ACEs (Merrick et al., 2018). These percentages indicate a high likelihood of having students impacted by ACEs in every U.S. school.

The National Survey of Children’s Health found similar numbers by looking at data for over 70,000 children. This survey found that almost 47% of children have experienced one or more ACE (U.S. Census Bureau, 2018). The percentage of respondents who had experienced two or more ACEs was 22%. The prevalence of adverse childhood experiences has significant implications for schools. These percentages indicate that around 50% of students in any given school may have
experienced some form of trauma, and schools need to be prepared to address issues that may arise as a result of trauma exposure.

**Impact of Trauma on Education**

The cognitive, behavioral, physical, emotional, relational, and social impacts of trauma exposure all affect a student’s ability to perform in school. A negative association exists between ACEs and school success (Bethell, Newacheck, Hawes, & Halfon, 2014; Blodgett & Lanigan, 2018; Burke et al., 2011; Porche, Costello, & Rosen-Reynoso, 2016). Exposure to trauma can lead to a range of symptoms that eventually manifest in the classroom. Students who have experienced trauma may present with physical, behavioral, emotional, or cognitive symptoms (Bell et al., 2013). The prevalence of trauma, along with the symptoms that may result, indicate a need for educators to develop their understanding of trauma and how it impacts their students.

The effects of trauma on students’ cognitive functioning can include lower intelligence quotient (IQ) scores; impaired visual, spatial, verbal, and working memory; increased language difficulties and disorders; and compromised attention (Cole et al., 2005; Perfect et al., 2016). Academic functioning may be impaired by exposure to trauma, thus impacting achievement and outcomes. Exposure to trauma is associated with lower achievement in math, spelling, language, reading, problem solving, and on measures of academic proficiency (Cole et al., 2005; Perfect et al., 2016). Trauma’s impact touches on most, if not all, academic areas.

In addition to academics, trauma also impacts social-emotional and behavioral functioning. Students who experience trauma may display an increase in disruptive behaviors, aggression, hyperactivity, and defiance (Perfect et al., 2016). Internalized
behaviors may also increase, including sadness, anxiety, depression, and withdrawal (Perfect et al., 2016). Students may struggle to take on the perspectives of others, demonstrate executive functioning, or understand the cause and effect nature of their own actions (Cole et al., 2005). The cumulative experience of trauma or the experience of severe trauma can have a compounding effect on these cognitive, academic, social-emotional, and behavioral impairments (Perfect et al., 2016). If students are unable to regulate their attention, behaviors, and emotions, they are most likely not able to achieve academically (Cole et al., 2005). The extent of these symptoms provides a rationale for providing teachers with trauma-informed professional development.

To examine the impact of ACEs on elementary school students, Blodgett and Lanigan (2018) utilized teacher reporting to gather information on ACEs and their impact on student success. The Blodgett and Lanigan (2018) study was the first to make use of teachers’ firsthand knowledge of students to learn about the impact of ACEs. Data were collected from 279 educators on known ACEs and teachers reported school performance of 2,101 elementary students (Blodgett & Lanigan, 2018). Blodgett and Lanigan (2018) found an association between increasing ACE scores and rates of behavior problems, academic failure, and attendance concerns. As ACE levels increased, the number of areas of concern also increased. For example, 12% of students with no ACEs had concerns in two or more areas, while 52% of students with three or more ACEs had two or more areas of concern (Blodgett & Lanigan, 2018).

The majority (78%) of the students in the Blodgett and Lanigan (2018) study were White, but a similar association between ACEs and school concerns was found by Burke et al. (2011) in a study of mostly (97%) minority children. Like Blodgett and Lanigan
Burke et al. (2011) relied on reporting from adults. Burke et al. (2011) reviewed the medical charts of 701 children for doctor-reported medical concerns and caretaker-reported ACEs and school performance concerns. The analysis of the data showed that 51.2% of students with at least four ACEs had reported learning/behavior problems, compared to 3% of children with an ACE score of 0 (Burke et al., 2011). These findings indicate the prevalence of ACEs across demographic groups.

Similar findings were reported by Jimenez, Wade, Lin, Morrow, and Reichman (2015). A study of the experiences of over 1,000 kindergarten students show that ACEs were associated with teacher-reported problems in the areas of academic skills, literacy skills, and behavior (Jimenez et al., 2015). Students who had experienced three or more ACEs were more likely to have below-average language, literacy, and math skills (Jimenez et al., 2015). These findings, again, highlight the compounding nature of ACEs and the significant impact they can have on students. The impact of trauma on students necessitates a response from schools to address students’ needs.

**Trauma-Informed Approaches in Schools**

Guidelines for trauma-informed approaches were developed outside the field of education. While SAMHSA’s (2014) guidance document and others like it exist for implementing trauma-informed practices, school leaders are responsible for following these types of guidelines to inform a trauma-informed approach in the school setting. The NCTSN (2017), which is administered by SAMHSA, stated that trauma-informed schools should be able to recognize and respond to the impact of trauma on students and develop knowledge, awareness, and skills amongst staff. How schools accomplish these goals has been presented in school-specific documents that serve as guidelines for
schools and districts to become trauma-informed. While these documents offer information and guidelines, research on the effectiveness of these approaches is ongoing.

The Trauma and Learning Policy Initiative, a partnership between the Massachusetts Advocates for Children and Harvard Law School, published a report, policy agenda, and guidelines relating to trauma-sensitive schools (Cole et al., 2005, 2013). In the report and policy agenda, Cole et al. (2005) stated that the significant roles of schools in children’s lives makes it imperative that the schools can address trauma’s impact on learning. The report and policy agenda put forth a framework with six key elements: (a) school-wide infrastructure and culture; (b) staff training; (c) linking with mental health professionals; (d) academic instruction for traumatized children; (e) nonacademic strategies; and (f) school policies, procedures, and protocols (Cole et al., 2005). The framework is intended to be flexible to fit the needs of individual schools. These elements outlined in the report represent a potential shift in culture, knowledge, and practice for teachers (Cole et al., 2005).

Learning about trauma and its impact can lead to the use of a trauma lens (Cole et al., 2013). The trauma lens allows educators to better understand students’ relationships, learning, and behavior. A new perspective can help teachers and schools respond to students in new, trauma-sensitive ways. Cole et al. (2013) made clear that a shift in culture is necessary to become trauma-sensitive, and the researchers highlighted six attributes of a trauma-sensitive school, which are: (a) leadership and staff share an understanding of trauma’s impact on learning and the need for a school-wide approach; (b) the school supports all students to feel safe physically, social, emotionally, and academically; (c) the school addresses students’ needs in holistic ways; (d) the school
explicitly connects students to the school community; (e) the school embraces ACEs teamwork and shared responsibility; and (f) leadership and staff anticipate and adapt to the ever-changing needs of students (Cole et al., 2013). Using a trauma lens and developing these attributes represents a potentially drastic shift in mindset and approach for teachers (Cole et al., 2013).

Current research points to the use of existing multitiered intervention models as a key to the implementation of a trauma-informed approach (Chafouleas et al., 2016, 2018; Dorado et al., 2016; Shamblin et al., 2016; von der Embse et al., 2018). Existing multitiered support systems in schools, such as SWPBIS and RtI, offer potential for the implementation of models for a trauma-informed approach (Chafouleas et al., 2016).

The use of universal, select, and targeted tiers (Tiers 1, 2, and 3), allows for “early identification of risk, varied levels of intervention support designed to teach skills and prevent more serious problems, and continual data-driven evaluation of response” (Chafouleas et al., 2016, p. 144). The universal tier refers to school-wide practices such as positive climate, behavioral expectations, teacher and staff training, restorative discipline practices, SWPBIS, and SEL curriculum (Chafouleas et al., 2016; Dorado et al., 2016). The universal tier presents an opportunity to create and support a trauma-informed school community (NCTSN, 2017). At the selected tier, students who are at risk and in need of early intervention are identified (NCTSN, 2017). At the selected tier, the focus is on students who are not responding to universal practices. Targeted interventions may include social skill development, strengthening of social supports, reexamining discipline policies, and creating coordinated care teams (Chafouleas et al., 2016; Dorado et al., 2016). The targeted or intensive tier interventions are for students
who are not responding to Tier 1 and 2 interventions. Interventions such as individual cognitive behavioral therapy, community care, wrap-around services, and crisis support may be present at the intensive support level (Chafouleas et al., 2016; Dorado et al., 2016; NCTSN, 2017). Studies of pilot schools and districts have explored using a MTSSs to integrate trauma-informed practices. The initial findings from these studies are promising, but research on the sustainability, feasibility, and acceptance of a trauma-informed approach in schools remains limited (Overstreet & Chafouleas, 2016).

Teacher Perceptions of Trauma

Prior to planning and implementing trauma-informed professional development, it may be beneficial to understand teachers’ perspectives about trauma and trauma-informed practices. With research suggesting that over 50% of children will be exposed to at least one traumatic event during their childhood, with as many as 25% experiencing multiple traumas, it is highly likely that teachers will have students who have experienced trauma in their classrooms (Felitti et al., 1998; Merrick et al., 2018; U.S. Census Bureau, 2018). Learning from teachers who have worked with students exposed to trauma can provide valuable information about what teachers will need in the form of trauma-informed professional development and training.

Aliscic et al. (2012) used a questionnaire with 765 upper-elementary teachers in the Netherlands to gauge their perceptions of working with students with trauma. While much of the research presented in this literature review is from the United States, research from other developed countries has been featured prominently in the ACEs discussion (Anda et al., 2010). The questionnaire included a brief introduction to trauma and statements scored on a 6-point Likert scale. Sample statements included “it is not
difficult/extremely difficult to know what is best for me to do to support students,” and, “it is not difficult/extremely difficult to know when students need mental health care to recover” (Alisic et al., 2012, p. 99). Only 9% of the participants had received trauma-informed training prior to the questionnaire.

At least one out of four teachers rated each item as a four or more out of six, indicating difficulty working with traumatized students, with one in five teachers scoring ≥4, on average, per item (Alisic et al., 2012). Specifically, teachers found it difficult to remain emotionally uninvolved with students, to know their specific role, to know where to refer students, and how to best support students who have experienced trauma. These findings indicate a need for trauma-informed professional development and training to address teachers’ concerns.

Similar results were found in another study by Alisic (2012), although the study utilized semi-structured interviews instead of survey data. Alisic (2012) conducted interviews with 21 teachers at 16 schools in the Netherlands, with efforts made to diversify participant experience, gender, and school assignment. The interviews focused on five trauma-related topics: (a) general information, (b) experience and teaching strategies, (c) school protocols, (d) colleagues, and (e) needs. All interview transcripts were read and commented on by the participants.

Teachers expressed concern over understanding where their role ended and mental health services began (Alisic, 2012), reinforcing what was found by Alisic et al. (2012). A theme of balance emerged, with teachers expressing concern over having to balance between the needs of overwhelmed students with the needs of the rest of the class, and how not to make students into outcasts (Alisic, 2012). A need for professional
know-how emerged, with teachers citing a need for training, a way to talk about traumatic events, how to determine when further care was necessary, and how to refer to mental health services. The emotional burden of working with traumatized students was highlighted by teacher concern for students, the potential to have their own traumatic experiences revisited, and the feeling of taking students’ problems home.

The need for training was also highlighted in a case study by Alvarez (2017). Alvarez (2017) interviewed an in-school mentoring program coordinator from an urban school with a high poverty rate to uncover the experiences and perceptions of an educator working within a school that had experienced significant traumatic events. The need for understanding and training emerged from the case study. Specifically, the participant expressed a need for educators to be trained to help students cope with the stress caused by trauma and its impact on students’ physical, social, and emotional well-being (Alvarez, 2017).

Teacher perceptions of trauma and trauma-informed practices may be dependent upon their familiarity with these topics. Blitz and Mulcahy (2017) conducted focus groups with 37 school personnel after the completion of a one-time training on the neurophysiological and behavioral impact of toxic stress and trauma. The topics discussed in the focus groups were (a) what participants know about their students’ lives that would expose them to trauma, (b) how this manifested in their work with students, and (c) what they thought the school needed to do to address these needs. While these focus groups were conducted after training, the focus remained on teacher perceptions. Teachers expressed a desire to better understand trauma and how to respond to students’ reactions to trauma, as well as a need for increased mental health support. This study
reinforced the Alisic (2012), Alisic et al. (2012), and Alvarez (2017) findings that teachers need trauma-informed training, and teachers have a desire to be able to work appropriately with students who have experienced trauma.

**Professional Development and Trauma-Informed Practice**

To implement a trauma-informed approach in schools, school leaders will need to plan and implement professional development. Professional development and training may look different depending on teacher needs and available resources. This section outlines studies of short-term professional development that was delivered over the course of one session or a few days, longer-term training, and training that was part of a full implementation of a multitiered trauma-informed approach.

**Short-term professional development.** Trauma-informed professional development may be presented as one-time training, or it can be delivered over the course of a few sessions. Brown, Baker, and Wilcox (2012) studied the impact of a basic trauma-informed care training on personnel across five residential youth treatment agencies, with teachers making up a portion of their sample. Participants received a 3-day training focused on trauma and children’s development of attachment, brain and nervous systems, and self-regulation skills. Participants experienced role-play, discussions, and active-learning exercises. The researchers then measured participants’ knowledge, beliefs, and behaviors using multiple-choice and Likert scale measures.

In response to the 3-day training, participants’ self-reported knowledge scores increased significantly from pre- to post-training (Brown et al., 2012). The knowledge measured was of the content presented in the training regarding how to work with traumatized youth. Beliefs favorable to trauma-informed care also increased from pre- to
post-training, with participants indicating an understanding of how traumatized children need unique care. Self-reported behaviors indicative of a trauma-informed care approach also increased after training. This increase suggests that knowledge, beliefs, and behaviors may be shifted in the short-term as a result of training.

The work of Brown et al. (2012) was extended by McIntyre et al. (2018) by utilizing similar measures to study the impact of foundational professional development exclusively on teachers. Additionally, McIntyre et al. (2018) studied the relationships of trauma-informed implementation factors, such as staff knowledge and acceptability of trauma-informed approaches. Six public charter schools participated in a 2-day foundational professional development course focused on trauma-informed approaches and SAMHSA (2014) key assumptions of (a) realization of trauma, (b) recognition of symptoms, (c) response to trauma, and (d) resisting re-traumatization.

Teachers were given a pre- and post-training knowledge measure consisting of 14 multiple-choice items, with scores of 80% or higher considered mastery (McIntyre et al., 2018). The percentage of teachers scoring at the mastery level increased from 20% to 70% from pre- to post-training. Acceptability of trauma-informed approaches and perceived school system fit were measured after the training. Acceptability and system-fit scores were tested with knowledge scores to determine associations between these factors. Knowledge was found to be significantly correlated with ratings of acceptability, while acceptability was positively correlated with perceived system fit. Knowledge was found to positively associate with acceptability only when there was a perceived system fit. If a system fit was not indicated, knowledge growth was associated with lower acceptability of trauma-informed approaches (McIntyre et al., 2018). Like Brown et al.
(2012), this study demonstrated that professional development could have a short-term impact on knowledge and beliefs. However, the findings also indicate a need to consider system fit when implementing a trauma-informed approach.

The association of variables predicting commitment to trauma-informed care implementation was also studied by Sundborg (2018). Sundborg looked at the variables of foundational knowledge, support from leaders and peers, self-efficacy, and beliefs about trauma. Questionnaires were given to a group of participants in the fields of public health, behavioral health, substance abuse, and early childhood education, all participants who had attended a trauma-informed care training provided by the researchers. Results of the questionnaires showed participants to be committed to trauma-informed care with high average scores for beliefs about trauma, knowledge self-efficacy, and principal support. Commitment to trauma-informed care was significantly correlated with all other variables, especially with the participants’ commitment and beliefs (Sundborg, 2018). These results, along with the results of the McIntyre et al. (2018) study, show an interconnection between variables that may impact the implementation of trauma-informed practices.

**Ongoing professional development.** Trauma-informed professional development and training may be implemented in an ongoing manner, exceeding a short-term training. These professional development efforts often accompany the implementation of a trauma-informed program or approach. Information from studies of this type of professional development may prove useful to future implementation efforts.

Barnett, Yackley, and Licht (2018) attempted to determine the impact of a trauma-informed care program on the knowledge, skills, safety, and job satisfaction of
staff members at a youth residential treatment facility. The training portion of the program consisted of seven, 2-hour trainings on the topics of relationships and trauma, secondary trauma, intervention strategies, and becoming trauma-informed. Reflective practice groups were offered after six of the trainings, and the groups were focused on supporting staff as they worked to implement what was learned in the trainings.

Surveys were administered 1 year into the program (Barnett et al., 2018). Participants perceived their safety, job satisfaction, and trauma-informed skills to be high, with the number of trainings and reflection groups attended correlating positively with trauma-informed skills. The same correlation did not exist for job safety or satisfaction. Knowledge growth was indicated by participants in the area of awareness of the possible traumatic histories of students. While these results speak to the potential of ongoing professional development to lead to knowledge and skill growth, it should be noted that other trauma-informed care measures had been put in place prior to the trainings. These measures included behavior rounds, caregiver training, and education relating to specific critical incidents in the facility. The correlation of training time to other variables points to the need to collect data from participants who have received ongoing training.

Additionally, critical behavior incidents were reduced by 22% over an 18-month period during the study (Barnett et al., 2018). These reductions were not specifically correlated with the professional development, but they may be a consideration for future research.

Another form of ongoing training was studied by Brunzell, Stokes, and Waters (2019). These researchers studied how a group of Australian primary school teachers might shift their practice when learning about trauma-informed positive education (TIPE) practices. Group interviews and participant journals were used to collect data over an 11-
month period as teachers were taught strategies to address student self-regulatory abilities, disruptive attachment, and psychological resources for well-being. After an initial TIPE practices workshop, teachers completed four cycles of active reflection in which they learned new strategies, planned, implemented strategies, collected evidence, and reflected on practice.

Themes of classroom relationships and increasing psychological resources for students’ well-being emerged from the interviews and journals (Brunzell et al., 2019). Teachers were focused on building attachments with students and utilizing unconditional positive regard. Additionally, teachers commented on intentionally working on students’ character strengths, growth mindsets, and reaching goals. These subthemes were addressed by teachers in daily interactions and in follow-up sessions to negative student behaviors. The Brunzell et al. (2019) study presented a shift from what teachers perceive or need, and instead looked more closely at how teachers begin to implement trauma-informed practices with students as a result of ongoing professional development and support.

**Professional development within multitiered implementation.** While trauma-informed professional development and training is important, it is often embedded within a multitiered approach to becoming a trauma-informed school. The research presented in this section studied the influence of professional development on teachers within a larger implementation framework. As outlined previously, multitiered models in schools typically consist of three tiers of service delivery. The universal tier involves school-wide interventions, while the select tier is focused on reinforcement for students who are
not responding to universal interventions. The intensive tier is focused on individualized interventions for students who have not responded to efforts at the first two tiers.

To implement trauma-informed approaches, schools or districts may partner with outside agencies to utilize available resources (Dorado et al., 2016; Perry & Daniels, 2016; Shamblin et al., 2016). Perry and Daniel’s (2016) study of a school and agency partnership examined the first year of implementation of a trauma-informed approach. Partners from the New Haven Trauma Coalition worked in a New Haven school to provide 2 days of professional development on basic trauma knowledge, strength-based interactions, trauma-informed classroom practices, de-escalation techniques, and self-care. A care coordination team was available to engage with students and provide small group services to referred students. Survey data show that 38% of the participants indicated changing their practice, while 47% had learned a new trauma-informed technique. Of the full group of participants, 50% indicated a change in attitude toward students, with 16% citing a better recognition of trauma. All teacher behaviors were self-reported. Brunzell et al. (2019) also noted a shift in teacher practice after professional development, however, neither study utilized observations of teacher behavior.

Dorado et al. (2016) studied the implementation of trauma-informed practices across four San Francisco schools as they partnered with the University of California-San Francisco’s Health Environments and Response to Trauma in Schools (HEARTS) program. A coordinated care team implemented practices at all three tier levels, with four main goals: (a) to increase school personnel’s knowledge about trauma and trauma-informed practices, (b) to improve students’ school engagement, (c) to decrease behavioral problems associated with the loss of instructional time due to disciplinary
actions, and (d) to decrease trauma-related symptoms for students who had received therapy as part of the program.

Staff received an initial trauma-informed training, with follow-up trainings and on-site consultation services (Dorado et al., 2016). HEART providers helped staff to develop behavior plans and discipline policies, while providing on-site therapy for students suffering symptoms of trauma. A program evaluation survey evaluated changes in personnel’s knowledge and practice and in students’ school engagement. A retrospective pre-post method, in which pre- and post-training answers were collected at the end of the training, showed an increase in both knowledge and practice for staff. These findings are consistent with previous studies that saw an increase in knowledge after professional development (Brown et al., 2012; McIntyre et al., 2018). Staff also reported an increase in student engagement, while discipline referrals and suspensions were reduced. Changes to student behavior referrals speaks to the potential of trauma-informed practices to impact outcomes for students.

Ongoing training and consultation services were also present in a school and agency partnership studied by Shamblin et al. (2016). A study group of 11 preschool teachers in rural Appalachia was provided with consultation services over the course of one school year. At the universal tier, consultation focused on supporting students’ social-emotional development, while at the select tier, consultants assisted with developing behavior plans for students. Clinicians provided on-site mental health support at the targeted tier. Data were collected on teachers’ confidence and competence with trauma-informed practices pre- and post-intervention. Teacher practices were scored by program consultants, adding an observation component to the study.
Teachers reported that their confidence and competence increased significantly from pre- to post-training (Shamblin et al., 2016). Positive teacher practice attributes did not increase significantly from pre- to post-assessment, but there was a significant reduction in negative attributes. The lack of change to practices leaves some question on the actual impact of the training on the teachers’ practices. The increase in competence after professional development aligns with the findings from Brown et al. (2012 and McIntyre et al. (2018). The findings differed from those of Brunzell et al. (2019) and Perry and Daniels (2016) by showing a decrease in negative teacher behaviors instead of the use of new trauma-informed behaviors.

A study by von der Embse et al. (2018) examined the implementation of trauma-informed practices at the Tier 1 and Tier 2 levels in a K-8 school in Philadelphia. The study covered the first 2 years of a 4-year implementation process to determine the impact of training and support on existing PBIS. A pilot group of teachers received training on the complex nature of trauma, the impact of trauma on students, the use of universal trauma screening tools, the teachers’ role in identifying risk, and practice and performance feedback. The trainings occurred at the beginning of each year and were supplemented by staff meetings focused on trauma-informed practices.

In addition to the initial trainings, six teachers received weekly coaching interventions focused on trauma-informed classroom management (von der Embse et al., 2018). Coaching cycles consisted of observations and performance feedback on six classroom management skills. Office data referrals for the pilot classrooms decreased over the course of a year from 1.2 per day to .2 per day, while non-pilot classrooms maintained consistent rates. Every teacher who received coaching demonstrated mastery
in at least one of the six classroom management practices, while all teachers showed improvement in at least three skills.

The use of an outside observer may be a more reliable indicator of teacher practice than self-reported measures. The results of this study contrast with the lack of observed positive changes found by Shamblin et al. (2016). School discipline data were also used by Barnett et al. (2018) and Dorado et al. (2016), however, the von der Embse et al. (2018) study made the connection between student behavior and teacher training more explicit.

**Chapter Summary and Gaps in the Literature**

The intent of professional development is to provide teachers with opportunities to increase their knowledge and skills, thus expanding their classroom practices. Certain characteristics of high-quality professional development have been shown to be more effective in improving knowledge, skills, and practice. Professional development is more effective when it focuses on specific content, allows for active learning, and includes collective or group participation (Borko, 2004; Desimone, 2009; Desimone et al., 2002; Ingvarson et al., 2005). Professional development is most beneficial when it is aligned with teachers’ current knowledge and beliefs and is provided over a longer period of time. Increased training has been shown to increase results (Borko, 2004; Desimone, 2009; Desimone et al., 2002; Ingvarson et al., 2005).

New practices are more likely to be adopted and continued if they align with teachers’ attitudes and beliefs (Han & Weiss, 2005). Guskey (1986, 2002) developed a theory to explain when and how teachers’ attitudes and beliefs change because of professional development. Guskey (1986, 2002) believed that actual changes to beliefs
and attitudes do not occur simply because of professional development. Teachers must be provided with the opportunity to implement new practices, receive support and feedback, and see positive changes in student outcomes (Guskey, 1986, 2002). There is insight to be gained from teachers who have gone through such an experience.

Childhood trauma is prevalent and impacts children across the globe (Anda et al., 2010; Felitti et al., 1998; Merrick et al., 2018; U.S. Census Bureau, 2018). Trauma can have a significant effect on children’s social, emotional, behavioral, physical, cognitive, and relational functioning (Perfect et al., 2015; van der Kolk, 2005). The impact on students’ learning can be pronounced. A negative association exists between increased trauma exposure and school success (Bethell et al., 2014; Blodgett & Lanigan, 2018; Burke et al., 2011; Porche et al., 2016). Increased behaviors, a decline in academics, and poor attendance are just a few of the negative outcomes associated with trauma (Blodgett & Lanigan, 2018). School districts are working to address this growing concern by looking to become trauma-informed.

Using a trauma lens or becoming trauma-informed involves a change in perception and mindset for many educators (Cole et al., 2013). Research has shown that teachers have expressed a desire to better understand trauma and how to respond to students’ reactions to trauma, but they need trauma-informed training to increase their knowledge and skill (Alisic, 2012; Alisic et al., 2012; Alvarez, 2017; Sundborg, 2018). Professional development can be offered on a short- or long-term basis to help teachers implement trauma-informed practices. These professional development opportunities are usually embedded within a larger shift in the school’s culture. Current research points to the use of existing multitiered intervention models as a key to the implementation of a
trauma-informed approach (Chafouleas et al., 2016, 2018; Dorado et al., 2016; Shamblin et al., 2016; von der Embse et al., 2018). These models utilized universal, targeted, and intensive tiers to deliver trauma-informed practices and interventions and increasing levels of intensity to match student need.

Initial studies on trauma-informed professional development have found that training can increase teachers’ knowledge and skills relating to trauma-informed practices on self-reported measures (Brown et al., 2012; McIntyre et al., 2018). Factors, such as commitment, knowledge, and beliefs, have been shown to influence each other and may influence teachers’ ability to implement trauma-informed practices (McIntyre et al., 2018; Sundborg, 2018). The longer-term sustainability of these changes is an area in need of further study.

While the research on professional development and trauma-informed practices is promising, it is also limited. Most research has looked at changes immediately following professional development. These studies have primarily relied on survey data to measure changes in teachers’ attitudes, beliefs, knowledge, and potential changes to practice. The effectiveness of professional development over a longer period is a gap that exists in the literature. While some research on the implementation of trauma-informed approaches over a year or two has been conducted, research on teachers’ perceptions of the effectiveness of professional development over time is limited and deserves further study. This is particularly true for researchers exploring the perceptions of individual teachers. There is a need to better understand what types of professional development work best for teachers, and what teachers need to successfully implement trauma-informed
practices. The methodology proposed for collecting and analyzing data on teachers’ experiences with trauma-informed professional development is explained in Chapter 3.
Chapter 3: Research Design Methodology

Introduction

Childhood trauma is prevalent and can have a significant negative impact on children’s social, emotional, physical, behavioral, cognitive, and relational development (Merrick et al., 2018; Perfect et al., 2015; van der Kolk, 2005). The prevalence and significant negative impact of childhood trauma necessitates a response from schools to address this growing concern. Teachers’ roles in students’ lives puts them in a position to identify and respond to students suffering symptoms of trauma (NCTSN, 2017). Teachers are, therefore, at the center of trauma-informed efforts in schools.

Guidelines for trauma-informed approaches, such as those from SAMHSA (2014), highlight the need to realize the impact of trauma, recognize the symptoms of trauma, respond to students who are experiencing symptoms, and avoid actions that may re-traumatize the students. Schools have attempted to implement trauma-informed practices through the use of existing multitiered systems such as PBIS (Chafouleas et al., 2018; Dorado et al., 2016). While schools have attempted to implement trauma-informed approaches, there is limited research on the long-term impact of these approaches (Chafouleas et al., 2016, 2018; Cole et al., 2013; Dorado et al., 2016; McIntyre et al., 2018). All facets of implementing a trauma-informed approach warrant further research.

A key component of implementing a trauma-informed approach in schools is professional development for teachers. Studies have shown a willingness on the part of teachers to learn about trauma and trauma-informed practices (Baker et al., 2016).
McIntyre et al. (2018) suggested that professional development may increase teachers’ trauma-informed knowledge in the short-term. Similar to the impact of trauma-informed practices on the whole, research on the long-term impact of professional development on teachers’ trauma-informed practices, attitudes, and beliefs is limited (Alisic et al., 2012, Chafouleas et al., 2018). Professional development theory suggests that practices, attitudes, and beliefs change after opportunities for implementation and changes to student outcomes (Guskey, 2002). This research examined the experiences of teachers who had time to learn, implement, and experience outcomes. The research study was guided by the following questions:

1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?

2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?

3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization?

Research Questions 1 and 2 sought to address the theory presented in Guskey’s (1986, 2002) model of the process of teacher change. Research Question 3 sought to investigate if alignment existed between teachers’ attitudes, beliefs, and practices and the key assumptions put forth by SAMHSA (2014). The study of trauma-informed practices in schools is an emerging field. The potential shift in approach may necessitate major
changes for teachers, which could be supported by professional development. This study set out to clarify how professional development and training influences teachers’ attitudes, beliefs, and practices over time. The data collected from teachers and an administrator may serve as a guide for school leaders as they attempt to develop and implement future trauma-informed professional development. The data provide insights into the influence professional development can have on teachers’ practices, attitudes, and beliefs.

**Design and Methodology**

This phenomenological study used individual interviews to collect data on the experiences and perceptions of the participants. Qualitative interviews are the typical method used for phenomenological study (Moustakas, 1994). A phenomenological study collects data from participants to develop an understanding of their *lived experience* (van Manen, 2017). Individual interviews allow participants an opportunity to engage in thoughtful reflection on a particular phenomenon (van Manen, 2007). This design was selected to develop an understanding of teachers’ experience with, and perceptions of, trauma-informed professional development and its perceived influence on their practices, attitudes, and beliefs.

**Research Context**

This research study took place within the Lake Point Elementary School (LPES) in the Lake Point Central School District (LPCSD) in Western New York. LPCSD is situated in Blake County, an area of approximately 340 square miles. Blake County has a population just under 25,000, and it has a large agricultural base. The county has a poverty rate of about 14%, with a population that is 97% White. Blake County, LPES,
and LPCSD are pseudonyms that were assigned in place of the names of the county, school, and district to ensure confidentiality. For the 2017-2018 school year, district-wide enrollment in LPCSD was approximately 1,570 students.

LPES serves students in Grades K-5, with an enrollment of 603 for the 2017-2018 school year. Of the student population 53% is male and 48% is female. The population of the school, at the time of this study, was 94% White, 3% Hispanic, 2% is multiracial, and 1% is Asian, Native Hawaiian or Pacific Islander. Of the whole population of students, 63% were considered economically disadvantaged. The school employed approximately 70 teachers, two mental health professionals, and two administrators.

**Research Participants**

The population of interest for this study was elementary classroom teachers and administrators from LPES who had received trauma-informed professional development and had time and opportunity to implement trauma-informed practices. Participants were selected based on their voluntary participation in a 4-month trauma-informed professional development training, delivered from January to April 2019. The professional development was part of a privately funded grant and was delivered by researchers from a local higher education institution. Participants received four full-day training sessions that were focused on trauma and the brain, the impact of trauma on learning and relationships, and a strength-based approach to trauma-sensitive strategies. Each session was followed by a daily log, tracking a specific component of the training. Participants tracked the behaviors of a selected student, their own self-care strategies, and the trauma-informed strategies they implemented with the selected student. The trainings culminated
with a presentation of the participants’ daily log information. Each participant received a stipend for participating.

The researcher used purposive sampling to select participants from the 25 teachers, mental health professionals, and administrators who participated in the training. Purposive sampling is used to develop an understanding of a research problem and phenomenon (Creswell & Poth, 2018). The goal of purposive sampling is to use information-rich cases for in-depth study, with the focus of learning about the research questions (Emmel, 2013). Teachers and administrators who had received intensive training and had time for implementation of the new practices provided rich cases that spoke to the phenomenon under study.

Participant selection was criterion-based (Emmel, 2013). Participants were administrators or classroom teachers who had attended the full 4-month training. The researcher obtained a list of teachers and administrators who received the professional development training. This list came from school administration and included teachers’ grade levels and years of experience. The researcher selected teacher participants from the larger group based on the provided information, in an attempt to interview participants with a range of years of experience and grade levels taught. The single administrator who received the training was selected to participate. Mental health professionals who received the training were not interviewed for this study. All selected participants received an email inviting their participation in the study (Appendix A), along with an informed consent form (Appendix A). Interviews were conducted with 11 participants, which is within the typical range for studies using individual interviews (Brinkman & Kvale, 2015).
Instruments

Three instruments were used for data collection. Data were collected from participants through individual, semi-structured interviews. Analytic memos were taken during the interview process, coding, and analysis. The professional development materials used during the initial 4-month training were collected from one of the professional development trainers and reviewed by the researcher.

Individual interviews. A semi-structured interview protocol (Appendix B) was used to collect data from the participants. The semi-structured interviews were used to obtain descriptions of the experiences of the participants with the goal of interpreting the phenomena under study (Brinkman & Kvale, 2015). The purpose of the semi-structured interviews was to understand the meaning of what was shared by participants, and participants were encouraged to describe and specify when discussing their experiences. The interviews focused on specific themes with open questions that allowed for elaboration and follow up (Brinkman & Kvale, 2015). The interview protocol was developed by the researcher and was based on the study’s three research questions, Guskey’s (2002) model of the process of teacher change, and SAMHSA’s (2014) key assumptions for trauma-informed approaches. The researcher conducted two pilot interviews with teachers from another school from which teachers did not participate in the study. Notes from the pilot interviews were used to adjust the protocol. Each teacher from LPES was interviewed using the same protocol. The administrator was interviewed using a slightly modified version of the teacher interview protocol (Appendix C) to fit his specific role.
Individual interviews allowed each participant to share his or her own unique perspective. The goal of the individual interviews was to gather perspectives and understand the lived experience of the participants (Brinkman & Kvale, 2015). Individual interviews were selected to allow participants to speak freely about the training they have received and the level to which they had implemented new practices. The decision to interview teachers and administrators individually was also made to avoid potential conflicts due to roles. Analytic memos were used to help understand the themes that emerged from the analysis of the interview transcripts (Brinkman & Kvale, 2015).

**Analytic memos.** The process of writing analytic memos was used throughout the research process. Analytic memos were used to document researcher reflections about all aspects of the interview and coding process (Saldaña, 2016). Memos were written to record reflections during and after interviews, while listening to audio recordings, and while coding. Memos were written throughout the study as the researcher reflected upon the process. The memos were sorted and reviewed to provide additional information during the process of coding and developing themes.

**Professional development materials.** Materials from the professional development training were reviewed as part of the data collection process. The purpose of reviewing the training materials was to familiarize the researcher with the content and objectives of the trainings. The materials were used as a resource during analysis of the participants’ responses. The professional development materials were analyzed for alignment with SAMHSA’s (2014) four key assumptions and with the participants’ responses.
Data Collection

After receiving approval from the St. John Fisher Institutional Review Board (IRB) and the LPCSD central administration, the researcher met with the LPES school principal to obtain a listing of potential research participants who met the criteria of being classroom teachers or administrators who received the full professional development training. Contact information, years of teacher experience, and grade levels taught were part of the potential participant listing. Emails were sent to potential participants introducing the researcher and explaining the research study.

Semi-structured interviews were conducted at the school at a mutually convenient time in a private setting, and the interviews lasted between 30 to 60 minutes. Prior to the interviews taking place, participants received a consent form (Appendix A) through email, and they were provided with an opportunity to ask any clarifying questions before being solicited to sign the consent. The interview protocol described the study’s purpose and the interview process. This information was provided to participants prior to the start of the interview. During the interview, the researcher asked guided questions, with follow-up and clarifying questions as deemed necessary.

Prior to the interviews, documents from the 4-month professional development training were collected and analyzed for alignment with SAMHSA’s (2014) four key assumptions. The use of these artifacts provided an opportunity for the researcher to become familiar with the content and objectives of the trainings. Developing an understanding of the training materials helped the researcher to analyze the data more thoroughly.
Data Analysis

The interviews were audio recorded and sent to an online service for transcription. Upon receipt, the transcriptions were coded, categorized, and used to develop themes. Interview recordings were listened to multiple times to ensure understanding. This understanding was compared with analytic memos taken during the interview process. The analytic memos were used during the coding of the transcriptions to provide additional insight.

Coding. A sample transcript was coded by a colleague familiar with qualitative analysis and compared to the researcher’s coding to ensure interrater reliability. For the first coding cycle, a priori codes were developed from the research questions, Guskey’s (2002) model of the process of teacher change, and SAMHSA’s (2014) key assumptions of a trauma informed-approach. A priori coding enabled the analysis that addressed the study’s research questions (Saldaña, 2016). The second cycle of coding consisted of initial or open coding. The initial coding was open-ended and provided a starting point for the analysis (Saldaña, 2016). The third cycle of coding used in vivo coding. The selection of in vivo coding was made to “prioritize and honor the participant’s voice” (Saldaña, 2016, p. 106).

Developing themes. During the coding process, codes were used repeatedly as patterns emerged. As the data were analyzed, codes were condensed into categories. Categories were used to create themes. Analytic memos written throughout the research process were used to bring additional information to the coding process. Additionally, new memos were written during coding to assist with the identification of patterns, categories, and themes (Saldaña, 2016).
Confidentiality

Confidentiality was maintained throughout the interview process. Pseudonyms were assigned to the district, school, and research participants. No distinguishing information was used to link participants to their pseudonyms. All interview recordings and transcripts are maintained using a private, locked, and password-protected file, stored on a password-protected computer.

Memos and other paper files relating to the data collection are stored securely in a locked filing cabinet in a private office. Paper records, recorded data, and consent forms will be kept for 3 years after the publication of this study. At that time, all paper records will be destroyed. Electronic data will be deleted and purged from all devices.

Credibility of the Researcher

The researcher has worked in the field of education for 14 years, as both a teacher and an administrator. The researcher has earned a Bachelor of Sciences degree in Childhood Education, a Master of Science degree in Childhood Literacy, and a Certificate of Advanced Study in Educational Administration. At the time of this study, the researcher was not affiliated with the LPCSD or LPES and did not have a supervisory relationship with any of the participants.

Procedures for Data Collection and Analysis

1. Preliminary Steps
   a. Obtained IRB approval from St. John Fisher College
   b. Obtained approval from LPCSD for the participation of their teachers and administrators in the study (Appendix D)
c. Worked with LPES administrative team to identify and recruit teachers and an administrator to participate in interviews
   i. Sent email with informed consent form (Appendix A) for teachers and an administrator

2. Data Collection
   a. Conducted pilot interview questions with participants not involved in the study
   b. Adjusted interview protocols (Appendix B, Appendix C) based on feedback from pilot interviews
   c. Collected professional development materials from trainer
   d. Scheduled interviews to occur after receipt of consent forms
   e. Conducted and recorded individual interviews with participants
   f. Wrote analytic memos during each step of the research process

3. Data Analysis
   a. Had interview recordings transcribed
   b. Sample coded a portion of the transcript for interrater reliability
   c. Reviewed analytic memos
   d. Analyzed transcripts using a priori coding
   e. Analyzed transcripts using initial or open coding
   f. Analyzed transcripts using in vivo coding
   g. Developed categories and themes from the coding
   h. Used professional development materials provided by the trainer to triangulate the data
Chapter Summary

This study of Lake Point Elementary School’s trauma-informed professional development provided insight into teachers’ perceptions about how professional development influenced their practices, attitudes, and beliefs. This qualitative, phenomenological study focused on the lived experiences of the participants. Individual interviews were conducted to understand the perspectives of the teachers and administrator who had experienced trauma-informed professional development and had time to implement the practices into their school and classrooms. Interviewing the teachers and the administrator after allowing time for implementation of trauma-informed practice provided important information about the longer-term influence of professional development on their trauma-informed practices, attitudes, and beliefs. A better understanding of the experiences of the teachers and the administrator provided information that can help to inform the planning and implementation of future trauma-informed professional development.
Chapter 4: Results

Introduction

Children’s social, emotional, physical, behavioral, cognitive, and relational development can be significantly impaired as a result of childhood trauma (Merrick et al., 2018; Perfect et al., 2015; van der Kolk, 2005). Poor academic performance and behavior difficulties in school can result from childhood traumas and have a negative impact on educational outcomes. Schools are working to address the impact of childhood trauma using trauma-informed practices and approaches. Teachers are at the forefront of trauma-informed approaches, as they are in a unique position to interact with students and respond to their symptoms of trauma (NCTSN, 2017). Professional development is one way to prepare teachers to work with students who have had traumatic experiences.

SAMHSA (2014) has highlighted four key assumptions for a trauma-informed approach, which include the realization of the impact of trauma, the recognition of the symptoms of trauma, the response to the symptoms of trauma, and the avoidance of actions that may re-traumatize the individual. Currently, schools are attempting to develop and implement trauma-informed approaches and practices that align with the key SAMHSA assumptions through the use of MTSS, such as PBIS (Chafouleas et al., 2018; Dorado et al., 2016). While research on the outcomes of these efforts is limited, studies have shown that teachers may be open to learning about trauma and how to implement trauma-informed practices (Baker et al., 2016; Chafouleas et al., 2016, 2018; Cole et al., 2013; Dorado et al., 2016; McIntyre et al., 2018). To help teachers develop the
understanding and skills necessary to work with students who have experienced trauma, schools and districts are providing teachers with professional development as a central component of their trauma-informed approach.

This study explored teachers’ perceptions of the effectiveness of trauma-informed professional development. The study also examined the perceived influence of professional development on teachers’ trauma-informed practices, attitudes, and beliefs and if these practices, attitudes, and beliefs aligned with SAMHSA’s key assumptions. Individual interviews were used to examine the experiences of 10 teachers and one principal who had received intensive professional development in trauma-informed practices, and who had had the time to implement these practices into their classrooms and school. Participants’ interview responses were analyzed using multiple coding cycles. The study answered the following research questions:

1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?

2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?

3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization?

The chapter is presented in four sections. The demographics of the study participants are presented first, including details about the participants’ years of
experience and grade level taught. Next, an overview of the participants’ professional
development training is provided to add context to the analysis. The third section
includes the data analysis and findings. The analysis and findings are presented in order
of the research question they address. Categories and themes developed under each
research question are presented and explored. Documents from the professional
development training sessions are discussed to triangulate the analysis and findings. The
chapter concludes with a summary.

**Demographics of Research Study Participants**

At the time of data collection, all participants were employed by the Lake Point
Central School District and worked at Lake Point Elementary School. Ten of the
participants were teachers at Lake Point Elementary School. The remaining participant
was the school principal. Lake Point Elementary serves students in Grades K-5 and is the
only elementary school in the Lake Point Central School District. Years of experience
and grade levels taught were provided by the school for all faculty members who
participated in an intensive, trauma-informed professional development opportunity
offered during the 2018-2019 school year. Demographic information was used to select
the study participants from the larger list of professional development participants. The
participants’ years of experience ranged from 2 to 20 years. At the time of data
collection, participants taught grade levels from primary to upper elementary. The
demographic information is provided in Table 4.1. For the protection of the participants,
their names were replaced with pseudonyms.
The table includes participants’ pseudonyms, position, and years of experience. Participants were selected based on years of experience and grade levels taught to provide a representative sample of the teachers and the administrator in the school.

Table 4.1

*Demographic Information for Interview Participants*

<table>
<thead>
<tr>
<th>Name (Transcript)</th>
<th>Grade Level</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abigail (T1)</td>
<td>Second</td>
<td>20</td>
</tr>
<tr>
<td>Beth (T2)</td>
<td>First</td>
<td>13</td>
</tr>
<tr>
<td>Caroline (T3)</td>
<td>Fifth</td>
<td>2</td>
</tr>
<tr>
<td>Deb (T4)</td>
<td>Kindergarten</td>
<td>16</td>
</tr>
<tr>
<td>Donna (T5)</td>
<td>Third</td>
<td>16</td>
</tr>
<tr>
<td>Lucy (T6)</td>
<td>First</td>
<td>13</td>
</tr>
<tr>
<td>Rachael (T7)</td>
<td>Fifth</td>
<td>4</td>
</tr>
<tr>
<td>Sally (T8)</td>
<td>Second</td>
<td>7</td>
</tr>
<tr>
<td>Susie (T9)</td>
<td>First</td>
<td>5</td>
</tr>
<tr>
<td>Tiffany (T10)</td>
<td>Kindergarten</td>
<td>2</td>
</tr>
<tr>
<td>Steve (A1)</td>
<td>Principal</td>
<td>7</td>
</tr>
</tbody>
</table>

**Overview of the Professional Development Training**

Participants in this study took part in a multi-session professional development opportunity during the 2018-2019 school year. The professional development consisted of three main sessions, with an additional poster presentation session and an optional summer conference. Each session was presented by two trainers, with a focus on trauma and trauma-informed practices. Between each session, participants completed assigned activity logs. The logs tracked the behavior of a selected student, the strategies implemented with that student, and the outcome of the interventions. Participants also completed a self-care log, detailing self-care strategies used over the course of the
professional development training. Data collected by each participant were used to create individual poster presentation on outcomes of the professional development.

The first session focused on trauma and how it impacts the developing brain. The topics of trauma, toxic stress, and neuroplasticity were included in this session. The second session focused on ACEs and the effect of trauma on learning and relationships. The teacher’s role in a trauma-sensitive environment, the development of resilience, and self-care were also addressed during this session. The third session centered on a strength-based approach and trauma-sensitive classroom strategies. Topics covered in this session included PBIS, RtI, restorative practices, and crisis intervention. The teachers presented the data collected from their logs as part of the poster presentation session. A summer conference was available for participants to attend. The summer conference provided participants with an opportunity to hear from and interact with educators from other districts who had also received the professional development opportunity.

Several documents from the professional development program were reviewed as part of the analysis. The documents included PowerPoint presentations from each of the three main sessions. These PowerPoint presentations contained the learning outcomes for the sessions, the content delivered, and the information on the daily log assignments. Other materials included the data collection book template, used by teachers, and the directions for the participants’ poster presentations.

**Data Analysis and Findings**

Qualitative methods were used to analyze the interview data and arrive at the study’s findings. Interview transcripts were coded using three coding cycles. A priori
codes were used for the first coding cycle. The a priori codes were developed using the study’s theoretical framework and they included attitudes, behaviors, practices, realizations, recognitions, responses, and avoiding re-traumatization. The second cycle consisted of open coding in which descriptive words were used to label portions of each transcript. Analytic memos were taken during both the interview and coding processes. The memos were analyzed to generate codes, provide context for coding, and to assist with the development of themes and subthemes. The study used two perspectives to frame the data. The four key assumptions from SAMHSA’s (2014) trauma-informed approach guidance document were used in conjunction with Guskey’s (1986, 2002) model of the process of teacher change to guide this study’s in vivo coding, which was used for the third cycle of coding. Participants’ exact words and phrases were used to assign meaning to parts of the transcripts. The transcripts are cited for the quotes used in the analysis. The transcript and line numbers are noted for all quotes.

**Research Question 1: Results and analysis.** What components of a professional development training series do teachers find most effective when attempting to implement trauma-informed practices in their classrooms? The study focused on understanding what components of trauma-informed professional development were deemed most effective by the teachers as they learned about and implemented trauma-informed practices. The analysis of the interview transcripts provided insight into what participants found most helpful from the intensive professional development opportunity they completed in 2018-2019. The professional development consisted of three main sessions, assignments to be completed between sessions, individual teacher posters and data presentations, and an optional summer conference with teachers from other schools.
who had completed the training. Three themes related to Research Question 1 emerged from the data analysis. These themes were *this was eye-opening*, *we are just seeing more and more need*, and *it is just not enough*. Table 4.2 shows the themes, the key concepts, and the subthemes for Research Question 1.

Table 4.2

Research Question 1 – Themes, Concepts, and Subthemes

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key Concept</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 This was eye-opening.</td>
<td>Effectiveness of Professional</td>
<td>Practical Application</td>
</tr>
<tr>
<td></td>
<td>Development</td>
<td>Design</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Content</td>
</tr>
<tr>
<td>1.2 We are just seeing more</td>
<td>Addressing Needs</td>
<td>Students’ Needs</td>
</tr>
<tr>
<td>and more need.</td>
<td></td>
<td>Teachers’ Needs</td>
</tr>
<tr>
<td>1.3 It’s just not enough.</td>
<td>What’s Next</td>
<td>Continued Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Additional Training Needs</td>
</tr>
</tbody>
</table>

**Theme 1.1: This was eye-opening.** This particular theme had to do with participants’ beliefs about the effectiveness of the professional development received during the 2018-2019 school year. The teachers expressed a positive attitude about the professional development and a belief that the experience was worthwhile. Second-grade teacher, Sally, shared, “it was really eye opening. It was really enjoyable. We all seemed to learn a lot and really are benefiting from it” (T8, 9-10). Donna, a third-grade teacher, also shared her positive impression, “I think the best way to say it is, it was powerful” (T5, 184). The main drivers behind this eye-opening, positive experience were the subthemes that emerged from the data analysis. The subthemes are the practical application of what participants learned, the effective design of the professional development sessions, and the new content taught during the sessions. Responses from the school principal, Steve, are included to provide the school administrator’s
perspective. Additional information from the professional development materials is included where appropriate.

Practical application. The teachers consistently referred to the practicality of the professional development, especially the trauma-informed strategies shared by the presenters. This sentiment was expressed by Donna, who said, “The strategies they gave us, I thought, were the most helpful” (T5, 14). She continued, “It was practical . . . you walked away with something you could put into place immediately” (T5, 186-187). The teachers were able to apply strategies learned during the training directly to their work in the classroom.

Multiple strategies were discussed by participants, including building strong relationships, making connections, and having meaningful conversations between teachers and students. A key strategy that the teachers took from the training was the 2 x 10 conversation. This strategy consisted of taking 2 minutes a day for 10 days and just speaking personally with a selected student. The 2 x 10 conversation strategy was the focus of the second professional development session, and it was presented as part of a safe and supportive classroom. A second-grade teacher, Abigail, shared the benefit of this strategy. “One-on-one, the 2-minute timeframe where you would just specifically talk with the child for 2 minutes . . . it really helped with the kids” (T1, 30-31). This was echoed by fellow second-grade teacher, Sally, who discussed working with a specific student. “The student definitely had a lot of baggage, a lot of trauma that he was dealing with. So, I picked that student, and we had quick conversations” (T8, 55-56). Steve, the school principal, also saw teachers’ attraction to the 2 x 10 strategy, sharing, “They really loved that 2 x 10 strategy. It was interesting because that produced really great
conversations” (A1, 147-148). The teachers developed their fondness for the 2 x 10 strategy and others through the case study format of the professional development.

During the training, each teacher implemented specific strategies with a selected student. The teachers’ interview responses singled out this case study approach as a particularly effective component of the professional development experience. After session one, participants completed a daily log of their selected student’s behaviors. After session three, participants increased their data collection to include strategies implemented and the effectiveness of those strategies. The case study process was explained by Caroline, who said, “We got to try out the different strategies with the student and see how it affected them or didn’t affect them or in what way they were affected over time” (T3, 20-21). She also commented on the benefits of the case study approach, stating, “The active research project, picking one student and really focusing on what I can do to make sure that they’re [sic] feeling supported and everything was just really, really helpful” (T3, 28-29). The case study approach also allowed the teachers to see what worked and what did not for particular students. Lucy, a first-grade teacher, discussed this approach stating, “Trying for different weeks, different techniques, and compiling some of that data, seeing what was useful” (T6, 10-12). The teachers’ logs allowed them to track student behavior for several weeks and to implement up to four strategies with the student.

The practicality of the case study approach and the applicability of the strategies were reinforced by their relation to real life. The grounding of the professional development in the teachers’ ongoing experiences resonated with many of the participants. A kindergarten teacher, Tiffany, expressed her appreciation of the approach.
“It just helped when we did the actual case study, so it wasn’t just like we were learning about subjects A and B that I’d have no connection with” (T10, 89-90). The benefits of a real-life focus were also shared by Caroline, who said, “they just brought it to life within the school rather than learning about it” (T3, 212-213). Donna echoed this sentiment. “I think the best way to say it is, it was powerful to be able to really look at what is real” (T5, 184). The real-life application was also noticed by Steve, who shared, “Why it really hit home with our group [was] because it laid that foundation, but then it went right into what can a teacher do in the classroom without any need for any other adults” (A1, 103-105). This practical application aligned with the learning outcomes of the professional development, which included the exploration of trauma-sensitive strategies, and participation in realistic goal setting activities to support students impacted by trauma. Analytic memos taken during the interview process highlighted the teachers’ strategy use as a key component of their perceptions of the professional development’s effectiveness.

Professional development design. Participants spoke in positive terms about the overall design of the professional development opportunity and how it contributed to the effectiveness of the training. In addition to discussing the presenters’ skills, participants also spoke about the positive impact of the approach taken. The use of multiple approaches, including real-life examples, videos, and a coaching approach were highlighted by participants. One of the first-grade teachers, Susie, shared, “The presenters tried to approach the topic from as many sides as possible” (T9, 19-20). Second-grade teacher, Sally, also spoke to the presenters’ approach, “[they] coached us through the practice of trauma-informed schools and coached us through strategies to use
with our own students here in the building” (T8, 6-7). This connected back to the effectiveness of real-life application discussed earlier.

The real-life application that stemmed from the case study was supported by incorporating data tracking into the design of the professional development. The first assignment had teachers tracking the behaviors of their specific student. After learning specific strategies, participants were required to track the implementation of those strategies and the students’ responses in their data collection log. Using data in this manner was shared by participants as a positive part of the training design, with Susie sharing, “it was helpful to have a handbook of ways that they provided [for] us of keeping track of what we tried and whether or not there was effectiveness” (T9, 53-54). A kindergarten teacher, Tiffany, also spoke about data tracking, saying, “the documenting part of it was helpful, too, because maybe I have a strategy that worked for the past 3 years and then, now, I got Johnny, here, and it’s not working” (T10, 181-182). Data tracking allowed for the teachers to see the effects of their chosen interventions, and it held them accountable for implementing different strategies.

The professional development included an optional summer conference with participants from other schools. The summer conference was an opportunity for participants to share what they had learned and how they had implemented their new learning into their classrooms and schools. While this conference was not attended by all the Lake Point Elementary participants, those who were able to attend spoke highly of having a follow-up opportunity as part of the professional development design. Susie described the conference as, “a day in the summertime that we got to go to where colleagues were just sharing what they were doing and follow up from the study” (T9,
Sally, a second-grade teacher, shared, “I really enjoyed coming together with all of the other professionals that had things to offer and understand. We were able to go to different workshops presented by colleagues in different strategies to bring back” (T8, 180-182).

The school administrator, Steve, also spoke favorably about the design of the professional development. He stated:

The training, I think, was well designed . . . the format of it of being focused after-school time for three hours. The participants knew that going in, so they knew it was going to be long, but that really allowed for some in-depth and just the level of focus and the seriousness. (A1, 20-22)

He continued sharing more positives, saying, “a mix of the format and the structure of the setting, but then the content really hit home” (A1, 37). He later added, “it was ongoing, it was in depth, and it was very practical” (A1, 247).

**Content.** In addition to the practical application and design, participants had positive reactions to the content of the professional development, itself. The teaching of explicit strategies, as discussed above, was often cited by participants as the most beneficial content. Another aspect of the professional development opportunity that was shared by multiple participants was the focus on the science behind the impact of trauma on brain development. Brain science was the main focus of the first professional development session. The objectives for the session included “discuss trauma and examine the effects of trauma on the brain,” and “define and explore the different types and levels of stress and its effects on brain function.” This focus was explained by Donna, a third-grade teacher, who said, “we did a lot around the brain and how the parts
of the brain play into development and how trauma impacts the brain and development.” (T5, 6-7). This explanation was expanded upon by first-grade teacher, Beth:

A lot of the instruction on the brain, talking about what parts of the brain control behaviors and understanding that when a child has trauma, well, many parts of those brains are completely just not working and how to go around it to get those parts working and to figure things out. (T2, 28-30)

This idea was also shared by Rachael, one of Lake Point’s fifth-grade teachers:

We talked about different things, the development of the brain, of ways to deal with trauma in the classroom, how to identify someone that may have some trauma history and techniques on how to work with them. (T7, 7-9)

Tiffany, a kindergarten teacher, shared how the content was effective in generating questions that needed to be answered, asking, “What is trauma? How is that affected by the brain? What can we do as classroom teachers to better serve the needs of kids living with trauma?” (T10, 6-8). The content focused on brain development was a clear benefit perceived by participants.

The teachers also saw the benefits of understanding trauma’s impact on the brain in their approach with students. A first-grade teacher, Susie said, “Understanding that there are neurological changes and physical, anatomical changes to the brain when that happens allowed me to approach my students with a different perspective” (T9, 40-42). Caroline, a fifth-grade teacher, spoke to the shift in approach brought on by focusing on the brain science,
Learning about the brain and how the science of the brain and how we really need to think about how our students are functioning in their brains before we become frustrated or irritated at the behaviors that they are exhibiting. (T3, 8-10)

Beth was able to speak to the purpose of learning the content:

The focus was to help us as educators understand the trauma that follows, the background of the trauma that comes in with the students that are in this school, not necessarily trauma that they have, but more so where the trauma is stemming from. (T2, 10-12)

This understanding of trauma was new for some of the participants, with second-grade teacher, Sally, saying, “actually getting acquainted with what trauma-informed practices were, it was new for a lot of us” (T8, 14-15).

Participants discussed how the content was able to raise their awareness of trauma and its impact. Deb, a kindergarten teacher, shared how she benefited from “learning more about the ACEs and hearing about experiences that others have had with trauma” (T4, 14-15). Rachael connected this awareness to her work, “I just noticed so much trauma in this district, that there are students that come from a lot of trauma” (T7, 42).

The term eye-opening was used by multiple participants when describing the content of the training. One example came from Sally, who said, “This was eye-opening and being a teacher of 13 years, it’s like ‘wow,’ unbelievable” (T8, 16-17). This was echoed by principal Steve, stating, “it just opened people’s eyes to, like, a different reason for different approaches” (A1, 176-177).

According to the teachers, the impact of learning new content was enhanced by the expertise and qualifications of the presenters. Participants spoke highly of the two
presenters, with comments highlighting the presenters’ knowledge of the content. Prior to facilitating this professional development training, both presenters had worked extensively with school district and trauma-informed approaches. The teachers picked up on this high level of understanding, with Susie commenting, “they have a wealth of knowledge and a wealth of strategies” (T5, 74). Sally shared, “they are beyond knowledgeable about this” (T8, 25). These sentiments were echoed by Steve, who said, “the presenters were really knowledgeable” (A1, 29). In discussing one presenter, in particular, Steve added, “she has been in the profession for 40 years and is highly regarded and well trusted” (A1, 209-210).

The data showed that participants had an overwhelmingly positive view of the effectiveness of the professional development they received. Analytic memos written after each interview reinforced the positive impressions participants had of their experience. This was true for both the primary and upper elementary teachers. Years of experience did not make a difference in participants’ belief in the effectiveness of the professional development. The teachers really did find the experience to be worthwhile and, in many cases, again, eye-opening.

**Theme 1.2: We are just seeing more and more need.** This theme emerged from the participants’ discussions of how the professional development opportunity was able to address the needs of both students and teachers. The professional development also addressed a lack of prior trauma-informed training received by participants. Students’ needs and teachers’ needs were the two subthemes under this theme.

While some of the participants spoke about their prior training and knowledge, it was clear that they felt this professional development was necessary to develop their
ability to work with students suffering from trauma. The teachers spoke of having had some training and that they had had some previous professional development on ACEs. A fifth-grade teacher, Caroline, shared, “we’ve definitely talked about ACEs. We’ve talked about trauma-informed instruction and loosely what that term means” (T3, 86-87). School principal Steve, spoke to some of the prior work done at the building level, “we did our background on ACEs and those bigger picture things” (A1, 109-110), and “we’ve offered poverty simulations and participated in district and poverty simulations” (A1, 95-96). Despite these initial offerings, the teachers cited further training as a considerable need.

Students’ needs. Teachers expressed a desire to use trauma-informed practices to meet the increasing needs of their students. As first-grade teacher, Susie, put it, “I wanted something that could help me build the social-emotional skills that my kids really desperately need. I was looking for anything that I could to help my kids” (T9, 65-68). Rachael, a fifth-grade teacher, spoke to her needs, “I wanted some more strategies with how to work with that, because that’s not something that we really talk about in undergrad or graduate school, the trauma-informed” (T7, 42-44). The level of need was made clear by second-grade teacher, Abigail, who shared her recent experience. She said, “I had a class last year that, out of 12 children, I had six that would be screaming and just spinning out of control on a daily basis” (T1, 51-52). She added, “it was so stressful for me last year” (T1, 64). The need for trauma-informed professional development led school principal, Steve, to seek out training. He was able to secure a grant-funded professional development opportunity focused on “creating trauma sensitive school communities.”
Many of the teachers seemed to realize that their students were coming to them with more traumatic experiences and they needed to be able to respond. “Such a large population of our kiddos are coming in with at least two ACEs” (T9, 110-111), said Susie. This high level of need was also expressed by fellow first-grade teacher, Lucy, “every year it seems to be the behavior of the students and the population in our area, the need, it gets, more prominent” (T6, 40-41). Deb, a kindergarten teacher, expressed a similar concern, “I’ve really seen a shift in how students are coming into school with their emotional state and their emotional regulation” (T4, 65-66). Poverty seems to be a contributing factor, with third-grade teacher, Donna, sharing, “students coming from a pretty impoverished background, parents maybe in and out of jail” (T5, 17-18). This was reinforced when Steve said, “we range from 60% to 53% poverty rate at our school” (A1, 67). He added, “we’re just seeing more and more need in this area from kids who are experiencing more trauma and that impacts on their learning” (A1, 78-79). It was clear that both teachers and the school principal felt the need for trauma-informed professional development to help with their current situation.

Teachers’ needs. The overall perception of participants was that the professional development training met many of their needs. Sally, one of the second-grade teachers, shared her perception on the overall benefit of receiving the professional development:

Sometimes I feel like teaching can be so stagnant. You can read a bunch of books and professional things, but to actually go to that next level, I felt like I was almost in college again . . . I want to pursue more. This is amazing. This just makes me feel alive again. It just felt so good. (T8, 212-213)
Sally’s comment was mirrored by third-grade teacher, Donna, who said, “This is, hands down, the best in-service training we have had in years. Like, worthwhile. You’ve got information. It’s probably the most learning I felt like I’ve had since I was in college” (T5, 188-190). The school administration also saw the benefit of providing the training, with Steve saying, “it was an amazing thing to have 25 people really highly trained by the most qualified people around over a 6-month period, which is a really intense level of development” (A1, 125-126).

Meeting the needs of students was a prominent focus of the professional development training. In particular, sessions one and two taught how issues of toxic stress, poverty, abuse, and other adverse childhood experiences can impact students’ development and behavior. The content from the PowerPoint presentation matched closely with the types of needs expressed by the participants.

Participants, across the board, expressed a belief that the professional development provided to them was information and strategies to better meet their needs and the needs of their students. This was true regardless of the grade level taught or the years of experience of the participants. Participants were able to articulate their needs in working with students who have experienced trauma and how the professional development helped meet those needs. While the responses of participants about the effectiveness of the professional development were consistently positive, there were some remaining concerns and needs once the training was complete.

**Theme 1.3: It's just not enough.** This theme emerged from the teachers expressing a significant need for additional and ongoing trauma-informed training to meet the high level of need present in their school. The key concept from this theme was
teachers expressing a need to know what’s next in their development of a trauma-informed school community. Two subthemes emerged as part of the larger theme. The first subtheme was how teachers had continued their trainings, either as part of a larger group or on their own. The second subtheme was the need for additional training. This includes additional training for participants and for those who were not able to participate in the original professional development offering.

**Continued training.** Some of the participants spoke about additional trainings and professional development opportunities they had experienced, as well as how they were able to share some of their learning with their colleagues. Since the training, multiple teachers have worked with a behavioral specialist, and that has helped move their trauma-informed practices further along. Kindergarten teacher, Tiffany, shared, “I got to work closely with the behavior specialist and learn different ways to adapt my teaching and my routines to meet their needs” (T10, 77-78). The support from the behavioral specialist was intentional and supported by the school principal. Steve touched on this work, saying, “It’s just purposeful, ongoing support with bringing those strategies to life, continuing to develop more” (A1, 245-246).

School leadership also provided an opportunity for the teachers who received the professional development to share some of what they had learned with the rest of the faculty. Tiffany explained, “We gave a little presentation on how that went and whether we found the strategy successful or not” (T10, 11-12). Fifth-grade teacher, Rachael, explained the process further. “We put our posters up that we did during the training and the coworkers got to come up to us and ask us some questions about the student . . . and
what strategies we used” (T7, 31-33). This proved to be a positive experience for the participants and their colleagues, with fifth-grade teacher, Caroline, sharing:

It was really great because people were super inquisitive. They were like, “Wait, what is this? How did you do this?” And the 2 x 10 was the biggest one that people took away and they tried it in their own classrooms. (T3, 49-51)

Outside of working with the behavioral specialist and having an opportunity to share some information from the larger training, a few participants explained how they had experienced additional training. Caroline discussed getting together for a “Fostering Resilient Learners” book club, “it really just turned into a discussion-based hour, or hour and a half of allotted time to talk about the information in the book and how we could apply that into our teaching settings” (T3, 101-103). Kindergarten teacher, Deb, said, “we’ve looked at conscious discipline. That was probably the one that I’ve liked the most that I feel is in sync with the trauma-informed.” She added, “just things that I have sought out on my own” (T4, 89). Despite some participants sharing their continued training experiences, it was clear they both wanted and needed more training.

Additional training needs. Participants’ comments about additional training fell into two distinct areas. Several participants felt the need to revisit or continue with the professional development they received as part of the 2018-2019 training. The other need expressed by participants was the expansion of the training to the remainder of the school and/or district.

While participants expressed a positive view of the professional development opportunity, they also shared that they had a need for the training to be expanded or at least revisited. Tiffany, a kindergarten teacher, spoke of a desire to follow up on what
had already been done, “well how about this year? How’s it going this year? Maybe even bring up the same poster boards” (T10, 254-255). Second-grade teacher, Sally, shared, “I would love to have them come back and do, like, a part two” (T8, 68). A first-grade teacher, Lucy, said, “it’s always good to have little refreshers or, like I said, someone coming in and looking and continuing conversations” (T6, 167-168).

The teachers spoke often of the need for additional strategies, with Sally sharing a desire to, “explore a little bit more, some different strategies, see how things are going this year, take what we learned from last year and kind of build upon it” (T8, 70-71). Lucy expressed an interest in a coaching approach, saying, “it would be really wonderful to have someone come in, do some observations, have some conversations about some of the students or some practices to try” (T6, 67-69). She later added that it would be beneficial to “watch as someone else is using some of the techniques that they talked about” (T6, 69-70). Fifth-grade teacher, Caroline, also said of additional strategies, “more strategies. I really, really enjoyed the strategies that were given to us because it, just, it is something that you can so easily put into practice” (T3, 120-121). This comment was echoed by first-grade teacher, Susie, who said, “I want more strategies. I want more intervention that I can give at a Tier 1 level” (T9, 110).

The importance of revisiting or adding to the training was explained by a kindergarten teacher, Deb, who said, “if you really want something to work, it’s got to keep being brought up.” (T4, 270-271). This sentiment was shared by school principal, Steve, who said, “We hit them in a general way, but we need to be more specific and reoccurring” (A1, 200-201). It seemed both the teachers and school administration recognized the need for continued professional development.
Expanding training to the remainder of the school was discussed by many participants. Teachers who felt they benefitted from the training saw a need to include those who had not yet had the opportunity. Specifically, teachers felt that students need to interact with trauma-informed teachers throughout their day, not just in pockets. As Caroline put it, “what about all of the 38 other classrooms in the school?” (T3, 233). Deb expressed a similar concern. She said, “you are so trauma informed in a classroom in certain pockets, and then the kids go to a different area where somebody might address them in a different way” (T4, 24-25). Abigail, one of the second-grade teachers, shared the urgency for expanded training, stating, “we have more need for people to have training for situations and there’s more and more situations coming at us” (T1, 220-221). Steve agreed with this point, “we need to expand that to everybody” (A1, 127). He added, “training our ancillary staff, our teaching assistants, our aides, and so that’s another area we need” (A1, 130-131). How the school plans to address these continued professional development needs was not made clear from the interviews.

Participants expressed a need for more training regardless of their years of experience or grade level taught. Memos written during the interview process also contributed to the theme of needing additional training. While views of the professional development were consistently positive, it was clear that participants believed that additional training would be needed if the entire Lake Point Elementary community was to become trauma-informed. The study of Lake Point Elementary teachers’ perceptions of effective trauma-informed professional development highlighted several components of their training. Participants expressed that a focus on practical application, content, and training design were all important components of the overall effectiveness of the
training. Additionally, the professional development’s success in meeting the needs of the participants stood out as a positive from the perspective of the participants. The school principal’s responses about the effective components of the professional development aligned very closely with those of the teachers. Despite the perceived effectiveness of the professional development, participants made it clear that additional and expanded training would be necessary to create a school that was fully trauma-informed.

**Research Question 2: Results and analysis.** What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices? As a result of the professional development participants received during the 2018-2019 school year, participants experienced shifts in their practices, attitudes, and beliefs about trauma and trauma-informed practices. Participants expressed how their approaches to students who had experienced trauma had shifted and how they were continuing to implement strategies they learned from the professional development opportunity into their classrooms. Participants also shared barriers to their implementation of what was learned. Table 4.3 includes the three themes for Research Question 2. The key concepts and subthemes for each of the three themes are included.

Table 4.3

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<thead>
<tr>
<th>Theme</th>
<th>Key Concept</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>2.1. Whoa, this actually worked.</td>
<td>Implementation of Practices</td>
<td>Strategies and Approaches, Student Focus</td>
</tr>
<tr>
<td>2.2. It’s what is best for kids.</td>
<td>Mental Shifts</td>
<td>Attitudes and Beliefs</td>
</tr>
<tr>
<td>2.3. That’s the biggest struggle.</td>
<td>Barriers to Implementation</td>
<td>Time, Teacher’s Role</td>
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**Theme 2.1: Whoa, this actually worked.** This theme refers to the repeated assertion by participants regarding how well the professional development translated into working with students in their classrooms. Participants spoke often of how the strategies and approaches learned throughout the sessions were implemented into their classrooms. The subthemes of this theme are the use of strategies and approaches, having a student focus, and getting to work with colleagues.

**Strategies and approaches.** The most frequently used code during the analysis of the transcripts was strategies. The study participants spoke extensively about the strategies and approaches they learned from the professional development and how they have applied them to their work with students. Participants gave many examples of specific strategies they had put into practice as a result of the training they received.

The most popular strategy shared by participants was the 2 x 10 strategy. As fifth-grade teacher, Caroline, explained, “2 minutes of uninterrupted time where you are really dedicated and focused to what is happening in the student’s life outside of school or the weather or whatever they want to talk about” (T3, 31-34). The opportunity to develop a relationship with students through short, focused conversations was a takeaway for many of the teachers. Sally, a second-grade teacher, shared, “2 x 10 conversations was one [strategy] that was definitely memorable to myself [sic] and a lot of us in the building that we use” (T8, 17-18). First-grade teacher, Beth, said, “I’ve done the 2 x 10 numerous times” (T2, 89), while fellow first-grade teacher, Lucy, stated, “the 2 by 10 conversations has seemed to work” (T6, 82). Steve, the school principal, also noticed the use of this particular strategy, “they really love that 2 x 10 strategy. It was interesting
because that produced really great conversations” (A1, 147-148). The focus on developing relationships with students is discussed further in the next subtheme.

Validation of students’ feelings was another strategy that participants found to be effective and they had implemented with their students. Donna, a third-grade teacher, discussed this strategy, “validate the way somebody is feeling, that was one of the most helpful strategies, and I use that all the time” (T6, 75). She went on to explain, “it’s as simple as saying, ‘You’re feeling mad right now. I see you’re mad. It’s okay.’ That validation piece is just . . . . It’s really powerful” (T6, 81-82). Caroline spoke to the benefit of using the validation strategy, “you have to validate a student’s feelings and everything like that to just connect with them, so they can start trusting you” (T3, 146-147). This strategy was a central component of the third professional development session. Participants’ responses echoed the training’s focus on understanding the student’s perspective and acknowledging their emotions.

Validation strategies are closely related to another approach discussed by many of the participants—restorative practices. Restorative practices were covered during session three of the professional development, with a focus on restorative circles helping students take ownership and building relationships. Donna spoke to the ownership piece of using restorative practices, “the ownership part of that restorative practices. How are you going to fix this?” (T5, 126-127). Deb, a kindergarten teacher said, “I try to give the kids as much ownership of things as I can” (T4, 151). Beth also spoke about building relationships and using circles, “we do [a] family meeting every morning. Restorative circles” (T2, 95-97). The school principal has also noticed the implementation of
restorative circles. Steve said, “[teachers are] implementing restorative circles all over the place here, which hadn’t happened prior to this training” (A1, 173-174).

Over the course of the interviews, participants spoke to a variety of strategies that they had taken from the training and implemented into their classroom. A few teachers spoke of using strategies as an approach to calming students during difficult times. Sally said:

I have a couple of different students in here that need some calming pieces, so trying to find the time to do it is something that, in my mind, I have to be really aware of and know that this takes priority over anything. (T6, 96-98)

Rachael, a fifth-grade teacher, also touched upon calming strategies, “we’ve done some moving your body in different ways, drawing eight with the sand, and different breathing practices” (T7, 98-99). Working to calm students was also acknowledged by Lucy, “taking the time to bring their engines back down when they are getting revved up” (T6, 100-101). Beth also spoke about strategies that she had found helpful:

I have a flexible seating classroom, so that, basically, the needs of the child for academic purposes can be done through their best sitting position. Sometimes they need to just lay down. We do [a] family morning, family meeting every morning. Restorative circles. (T2, 95-97)

Participants spoke to the overall purpose of these strategies. Susie, a first-grade teacher, said the use of strategies was, “focused on relationship building, understanding students’ needs and just being responsive to them” (T9, 52). Kindergarten teacher, Tiffany, shared, “the strategies that we’ve learned were just more intentional” (T10, 179). She added, “let me put some things into practice so that it’s not me scrambling in
December” (T10, 138). Every teacher interviewed, regardless of years of experience or current grade level, was able to speak to practices that had been implemented from the professional development opportunity.

The principal, Steve, spoke to how the strategies were being put into practice within the school. He said, “[during] MTSS meetings, we actually refer to the strategies from the training . . . typically recommend the strategies learned in that training to teachers to do with kids” (A1, 42-42). The success of the strategies in the participants’ classrooms led to expanding their use to other parts of the school, at least with specific students.

The responses discussed in this section align closely with the third professional development session. The PowerPoint materials showed a focus on in-classroom strategies, including validation, relationship building, and restorative practices. Participants seemed to understand that the purpose of these strategies was to connect with students and be appropriately responsive to their needs. Part of the reason teachers found these strategies to be so successful was the intense focus on students’ needs. A review of the analytic memos taken during the interview process found frequent references to classroom strategies as a key takeaway for the teachers.

Student focus. The subtheme of student focus refers to how the practices learned from the training were designed for teachers to meet students’ needs, address their trauma, and to build relationships. In fact, participants brought up relationship building as a consistent benefit of the strategy implementation. A few specific relationship-building strategies were highlighted by the teachers.
Sally, a second-grade teacher, discussed using small notes to communicate back and forth with a struggling student and the benefits, “After that strategy, the relationship that him and I [sic] built was unbelievable” (T8, 59). Susie, a first-grade teacher, spoke specifically about the 2 x 10 strategy used by so many teachers, “meeting with them for 2 minutes for 10 consecutive days to reestablish personal relationships . . . . That one has been the most successful” (T9, 138-139). Kindergarten teacher, Abigail, also spoke to the benefits of relationship building. “It really brings the kids close to your heart, and the kids know that you care for them” (T1, 38-39).

Participants discussed the beneficial outcomes their relationship focus had had on students. Kindergarten teacher, Tiffany, said, “the kid feels welcome, and like this is their home, and they want to be here, and they’re loved” (T10, 41-42). Donna, a third-grade teacher, spoke about a specific student, “he needs to know somebody cares, and that somebody is invested in his life, and it has been a huge turnaround for him” (T5, 95-96). Sally also highlighted the benefits, “I feel there’s a lot of kids in here with some anxiety pieces and definitely from the trauma they faced. I feel that using those strategies in here has been really beneficial” (T8, 90-92). She later added, “by forming those relationships with a trusted adult, it allows them to be more safe [sic], take more academic risks, make more growth” (T9, 182-183).

Their students’ safety and comfort were shared by several teachers as a positive outcome of student-focused strategies. Susie said, “[trauma-informed practices] made my kids feel more safe [sic] at school. It’s allowed them to take more academic risks because they feel safe” (T9, 172-173). Fellow first-grade teacher, Beth, also saw students’ well-being as the purpose of using strategies, “[the purpose is] to allow that
child to feel most safe and comfortable” (T2, 102). Addressing students’ needs with trauma-informed strategies and the establishment of relationships were two of the biggest components of the training that the teachers felt worked for them. School principal, Steve, noticed the change in teachers’ approaches to working with students, “teachers who might normally say, ‘This kid, whatever,’ [are] really trying to actually dive a little deeper into where things are coming from and then really try a little bit more measured approach” (A1, 169-171).

PowerPoint materials showed that session two of the professional development aligned closely with what participants shared about the students’ safety and building relationships. This session sought to help participants “create safe and supportive classrooms to build trusting relationships with students.” The development of these safe spaces and relationships were viewed by the teachers as more than just good teaching. Beth said:

It is not about educating only anymore. It’s about really helping these kids understand life and understand their emotions and why things are happening the way they are, and also teaching them how to learn at the same time. (T2, 185-187)

Donna echoed the importance of implementing trauma-informed strategies, “so that they could be more successful, not just as students but in life” (T5, 48-49). The positive impact of the trauma-informed practice on students contributed to a mental shift for many of the teachers when working with students who struggled because of trauma.

**Theme 2.2: It’s what is best for kids.** While the first theme addressed the practices portion of Research Question 2, this theme highlighted how the professional development instruction impacted participants’ attitudes and beliefs about trauma and
trauma-informed practices. Participants mentioned how changing their practices and approaches led to a change in how they viewed their interactions with students.

**Attitudes and beliefs.** The teachers spoke about how they have shifted their attitudes about how they think about students and their histories of trauma. Fifth-grade teacher, Caroline, discussed what she thought about before reacting to a student’s behavior, “Okay, what is the student going through right now? What is happening at home?” (T3, 199-200). Abigail, a second-grade teacher, shared a similar thought, “it’s not just that child being naughty anymore. It’s that child reacting to what’s going on in their life” (T1, 191-192). This change in attitude was explained by kindergarten teacher, Deb, who said, “[it’s] more of an awareness and a sensitivity to students” (T4, 251).

Susie, a first-grade teacher, discussed how she, too, had undergone a shift:

> There has been a huge shift in my focus of my practice. I went from being a very, “These are the rules, these are how we behave in first grade,” type teacher to being, “This is your environment. We are going to design it together. We are going to create the rules together. We are going to be very community oriented, creating more relationships between adults and kids in the class.” (T9, 243-247)

Beth, a first-grade teacher, also spoke to a change in her beliefs about student trauma, “I’ve gone so many years of telling the kids that’s the poor behavior, that’s a poor choice, not knowing that sometimes that’s a survival mode for them” (T2, 21-24).

The shift in the teachers’ attitudes came from learning how trauma impacts a student and how that student may present differently in the classroom. Sally, a second-grade teacher, used an analogy to explain how a student’s response to trauma can be unpredictable:
The analogy is they look like a bottle of soda, but they could be all shook up inside, and you have no idea until something hits them. Either they’re going to be mellowed out and it’ll open and crack like a nice can of soda, or it’s going to just explode that day. (T8, 167-169).

Knowing that student behavior can be unpredictable, the teachers felt they needed to take a different approach. Tiffany, a kindergarten teacher, said, “I need to be sensitive to what’s going on in everybody’s life and how they’re relating to that and how they’re coping” (T10, 222-223). Susie also spoke to having an understanding of what is behind students’ behavior, “[training] allowed me to understand a more root cause of why students get into these conflict cycles, of why students can’t seem to get out of these struggling situations where they struggled to regulate their emotions (T9, 42-44). Teachers expressed a desire to understand why student behaviors were occurring, instead of focusing on only the expression of the behaviors.

This sensitivity to students’ experiences led several of the participants to reconsider their priorities in the classroom. Sally discussed this priority shift, “[trauma-informed practices] that’s something that I wouldn’t typically do because, to me, in my old brain, that’s a waste of time. It’s not curriculum, we’ve got to move on. But that’s not reality anymore. That’s not what we’re dealing with in these times” (T8, 184-186). This sentiment was echoed by fifth-grade teacher, Rachael, “it’s helped me be more aware of what’s going on in their lives and how, sometimes, the work that we’re actually doing has to be second and getting through the day might be first” (T7, 154-155). The school principal, Steve, had also seen a shift in the teachers’ attitudes about how to approach challenging students, “I think I see a thoughtfulness to ‘wait, where would this
be coming from’ and that whole shift from ‘why are you doing this?’ to ‘what happened to you?’” (A1, 165-167).

Participants’ explanations of their mental shifts aligned with the material presented during sessions one and two of the professional development training. The PowerPoint materials showed the focus of those sessions as building an understanding of how trauma impacts the brain and how that impact can manifest in the school setting. The concept of shifting from a perspective of “why are you doing this?” to “what happened to you?” was explicitly discussed during session two. It seems this concept was taken to heart by many of the participants. The changes in practices, attitudes, and beliefs were present in the data—regardless of the teachers’ years of experience or grade level. Participants were able to see that many of the interventions had been working and that taking a trauma-informed approach is “what is best for kids.”

**Theme 2.3: That’s the biggest struggle.** While participants consistently highlighted the positive changes brought about from the professional development sessions, they also shared barriers that have made the long-term implementation of a trauma-informed approach challenging. Time and the teachers’ roles were the two main barriers shared by participants.

*Time.* Finding time to work closely with struggling students was the main concern of the participants. Third-grade teacher, Donna, simply asked, “how do you carve out that time?” (T5, 110). This frustration was shared by fifth-grade teacher, Caroline, “it felt really challenging because I was pressed for time” (T3, 24-26). Despite wanting to reach each student, the teachers struggled to do so. Susie, a first-grade teacher, said, “time is the biggest constraint. I want to make time to have an individual
conversation with every kid, every day, and there’s just not enough minutes in the day (T9, 157-158). Although some of the interventions were not time consuming, themselves, the teachers found it difficult to reach every student in need. Even 2 minutes could sometimes feel like a stretch, as fifth-grade teacher, Rachael, shared, “when am I going to take out those 2 minutes?” (T7, 120).

One of the main components of the time barrier was the demand placed on the teachers by curricular expectations. Teachers need to cover a certain amount of material in a certain amount of time, not accounting for the time necessary to address students’ behavioral needs. Donna said, “the biggest challenge is fitting in all of those pieces when there’s such a curriculum drive” (T5, 116-117). First-grade teacher, Beth, also spoke to fitting in interventions around instruction, “there really isn’t any other time throughout the day because our academics are so filling” (T2, 111). This point was also made by Sally, a second-grade teacher, “the challenging piece is definitely for me having all of the curriculum but realizing that we’re not going to get to the curriculum unless their well-being is taken care of first” (T8, 106-107). Not having enough time to address behavior and academics was a concern of Rachael, too, “you’ve got to get through all of that during the day. You're expected to finish this unit on such-and-such day, so finding that time” (T7, 119-120). No matter the grade level or years of experience, the teachers felt pressed for time when implementing trauma-informed practices. Time was frequently a topic of the analytic memos written after each teacher interview.

Teachers’ role. Teachers also spoke about the difficulty in knowing their role as a barrier. They are expected to instruct students academically, but many struggled with the line between academic instruction and mental health. This barrier was explained by
first-grade teacher, Beth, “you really want to help them and be there, but you’re not the psychologist or the counselor, you’re the teacher and it’s a fine line of where you would cross that” (T2, 126-128). Kindergarten teacher, Deb, also expressed concerns about being the professional to address a student’s mental health needs, “quite frequently, I can tell by her mood that she needs to talk to someone. I can’t always be that person (T4, 54-55). Tiffany, another kindergarten teacher, wondered about her responsibility when asking, “what is my role here? How can I give without giving myself and getting burnt out at the end of the day?” (T10, 56-57). While mental health professionals are present in the school and available to assist teachers, at times, it seemed clear that some of the teachers were uncomfortable or unsure about how far they should go in addressing students’ mental health concerns.

The principal acknowledged that there may be some difficulty in maintaining trauma-informed interventions, but he did not see the level of barriers presented by the teachers. Steve spoke about the challenge presented by not providing consistent, ongoing training. “I would consider that a challenge, kind of out of sight, out of mind, a little bit on some of the specific trainings” (A1, 194-195). However, Steve also said, “I didn't see too many barriers [to implementation] (A1, 197). The difference in the teachers’ and administrator’s views on challenges was also highlighted in an analytic memo taken after the interview with the principal. This disconnect between perspectives may present challenges for supporting this work into the future.

**Research Question 3: Results and analysis.** How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization? Research
Questions 1 and 2 were designed to better understand what elements of professional development participants found most beneficial and how those elements influenced teachers’ practices, attitudes, and beliefs. Research Question 3 was designed to see if there is alignment between what participants shared for Research Questions 1 and 2 and SAMHSA’s (2014) four key assumptions for a trauma-informed approach. This section explores a theme that emerged for each of the four assumptions of realization, recognition, response, and avoidance of re-traumatization.

Table 4.4 includes the four themes developed for Research Question 3. Each theme is tied to a key concept. The key concepts are SAMHSA’s (2014) key assumptions for a trauma-informed approach. Subthemes were not created for Research Question 3, as each theme was directly connected to one of the four key assumptions.

### Table 4.4

#### Research Question 3 – Themes and Key Concepts

<table>
<thead>
<tr>
<th>Theme</th>
<th>Key Concept</th>
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<tbody>
<tr>
<td>3.1. Understanding where these kids are coming from.</td>
<td>Realization</td>
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<tr>
<td>3.2 Well, why are they doing that?</td>
<td>Recognition</td>
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<tr>
<td>3.3 They’re little, and they need a little bit more.</td>
<td>Response</td>
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<tr>
<td>3.4 They feel safe.</td>
<td>Avoiding Re-traumatization</td>
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**Theme 3.1: Understanding where these kids are coming from.** This theme represents how the teachers communicated the concept of the realization when discussing their practices, attitudes, and beliefs about trauma and trauma-informed practices. Realization is the first step in developing a trauma-informed approach. Teachers must know that traumatic experiences in childhood are prevalent and that they can have a
significant negative impact on students. The PowerPoint presentation from the training showed the key assumption of realization, and it was discussed in depth during sessions one and two of the professional development training. This discussion included how the brain is impacted and how student behaviors can be a symptom of adverse childhood experiences. A deeper understanding of trauma and its impact provided a rationale for implementing new practices and for shifts in attitudes and beliefs.

Second-grade teacher, Abigail, spoke about how the realization had impacted her, “I am so much more aware of what’s going on out there” (T1, 190). She then discussed the realization that students’ behaviors have root causes in trauma, “Why are they acting that way? Why? What happened to them to make them act that way is where my brain is going now” (T1, 194-195). Sally, another second-grade teacher, also spoke of the realization, “I’m understanding that these kids that are coming in with uncertain things” (T8, 165-166).

The teachers spoke of how realization had helped them, with third-grade teacher, Donna, sharing, “just knowing my student’s background, that I’ve encountered year after year, really helped me” (T5, 46-47). Susie, a first-grade teacher, had a similar experience, “understanding that there is a physical, anatomical element to the crisis cycle, or the conflict cycle has helped to me to be able to disengage with it and not take it so personally” (T9, 214-216). Fifth-grade teacher, Caroline, spoke to the impact her new learning had had on teachers she taught in teams with, “they almost took it more seriously and really understood that the impact trauma has on students is very, very, very real” (T3, 73-74). She also discussed the impact on students, “they see we see them as humans that have things going on outside of school that have different situations impacting them” (T3,
School principal, Steve, highlighted the importance of realization when working with traumatized students, “we have to have poverty and trauma in mind in order to even reach them” (A1, 85-86). The realization of trauma and its impact was present in the data from all participants, regardless of years of experience or grade level. This theme aligned closely with the professional development materials from sessions one and two, which focused primarily on understand trauma and how it impacts students’ development and behavior.

**Theme 3.2: Well, why are they doing that?** Recognition of symptoms of trauma is the focus of this theme. The PowerPoint presentation of session one of the professional development series taught participants about the academic and emotional implications of trauma and how those can manifest in the classroom. Session two expanded on these concepts and went more in depth on how trauma impacts learning and the establishment of relationships.

Abigail, a second-grade teacher, spoke about learning to recognize how trauma can lead to students presenting in certain ways, “we learned different things, different mannerisms of children who are coming from trauma” (A1, 9-10). Part of recognition is the ability to realize that behavior has a cause or a trigger. When reflecting on student behavior, Lucy, a first-grade teacher, said, “having an awareness, of observing and noticing when the kids are maybe needing something, when I see them start to escalate” (T6, 93-95). She added, “we’re talking about the triggers. Where am I getting this reaction from?” (T6, 131-132). There was also a recognition that the students may not have the ability to adjust their behaviors. Fifth-grade teacher, Caroline, said, “they don’t necessarily have the power to control the way that they are acting, given the different
traumas that they have experienced in their lives” (T3, 11-13). That recognition can be important when working with students whose behavior can escalate quickly. “[I need] to know the indicators and what to do before it gets in that cycle,” (T4, 68) said kindergarten teacher, Deb. She later added that she is often, “looking for signs, like when somebody is getting escalated,” (T4, 157) to prevent student behaviors from worsening.

Some of the teachers shared specific behaviors they had witnessed from traumatized students. Donna, a third-grade teacher, spoke about the behavior of one of her students, “2 to 3 hours a day rolling around on the floor, crawling in and out of shelves, throwing, dumping chairs over, hiding in the closet” (T5, 98-100). Knowing that much of the students’ behaviors are a result of trauma, the teachers also discussed known traumas. Fifth-grade teacher, Rachael, reflected on the experiences of some of her students, “this year, we've had someone that has witnessed someone do an opium drug overdose and died. We have someone that was in the car when their dad committed an armed robbery” (T7, 142-144).

Recognition was a key component of the participants’ professional development logs that were implemented as part of the training. As part of the daily log, participants had to track the behaviors they recognized from their selected student. This tracking would later be used to inform the teachers’ responses. This theme aligned closely with the second professional development session, which explored the impact of trauma on students and how symptoms of trauma manifest in the classroom.

**Theme 3.3: They’re little, and they need a little bit more.** This theme emerged from analyzing how participants discussed responding to trauma in their classrooms. As previously discussed in the analysis of Research Question 2, participants had used
multiple strategies and approaches to respond to students who had experienced trauma. Conversations, validation, calming activities, restorative practices, and relationship building were all shared by participants as ways to respond to students. This section does not revisit those specific strategies but, instead, focuses more generally on how the teachers shifted their responses to the students who had experienced trauma.

Session three focused on an approach to responding to students with traumatic experiences. This session explored approaches to compassion, intervention, restorative practices, and crisis intervention. In addition to changing their approach with students, the teachers also discussed how connections and relationships were a key component of their responses. Rachael, a fifth-grade teacher, said of relationships, “you find out a little bit more about them and [it] helps you relate to them in different ways” (T7, 24-25). Donna, a third-grade teacher, explained there was a need to “be able to try to connect with them and help them on that emotional level” (T5, 8-9). Lucy also shared about her attempts to connect, “I really had to make strong connections with some of these kids” (T6, 109-110). Susie talked about response through relationship building by “meeting them at the door every single day and being elated that they’re here is a strategy that has worked for me” (T9, 141-143). Second-grade teacher, Abigail, discussed her role with students, “I want to be the one that was there and helped them through a situation, whether it was a large situation. You know, a mother passing away or just having a sore ear because she had too much wax in her ear” (T1, 133-135).

The school principal recognized the evolving responses of the teachers. Steve shared his observations about the nature of these changes, “mostly the tolerance, the restorative, the discipline sides” (A1, 158-159). He added, “I’ve seen a little bit of a shift
in how they’re viewing kids who are especially outwardly expressing behavior” (A1, 164-165). Teachers and administrators have seen a change in teachers’ responses to challenging behaviors brought on by symptoms of trauma, and there seems to be a belief that these changes are positive for the teachers and the students. Teachers of all levels of experience and grade levels taught that they were able to speak to how they were responding to students’ symptoms of trauma. Developing a response to students was explicitly taught during session three of the professional development training, with a focus on in-classroom strategies.

**Theme 3.4: They feel safe.** The final theme for Research Question 3 examines how the teachers were attempting to avoid re-traumatizing the students. An overarching theme of the professional development was the creation of safe and supportive environments for students who have experienced trauma. While this concept was present throughout the professional development, it was the focus of session three. The key component of a trauma-informed approach is to develop a safe and supportive environment that limits the opportunities for students to be triggered, potentially causing additional trauma.

The main focus of prevention for the teachers was creating safety for their students. Fifth-grade teacher, Caroline, said, “the biggest takeaway is that my job is to make sure that these students are feeling loved, safe, and cared for” (T3, 18-19). She later added, “what can we do to make sure that they are feeling supported and really just safe? Just feeling safe in our room” (T3, 64-65). Third-grade teacher, Donna, also spoke about the importance of students’ feelings of safety, “they know somebody cares, somebody wants to connect with them on a level, and they feel safe to talk to me” (T5,
123-124). This sentiment was echoed by kindergarten teacher, Deb, who talked about her expectations for her relationships with students, “my job is to keep you safe; your job is to help me keep you safe” (T4, 131-132). The benefits of safety and support were explained by Susie, a first-grade teacher, “by forming those relationships with a trusted adult, it allows them to be more safe [sic], take more academic risks, make more growth” (T9, 182-183). School principal, Steve, observed a specific instance of a teacher realizing why certain approaches may be necessary to avoid further traumatization of students. He relayed what the teacher had shared, “I made the connection to why that counselor was coloring with that child when [she] asked him to leave my room. I was mad at the time because I thought it was play time” (A1, 226-227). He added, “but they could see why that was intentional” (A1, 228). The creation of a safe and supportive environment highlighted in this theme aligned with session three of the professional development training, which went into detail on how to create such an environment.

A few participants expressed some challenges with developing a safe environment and consistently trying to avoid triggers. Rachael, a fifth-grade teacher, said, “I know pushing academics is going to be a trigger for them, at what point do I say ‘okay’ and trigger it because it’s something they need to work through and how do you work through that?” (T7, 80-81). Beth, a first-grade teacher, discussed that for some students, a safe and supportive environment may lead to an increase in behaviors, “more behaviors and more emotion sometimes fly in the room because they’re that safe and that comfortable and that’s a little hard to deal with as a teacher” (T2, 125-126).

All four of SAMHSA’s (2014) key assumptions were present in participants’ interviews, with no difference connected to years of experience or grade levels taught.
The analytic memos from the interview process highlighted the four key assumptions as central components of the participants’ responses. Participants were able to express how realization, recognition, response, and avoidance of re-traumatization had become part of their approach, even if not always using those specific terms. Participants demonstrated both an implementation of specific strategies along with an overall shift in approach and perspective when working with traumatized students and challenging behaviors.

Shifts in the teachers’ perspectives following a shift in practice aligns with Guskey’s (1986, 2002) model of the process of teacher change. Interview data highlighted participants’ paths along Guskey’s (1986, 2002) process, including professional development, new practice implementation, student outcomes, and changes in attitudes and beliefs. Participants who took part in the professional development were able to implement trauma-informed strategies into their classrooms and see a benefit for their students. These same participants spoke to a shift in their own perceptions of trauma and trauma-informed practices.

Summary of Results

This chapter presented the analysis and results of 11 semi-structured, individual interviews with 10 elementary teachers and one administrator, all of whom participated in an intensive trauma-informed professional development program during the 2018-2019 school year. For Research Question 1, data were analyzed to understand which components of the trauma-informed professional development training the teachers perceived to be most effective. Three themes emerged from the results. The first theme was that the teachers found the professional development to be effective. The teachers cited the case study approach and applicable in-classroom strategies to be most
beneficial. Second, participants felt the professional development addressed the increase in teacher and student needs that existed in their school. The strategies and approaches taught in the professional development helped the teachers to work with students who had experienced trauma and were displaying challenging behaviors. Third, participants expressed a need for more professional development in the area of trauma-informed practice. Participants shared a desire to continue their own training, while also expanding the training to the entire school, creating a more fully trauma-informed school.

Research Question 2 focused on how the professional development influenced the teachers’ practices, attitudes, and beliefs about trauma and trauma-informed practices. The data analysis identified three themes. Changes in classroom practices that participants found to be successful was the first theme. The teachers discussed the effectiveness of new strategies and approaches learned from the professional development training, including validation, restorative approaches, calming techniques, and relationship building. Strategy use was noted often in the analytic memos taken after each interview. The second theme was a mental shift undergone by the participants. Participants shared a new understanding of how trauma impacts students and the need to take a more patient, intentional approach with them. Teachers shared how they viewed students and their interactions with them differently, shifting from wondering what is wrong with the students to considering what has happened to the students. Barriers to implementation was the third theme for Research Question 2. The teachers stated that finding enough time to implement practices was the biggest barrier. The theme of time was noted multiple times in the analytic memos taken during the interview process. The
second major barrier was that the teachers struggled with how much a role they were expected to play in addressing students’ mental health concerns.

For Research Question 3, data were analyzed to determine if participants’ responses aligned with SAMHSA’s (2014) four key assumptions of trauma-informed approaches: realization, recognition, response, and avoidance of re-traumatization. Evidence of all four key assumptions were found in the analytic memos taken during the interview process. Participants demonstrated a realization of the prevalence and impact of trauma on the students in their school. Teachers spoke about specific traumas their students had experienced and the recognition of how those traumas manifested as behaviors in the classrooms. The response of the participants included specific trauma-informed interventions, along with a shift in approach to working with traumatized students and their challenging behaviors. The creation of safe and supportive environments was the key point teachers discussed when trying to avoid students’ triggers and re-traumatization.

Participants clearly articulated multiple takeaways from their professional development experience. The learning, strategies, and approaches shared by participants aligned with the professional development sessions. Specific content knowledge and strategy use shared by participants could be found explicitly in the PowerPoint materials. There were changes to participants’ trauma-informed practices, attitudes, and beliefs. The new approaches implemented by participants aligned with SAMHSA’s (2014) four key assumptions. While this intensive professional development approach was perceived by participants to be beneficial, ongoing training and support appear as essential to sustain participants’ long-term trauma-informed efforts.
The research implications of the results presented in Chapter 4 are outlined in Chapter 5. Chapter 5 also includes the limitations of this study, recommendations for future research, and a conclusion of the study.
Chapter 5: Discussion

Introduction

Researchers have studied the implementation of trauma-informed practices and the short-term influence of trauma-informed professional development in elementary schools (Chafouleas et al., 2016; Dorado et al., 2016; McIntyre et al., 2018; Shamblin et al., 2016). Existing research, however, has not examined the long-term influence of trauma-informed professional development on teachers’ practices, attitudes, and beliefs. More specifically, the perspectives of the teachers are not present in much of the current research. The purpose of this study was to examine teachers’ perceptions of the influence of trauma-informed professional development on their practices, attitudes, and beliefs. Additionally, the study examined the alignment between these practices, attitudes, and beliefs and SAMHSA’s (2014) four key assumptions of a trauma-informed approach: realization, recognition, response, and avoidance of re-traumatization. This chapter provides an overview and the implications of the key research findings of this study. The limitations of this study, as well as recommendations for future research and practice are also presented. The study, using Guskey’s (1986, 2002) model of the process of teacher change and SAMHSA’s (2014) four key assumptions addressed the following research questions:

1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?
2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?

3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization?

Several themes emerged through the interview data analysis. Three key findings emerged from the themes and helped to focus this study’s implications.

**Implications of Findings**

This study produced three key findings. First, the knowledge built through effective, trauma-informed professional development is a driver of change in teachers’ practices, attitudes, and beliefs. Second, effective trauma-informed professional development must connect to teachers’ lived experiences. Third, effective professional development is only the beginning of a sustained trauma-informed approach. These findings and their implications are presented and discussed including their alignment with existing literature in the fields of professional development and trauma-informed approaches in education. Connections are made to Guskey’s (1986, 2002) model of the process of teacher change, which is a component of this study’s theoretical rationale.

**Finding 1: The knowledge built through effective, trauma-informed professional development sets the stage for changes in teachers’ practices, attitudes, and beliefs.** Participants in this study, prior to their interviews for this study, previously completed an intensive, four-session professional development opportunity on trauma and trauma-informed practices over the course of several months in 2018-2019. The
sessions covered a significant amount of content about what trauma is and how it impacts brain development, behavior, and learning. Participants highlighted learning about trauma and the science behind trauma’s impact on the developing brain as a key component of their experience.

Changes in the teachers’ knowledge after trauma-informed professional development have been noted by several researchers (Brown et al., 2012; McIntyre et al., 2018; Shamblin et al., 2016). These studies all found an increase in participants’ trauma-informed knowledge after short-term professional development. Barnett et al., (2018) found a correlation between an increase in professional development trainings and trauma-informed skills after 1 year of a trauma-informed training program. An increase in knowledge after longer-term professional development was also found by Dorado et al. (2016). A solid base of knowledge and understanding of trauma and its impact is a key component of implementing and sustaining trauma-informed practices and approaches. Therefore, professional development trainers must give considerable thought to the depth of the content presented in their sessions.

The acquisition of new knowledge from effective professional development is a driver of change. New knowledge influences teachers’ perceptions of, and approaches with, students. Changes in approach allow for teachers to be more patient and understanding of the challenging behaviors exhibited by students who have experienced trauma. Understanding how trauma impacts brain development provides teachers with the knowledge necessary to consider the root cause of challenging behaviors and avoid labeling students as discipline problems by focusing only on behaviors. When teachers are taught the science behind trauma, they can connect their learning about trauma’s
impact on behavior development to behavioral challenges present in their classroom. A shift in perspective and approach as a result of new, trauma-informed learning is called a trauma lens, which allows teachers to better understand the connections between trauma, relationships, experiences, learning, and behaviors (Cole et al., 2013). Understanding the importance of teacher-student relationships is a key component of a trauma lens. Knowledge of how trauma impacts students’ abilities to develop and maintain relationships highlights the important role teachers can play through a shift in their approach. Teachers who are willing to build relationships create opportunities to connect with, and better understand, their students who have experienced trauma.

The development of a knowledge base during professional development sets the stage for learning trauma-informed practices for the classroom. The understanding of trauma and its influence on students’ learning and behavior provides teachers with a rationale for the implementation of new practices. Knowledge obtained through content-rich professional development prepares teachers to put into place practices that provide their students with opportunities to be successful. These findings were supported by Kennedy (2016) who discussed how professional development that alters teachers’ knowledge is the first step toward altered practices and changes in student learning. New knowledge serves as the foundation for change. The concept of professional development setting the stage for future change is the starting point of Guskey’s (1986, 2002) model of the process of teacher change.

**Finding 2: Effective trauma-informed professional development must connect to teachers’ lived experiences.** The most effective component of the professional development at the heart of this study was the practical and applicable nature
of the trainings. Participants cited the connections to their own classrooms and the ability to implement practices immediately as two of the most beneficial and important aspects of their professional development experience. The practicality of the professional development was enhanced by the case study approach utilized during the multiple sessions. Professional development that uses a practical, case study approach generates opportunities for teachers to take information that may seem abstract and apply it directly to interactions with current students. Building knowledge with specific students in mind creates clear connections to teachers’ experiences and sets up opportunities to put learning into action. Teachers move past hypothetical scenarios and align new learning and strategies to specific students, behaviors, and situations, connecting content and practice. The addition of a data collection component allowed for ongoing analysis of the outcomes related to the implementation of the newly learned practices and approaches. Collecting data, analyzing results, and receiving feedback reinforced the work teachers were putting into their own learning.

Explicit, applicable strategies are most effective when providing professional development on trauma-informed practice. Participants learned and immediately implemented strategies, which provided feedback on their learning. Cycles of implementation, analysis, and further learning moved the teachers toward the sustainable adoption of new trauma-informed practices. This cycle aligns with Guskey’s (1986, 2002) research and the development of the model of the process of teacher change. In his model, Guskey (1986, 2002) found that changes to teachers’ attitudes and beliefs occurred after the teachers had learned through professional development, implemented new practices, and had seen positive results with their students. By teaching explicit
strategies that can be implemented, tracked, and discussed, professional development trainers engaged participants in the model of the process of teacher change (Guskey, 1986, 2002). Engaging in the process of teacher change through implementation and feedback provides the necessary foundation for changes in attitudes and beliefs.

The use of newly learned trauma-informed practices was also seen in a study by von der Embse et al. (2018). Teachers who received ongoing training and coaching were able to increase their mastery of trauma-informed classroom management strategies. Brunzell et al. (2019) found teachers were able to use a similar cycle of learning, implementation, tracking, and reflection to work more effectively with students who had experienced trauma and were exhibiting challenging behaviors.

**Finding 3: Effective professional development is only the beginning.** The interview data made clear that the journey to a sustainable trauma-informed approach does not end when the formal professional development opportunity ends. Effective professional development is only the beginning of the trauma-informed process, serving as the foundation for continued work. Teachers need ongoing training and support to progress in their learning and to overcome potential barriers to implementation. Diligent planning is required to sustain trauma-informed efforts within individual teacher’s classrooms and across schools.

Teachers can develop knowledge and skills relating to trauma-informed practices when receiving training and feedback. Once the original professional development opportunity has concluded, it becomes difficult for teachers to maintain the same level of commitment and momentum in the absence of continued training and support. New students bring new challenges that can be aided by continued training. As time passes
without revisiting trauma-informed topics, skills diminish as strategies are used less frequently. Research has shown that increased contact time with professional development can provide continued opportunities for active learning (Garet et al., 2001). Duration and coherence are key aspects of effective professional development that can encourage the continuation of professional conversations (Desimone et al., 2002). Unless trauma-informed approaches and practices are kept as a school-wide focus, other concerns, initiatives, and responsibilities will tend to take up teachers’ time and attention. While ongoing training may not fully replicate the original training, providing training, resources, and mental health professionals’ support can provide teachers with opportunities to hone their trauma-informed strategies and approaches. Han and Weiss (2005) also found that for new practices to be successful, teachers must be supported and provided with the resources necessary for sustained implementation efforts. Sustainability is key. Otherwise, the significant efforts of trainers and participants will not have the desired long-term effects on student success.

The need for ongoing feedback, training, and support was highlighted by Guskey (1986, 2002) in his model of the process of teacher change. Feedback and ongoing support make up two of Guskey’s (1986, 2002) three practices that are present throughout the process of teacher change. Ongoing support and training, as made clear in this study, is necessary to sustain new practices and further develop attitudes and beliefs about change (Guskey, 1986, 2002). As Tiffany stated, “It’s helpful to keep the conversation going because . . . like any professional development, unfortunately, sometimes you’ll take a golden nugget and then some of it that you didn’t use goes by the wayside” (T10, 257-259). Desimone (2009) also highlighted the importance of ongoing, coherent
professional development. Professional development must be presented in an aligned manner, where past, present, and future trainings are connected and are part of a planned program (Desimone, 2009). Additionally, the duration of professional development plays a key role in its success (Desimone, 2009).

There is also a need to expand trauma-informed training to an entire school, including all classroom teachers and ancillary staff members. Students interact with several adults throughout the school day. Students struggling with the impact of childhood trauma require a consistent, trauma-informed approach to be taken by the adults in their lives. As students interact with bus drivers, paraprofessionals, teachers, office staff, cafeteria monitors, and more, it is imperative that they are met with consistent approaches and expectations. School-wide training can help prevent students from having to understand and navigate varied responses to their behaviors, making their days in school more reliable and predictable. Ongoing, school-wide training serves to eliminate trauma-informed pockets within the school. While current research does not examine the implementation of training across an entire school, the expansion of knowledge, strategies, approaches, attitudes, and beliefs throughout a school can only strengthen the positive impact on students. A continued commitment from school leaders to provide ongoing training, support, and resource allocation reinforces the importance of implementing a trauma-informed approach in all areas of the school.

Despite receiving intensive training, implementing new practices, and experiencing a shift in attitudes and beliefs, participants in this study spoke of the obstacles keeping them from faithfully implementing trauma-informed practices. The implementation of trauma-informed practices takes time. Rigorous curriculum and the
intense focus on academic progress often pushes behavioral and social-emotional issues to the side. Teachers struggle to implement trauma-informed practices unless they are given the permission to address students’ social-emotional and behavioral needs, while temporarily lessening the focus on academics. Susie spoke of barriers, “I can’t do all of those things at the same time without support” (T9, 70-71). Strategies designed to build relationships and regulate students’ emotions and behaviors must be giving precedence over the need to get through the curriculum at any cost. Research on the impact of trauma makes it clear that students’ ability to learn is significantly reduced if their basic social-emotional needs are not met. Realizing the importance of balancing academics with SEL is an important outcome of becoming trauma-informed. The barrier of addressing the needs of traumatized students with the academic needs of the rest of the class was one of the concerns found by Alisic (2012) during semi-structure interviews with classroom teachers. It is common for teachers to struggle with balancing the needs of their students with the expectations for academic progress. Trauma-informed schools understand that social-emotional well-being and academic achievement go hand in hand.

Another barrier came to light as participants questioned their role versus the role of mental health professionals. Teachers needed clarity on what is expected of them in terms of addressing students’ behaviors and social-emotional needs. Concerns about the role of the teacher necessitates ongoing support and communication from the school’s mental health professionals and administration. Trauma-informed practices are intended to build relationships and regulate students, but they are not a complete solution to students’ mental health struggles. Ongoing support, feedback, and planning are necessary for teachers to fully understanding what is within their capability and what
necessitates an appeal for increased support. Concerns about the role of the teacher in addressing the needs of traumatized students were also found in studies by Alisic (2012) and Alisic et al. (2012). The results of this study, along with those from Alisic (2012) and Alisic et al. (2012), highlight a hesitancy on the part of teachers to assume some of the roles traditionally reserved for counselors, psychologists, and social workers. Training and clear communication of expectations are necessary to make teachers more confident in their role versus the role of mental health professionals.

Limitations of the Study

This study was limited to 11 participants from one elementary school in one small rural district. The nature of the qualitative methods used in this study does not necessarily allow the findings to be generalized to other K-5 elementary schools. The study had one administrative participant, limiting that perspective in the data. While schools of all types are attempting to implement trauma-informed professional development and practices, the study focused on one rural elementary school.

Recommendations for Future Research

This study used qualitative methods to analyze elementary teachers’ perceptions of the influence of trauma-informed professional development on practices, attitudes, and beliefs. The heart of the study was to examine the lived experiences of teachers who received an intense level of professional development and had opportunities to implement trauma-informed practices into their classrooms. The influence of professional development on trauma-informed practices is complex, with more research necessary to inform teachers and school leaders regarding how to proceed with implementation. Future research can continue to build on the information in this study to strengthen
educators’ understanding of trauma informed professional development and its influence on teachers’ practices, attitudes, and beliefs.

First, it is recommended that future research focus on the influence of professional development on the trauma-informed practices, attitudes, and beliefs of teachers and administrators in urban and suburban districts. The findings from future studies would complement those found in this study, which focused solely on the teachers and one administrator in one specific rural school.

Second, a quantitative methodology could be used to study the influence of how changes in teachers’ trauma-informed practices, attitudes, and beliefs impact student outcomes. While the analysis of the data in this study showed that participants believed a trauma-informed approach to be helpful for students, additional evidence would be useful to support this idea. An important step in understanding the efficacy of trauma-informed approaches would also be the measurement of the impact on specific student outcomes in the areas of academics, mental health, and behavior. Potential measurements could include changes in students’ grades, dropout rates, mental health referrals, discipline referrals, or suspensions.

A third research recommendation would be to conduct a study that looks at teachers’ practices for an extended period, possibly several years. As the third finding of this study stated, there is a need to understand what comes next for teachers and schools attempting to sustain trauma-informed approaches. Research that extends over the longer term would provide valuable insight into the sustainability of trauma-informed approaches in schools.
Recommendations for Practice

This study found that teachers and administrators can greatly benefit from an intense, in-depth professional development on trauma and trauma-informed practices. A professional development model that provides important content, practical information, and applicable strategies allows for teachers to learn and implement new practices. This process serves as a driver for change in teachers’ attitudes and beliefs about trauma and trauma-informed practices. As the data analysis shows, teachers will need both an effective initial professional development opportunity and opportunities for future training, along with help to overcome barriers. Recommendations follow for professional development trainers and school leaders, to provide guidance as they continue the important work of providing trauma-informed professional development and implement trauma-informed approaches in schools.

Professional development trainers. The findings of this study could be valuable to educators who are responsible for the planning and delivery of trauma-informed professional development. The demand for such trainings is likely to increase as the desire for schools to become trauma-informed increases. The increase in demand for trauma-informed professional development can be met through paid consultants or outside trainers, like the professional development that teachers in this study attended. Additionally, some schools and districts might want to rely on in-house-trained faculty to deliver professional development. The recommendations that follow are meant to guide the development of these future trainings.

First, professional development must provide participants with a strong foundation of knowledge about trauma and trauma-informed practices. It is
recommended that trainers spend considerable time developing participants’
understanding of the science behind trauma and its impact on children’s brain
development. The benefit of explicitly instructing teachers about the science behind
trauma and the brain was expressed by Susie, “understanding that there are neurological
changes and physical, anatomical changes to the brain when that happens allowed me to
approach my students with a different perspective” (T9, 40-42). The understanding of
the science of trauma informs teachers as to why they are seeing certain behaviors and
why it is necessary to take alternative approaches when dealing with students who have
experienced trauma. A deep level of understanding of trauma and its impact provides the
rationale for implementing trauma-informed practices and drives shifts in teachers’
perceptions of students and their behavior. The understanding of trauma as a catalyst for
change connects to the concept of the trauma lens researched by Cole et al. (2013). A
trauma lens allows teachers to leverage their understanding of trauma and its impact to
change their perspectives regarding how to work with traumatized students (Cole et al.,
2013). Teachers can use their knowledge of trauma and its impact to understand that
changes in practices, attitudes, and beliefs are what is best for their students. The
development of a trauma lens may help teachers to realize how important it is for them to
receive continued trauma-informed professional development.

Second, trainers should make the content practical and applicable. To be practical
and applicable for teachers, trauma-informed professional development must meet the
needs of the teachers. Participants in this study discussed how they felt the professional
development they received met their needs by preparing them to meet their students’
needs. “I wanted something that could help me build the social-emotional skills that my
kids really desperately need” (T9, 65-66), said Susie. Sally also talked about needs: “We know kids have trauma, we understand that, but actually [learning] how to implement and how to deal with it on a daily basis” (T8, 26-27). Professional development that addresses needs engages participants and allows for immediate application of new learning. The use of a case study approach makes the content practical for teachers, as they can apply their new learning to their work with their actual students. Trainers must try to connect the professional development to real life examples from teachers’ everyday experiences. Connecting more directly to teaching is a characteristic of reform-style professional development, and it is more effective than traditional approaches (Desimone et al., 2002; Garet et al., 2001). Applying new learning to specific examples makes the concept of trauma-informed practices less abstract and more concrete.

To fully maximize the use of a practical approach, professional development should be delivered over an extended period. Duration is a key component of effective professional development, with prolonged professional development opportunities proving more effective than those shorter in duration (Avalos, 2011; Garet et al., 2001). Sustained professional development provides increased opportunities for teachers to engage in high-quality learning (Avalos, 2011; Garet et al., 2001). Time between sessions allows participants to put learning into action, knowing there are opportunities for follow-up in the future. In this study, participants met for four sessions over the course of 4 months. This allowed for participants to implement strategies and practices, analyze impact, and bring their experiences back to the group for feedback. Multiple sessions allowed participants to learn, implement, analyze, and receive feedback. This cycle is the model of the process of teacher change (Guskey, 1986, 2002). It is through
this process that teachers will become more accepting of a trauma-informed approach and the work required to implement such changes.

A key component of practical professional development is the ability for participants to apply their new learning. The actual implementation of trauma-informed strategies is necessary for teachers to connect their knowledge and practice. When looking at Guskey’s (1986, 2002) model of the process of teacher change, it is unlikely that teachers’ attitudes and beliefs about trauma-informed approaches will change without the successful implementation of newly learned practices (Guskey, 1986, 2002). Therefore, it is imperative that teachers are able to apply their learning throughout the course of the professional development offering. Professional development trainers can use feedback and reflection to build upon teachers’ experiences and continuously strengthen their practice. Professional development trainers must understand that teacher change is a gradual process that requires ongoing feedback and training (Guskey, 1986, 2002).

School leaders. The findings of this study offer insight for school leaders attempting to implement a trauma-informed approach into their school or district. The first recommendation is that school leaders give serious consideration to the duration and depth of their trauma-informed professional development offerings to faculty and staff. Teachers and staff will need considerable exposure to trauma-informed content, with opportunities to engage in the model of the process of teacher change (Guskey, 1986, 2002). Teachers must be engaged in the process of teacher change to facilitate shifts in their attitudes and beliefs about trauma and trauma-informed practice implementation (Guskey, 1986, 2002). The model of the process of teacher change states that teachers’
attitudes and beliefs change only after engaging in learning, implementation, and analysis of outcomes (Guskey, 1986, 2002). The process of teacher change is facilitated through reform-style professional development, which connects directly to teaching (Desimone et al., 2002; Garet et al., 2001). Reform-style professional development, which includes cycles of interactive learning, is more effective than traditional professional development where sessions are often short and isolated (Desimone, 2009; Desimone et al., 2002; Garet et al., 2001). The professional development in this study was an example of reform-style professional development, providing participants with opportunities to apply their learning and to connect the content to their experiences. Participants engaged in active learning over an extended period of time. For professional development to be highly effective, it is imperative that teachers are intellectually engaged with professional development content, not merely presented with information (Kennedy, 2016).

School leaders must consider the purpose of trauma-informed professional development when selecting training options. The key assumptions from SAMHSA’s *Concept of Trauma and Guidance for a Trauma-Informed Approach* can provide objectives for professional development. Trauma-informed educators must realize that trauma exists and is prevalent, they need to recognize how trauma manifests in the classroom, they have to know how to respond to students suffering from trauma, and they should avoid re-traumatizing students (SAMHSA, 2014). School leaders should discuss how these key assumptions should be addressed through professional development before committing to a program or trainer. This will ensure that the professional development offering is grounded in research on trauma and trauma-informed practices. The professional development in this study did address SAMHSA’s key assumptions and all
four were present in the data. Participants discussed their understanding of their students’ trauma, their recognition of trauma manifesting in the classroom, specific strategies used with students, and working to make safe, supportive environments. Building professional development around trauma-informed research can translate into effective classroom practices. Figure 1.1, on page 15, shows how the recommendations of Guskey’s (1986, 2002) model of the process of teacher change and SAMHSA’s (2014) key assumptions of a trauma-informed approach are merged.

The theoretical framework for this study combined Guskey’s (1986, 2002) model of the process of teacher change and SAMHSA’s four key assumptions (2014). High-quality, trauma-informed professional development allowed participants to experience each step of Guskey’s (1986, 2002) model of the process of teacher change model, while simultaneously being exposed to the SAMHMSA’s four key assumptions for a trauma-informed approach. The key assumptions are part of participants’ learning, implementation, and perspective shifts.

Providing a more in-depth professional development opportunity will require school leaders to plan for the investment of resources into securing or developing training. School leaders must seek out qualified trainers to provide trauma-informed professional development, as trainers’ expertise influences program success (Kennedy, 2016). Multiple training options exist for school leaders. Internally, school leaders can look to their mental health professionals or previously trained teachers to facilitate trainings. Online organizations can be contacted to offer in-person or online professional development. In New York State, the Board of Cooperative Education Resources can provide teacher educational services. For this study, school leaders worked in
collaboration with local professors and researchers to provide professional development training through a grant. School leaders must be willing to research available options in their area to provide the professional development option that best meets the needs of their faculty and staff. Professional development should be part of the budgeting process, or school leaders may have to find grant money or other avenues to secure appropriate funding.

What is clear is that professional development efforts will not be effective if considerable effort is not given by school administrators to ensure high-quality offerings. High-quality professional development provides teachers with training that alters their knowledge and causes a change to their practice, which in turn creates better outcomes for students (Kennedy, 2016). High-quality professional development focuses explicitly on content, allows for active learning, requires collective participation of faculty, is aligned to previous and future professional development, and provides significant time for participant engagement (Borko, 2004; Desimone, 2009; Desimone et al., 2002; Ingvarson et al., 2005; Garet et al., 2001). School leaders should look to secure professional development that is designed to engage teachers over a significant period, with opportunities for learning, implementation, and feedback.

The second recommendation is to expand trauma-informed professional development well beyond those in attendance for the initial offering. If there are groups of faculty and staff who have not received training, there will only be pockets of trauma-informed practices and approaches being used. School leaders should consider a phased approach to trauma-informed professional development. Professional development opportunities, such as the one presented in this study, take significant time and
commitment from teachers. Additionally, outside of grants or other funding sources, outside training of this magnitude may be expensive when seeking to train entire faculties. High-quality professional development often requires substantial resources (Garet et al., 2001). Providing fewer teachers with high-quality professional development is preferable to providing many teachers with less in-depth training, so school leaders can focus on leveraging initial high-quality training opportunities to expand training throughout the school (Desimone et al., 2002). Trained faculty and staff members can lead future professional development to reach additional faculty and staff. Mental health professionals can also contribute to ongoing training and support. The use of trained faculty and staff to conduct future trainings builds capacity within the school and allows teachers to be resources for one another. In-house trainings may lead to increased opportunities for collective participation, in which educators from the same grade or department are learning together (Desimone, 2009; Desimone et al., 2002). Opportunities to collaborate with peers, share experiences, network, and discuss teaching and learning can positively impact teachers’ knowledge and practice (Avalos, 2011; Ingvarson et al., 2005). By using a phased approach to professional development, school leaders can leverage the expertise of their trained teachers, while building a community of trauma-informed educators across the school. Additionally, ongoing, smaller-scale professional development opportunities can be used to target the specific needs of faculty and staff as they implement trauma-informed practices and approaches.

School leaders would be well served by planning professional development cycles that reinforce learning for trained teachers while providing new professional development for untrained faculty and staff. Eventually, the focus can shift to sustained review and
targeted professional development for specific concerns. Initial trauma-informed professional development should then become part of the onboarding process for new hires, ensuring consistency as faculty and staff change. It is important to place priority on professional development over time (Desimone, 2009). High-quality professional development can emerge from such strategic and systematic approaches to professional development (Desimone et al., 2002). School leaders who are strategic in their planning and systematic in the professional development they offer can leverage their newly trained teachers’ skills and understanding to continually train additional faculty and staff.

Another component of this recommendation aligns with Guskey’s (1986, 2002) model of the process of teacher change. It is important that school leaders do not wait for the entire staff to buy-in to the implementation of a trauma-informed approach before committing the school to professional development efforts. Teachers have students suffering the effects of trauma in the classrooms every single day. Schools cannot afford to wait. As Guskey’s (1986, 2002) model posits, changes in attitudes and beliefs occur after professional development, practice implementation, and changes in student outcomes. Teachers who experience high-quality, intensive professional development should be able to implement trauma-informed practices into their classrooms. The successful implementation of these practices, and their impact on students, has the potential to solidify buy-in from teachers. If school leaders follow the recommendation to leverage newly trained teachers as a source of future professional development, those teachers will be able to share not only their knowledge, but also their attitudes and beliefs.
A third recommendation is for leaders to consider what happens after the initial professional development has concluded. As the third finding of this study highlighted, there will be a need for ongoing training and efforts to overcome barriers to sustainable implementation. The teachers who took part in the initial professional development training will need to have their learning reinforced, and they should be given opportunities to practice their skills as they work to sustain a trauma-informed approach. Planning will necessitate securing resources to support the teachers both inside and outside of the classroom. Continued professional development could consist of coaching, book studies, teacher-led trainings, or additional outside trainers being brought into the school. Resources to support teachers could include additional mental health professionals, the cost of additional training, time for teachers to plan trauma-informed practices into the existing curriculum and an endorsement of a trauma-informed approach from the administration. Implementing the phased professional development approach mentioned previously provides opportunities to diversify training. Groups who need to revisit their initial professional development can receive training that is differentiated from the training provided to faculty and staff who are new to trauma-informed approaches. Teachers experience professional growth at different rates, and they will require professional development that aligns with their existing levels of understanding and practice (Clarke & Hollingsworth, 2002). Differentiating professional development opportunities allows for a coherent training process, which is a characteristic of high-quality professional development (Desimone, 2009; Garet et al., 2001). Teachers benefit from training that fits their needs.
This study, along with previous research, found that teachers struggle with understanding their roles compared to the roles of mental health professionals (Alisic, 2012; Alisic et al., 2012). School leaders must work with teachers and mental health professionals to clarify roles and expectations. Establishing clear lines of communication between teachers and mental health professionals may be necessary to appropriately address students’ mental health issues.

To commit the time, energy, and resources necessary to sustain a trauma-informed approach, school leaders should build the implementation of a trauma-informed approach into their strategic plans. Citing a trauma-informed approach as a priority during strategic planning will serve as a source of accountability for the school leader and teachers, while also communicating an endorsement of teachers’ trauma-informed work. Citing trauma-informed practices as a priority will assist teachers in overcoming the barriers of time and competition between trauma-informed practices and academics. A commitment to a trauma-informed approach in a strategic plan lets teachers know that efforts to meet the social emotional and behavioral needs of their students is as important as meeting their academic needs. Commitment from school leaders aligns with the concept of ongoing support, a necessary component to shift teacher’ attitudes and beliefs and establish buy-in (Guskey, 1986, 2002). Furthermore, resources can be allocated ahead of time to ensure a commitment to the sustainability of a trauma-informed approach well past the conclusion of one specific professional development opportunity.

School leaders can learn from their teachers who have received professional development. As in this study, teachers are able to speak to the effectiveness of professional development, key components of their learning, and barriers that exist to
implementation. Involving teachers in the planning process will help school leaders to reinforce the most effective components of trauma-informed professional development.

Conclusion

This study examined the perceived influence of professional development on teachers’ trauma-informed practices, attitudes, and beliefs. The increased awareness of the prevalence and impact of traumatic experiences on students has led to many school communities attempting to become trauma-informed. Schools look to trauma-informed approaches to meet the needs of their most vulnerable students. Students who are struggling as a result of the impacts of trauma deserve nothing less than well-trained teachers who are competent, compassionate, and trauma-informed. A trauma-informed approach is necessary to provide struggling students with access to the supports they need to succeed in school. Additionally, teachers need to feel confident and competent to work with students who present challenging behaviors and learning profiles created by past traumatic experiences. Childhood trauma and the students who have had traumatic experiences are not going away. It is the responsibility of school leaders and teachers to create school environments that are sensitive to the needs of traumatized students and that provide the resources and support necessary for all students to reach their potential. Students struggling with the effects of trauma are in classrooms right now, therefore trauma-informed professional development for teachers cannot wait.

One part of the trauma-informed process is the professional development of teachers. The effective training of teachers is key to implementing a trauma-informed approach in schools and trauma-informed practices in the classroom. While schools across the country and world are working to become trauma-informed, the long-term
influence of professional development in this area is unclear. This lack of understanding necessitates research focused on the outcomes of trauma-informed professional development, especially over longer periods of time.

Two frameworks were combined to create the theoretical framework that guided this study. Guskey’s (1986, 2002) model of the process of teacher change outlines the process teachers go through to shift their attitudes and beliefs. The process consists of four stages: professional development, implementation of practices, changes in student outcomes, and then changes to attitudes and beliefs. This process provides a rationale for researching the perspectives of teachers who have received training, implemented practices, and have had time to see outcomes based on those practices. Guskey’s (1986, 2002) model also states that change is a gradual process that requires ongoing feedback and support as teachers move through each stage. For many teachers, sustained implementation of a trauma-informed approach will require a shift in perspective and changes to their attitudes and beliefs about trauma and trauma-informed approaches. Guskey’s (1986, 2002) model of the process of teacher change provides a framework for accomplishing these necessary changes. This study added SAMHSA’s (2014) four key assumptions of a trauma-informed approach to Guskey’s (1986, 2002) model to provide the study with a trauma-informed focus. The assumptions of realization, recognition, response, and avoidance of re-traumatization should be a part of all four stages in Guskey’s (1986, 2002) model when applied to a trauma-informed approach. There is a vital need to shift teachers’ attitudes and beliefs about trauma and trauma-informed practices so that teachers are willing to put forth the necessary effort to meet the needs of their most affected students. Belief in the importance of a trauma-informed approach
must be paired with practices that align with what is known about working with traumatized populations to have the maximum positive impact.

An examination of the literature revealed research on the long-term influence of trauma-informed practices on teachers’ practices, attitudes, and beliefs to be limited. Additionally, a gap exists in the research focused on the perspectives of teachers and administrators relating to their trauma-informed practices. The prevalence and impact of trauma has been highlighted by multiple research studies (Merrick et al. 2018; Felitti et al., 1998; U.S. Census Bureau, 2018). It has been shown that traumatic experiences have significant impact on children’s development and can lead to negative manifestations in the school setting (Bell et al., 2013; NCTSN, 2008). Students can exhibit academic, behavioral, social-emotional, and relational issues as the symptoms of trauma (Perfect et al., 2015; van der Kolk, 2005). School districts have attempted to become trauma-informed to better meet the needs of traumatized students, often through the use of trauma-informed practices and MTSS (Chafouleas et al., 2018; Dorado et al., 2016). A key component of becoming trauma-informed is the training of teachers through professional development opportunities (Chafouleas et al., 2016; Dorado et al., 2016). While research exists on teachers’ willingness to engage in trauma-informed practices, little is understood about how professional development influences outcomes for teachers (Baker et al., 2016; Chafouleas et al., 2016, 2018; Cole et al., 2013; Dorado et al., 2016; McIntyre et al., 2018). The gap in research on outcomes associated with trauma-informed professional development necessitated further study. Findings from this study indicate that teachers’ trauma-informed practices, attitudes, and beliefs can be influenced by professional development. Teachers in this study were able to speak to shifts in their
perspectives and approaches several months after receiving professional development. Furthermore, it was found that changes to practices, attitudes, and beliefs were facilitated by the learning of new, in-depth content, partnered with opportunities to put learning into action.

This study used a qualitative methodology to study teachers’ and an administrator’s perceptions of trauma-informed professional development. Semi-structured, individual interviews were conducted with 10 elementary teachers and one elementary principal. Participants were selected based on their participation in a four-session, months-long professional development on trauma and trauma-informed practices. Participants were all educators in a K-5, rural elementary school. Participants were selected based on years of experience and grade levels taught to provide a representative sample of the teachers in the school.

Analysis and coding of the interview transcripts uncovered multiple themes for each of the three research questions. Three themes emerged for Research Question 1, which examined the components the professional development participants found to be the most effective when learning about trauma and trauma-informed practices. The themes were (a) this was eye-opening, (b) we are just seeing more and more need, and (c) it’s just not enough. Research Question 2 focused on how participants perceived the professional development’s impact on their trauma-informed practices, attitudes, and beliefs. Three themes emerged from the analysis (a) whoa, this actually worked, (b) it’s what’s best for kids, and (c) that’s the biggest struggle. Research Question 3 examined the alignment between participants’ responses about their practices, attitudes, and beliefs and SAHMSA’s (2014) four key assumptions of trauma-informed approach of
realization, recognition, response, and avoidance of re-traumatization. Four themes emerged from Research Question 3: (a) understanding where these kids are coming from; (b) well, why are they doing that; (c) they’re little, and they need a little bit more; and (d) they feel safe. Theme titles were taken directly from participant interviews. Key concepts and subthemes were generated to support the themes.

Three key findings and their implications arose from the analysis of the study’s themes. The first finding was that the development of knowledge through effective professional development sets the stage for changes to teachers’ practices, attitudes, and beliefs. As teachers understand what trauma is and how it impacts students’ learning and development, they can see the importance of using a trauma-informed approach. Teachers who implement trauma-informed practices and see results with students have engaged in the process of teacher change and experience shifts in their attitudes and beliefs. The second finding was that effective professional development must connect to teachers’ lived experiences. Teachers benefit from connections between knowledge and practice. Using a case study approach and immediately implementing strategies allows teachers to put learning into action. The third finding was that effective professional development is just the beginning of the trauma-informed process. Implementing a trauma-informed approach is a complex process. To make implementation sustainable, teachers need ongoing training and support that lasts well past the conclusion of the initial professional development opportunities.

Recommendations for future research were made as a result of the findings and implications. First, similar research should be conducted with teachers and administrators in urban and suburban schools to compare to the experiences of the rural
participants in this study. Second, quantitative methodology should be used to study the impact of professional development and changes in teachers’ practices, attitudes, and beliefs on student outcomes, including academic, behavior, and/or mental health data. Third, researchers should study teachers over a longer period, to gain a better understanding of the long-term sustainability of implementing trauma-informed approaches after professional development. The theme, *it’s just not enough*, from Research Question 1 highlighted participants’ desire for additional, ongoing training. Research focused on ongoing training could provide important information about professional development’s influence on sustainability.

Recommendations for practice were also made for two specific groups: professional development trainers and school leaders. Professional development trainers should ensure their trainings provide participants with a solid foundation of knowledge about trauma and trauma-informed practices, with a specific focus on the science behind trauma and brain development. The content of the professional development must be practical, connecting with teachers’ current experiences. Finally, the professional development must provide content and strategies that are immediately applicable to the teachers’ practice.

School leaders responsible for implementing a trauma-informed approach should provide faculty and staff with intensive, in-depth professional development that goes beyond traditional professional development. A key to implementing a school-wide approach is the inclusion of as many faculty and staff members as possible. This will eliminate the issue of trauma-informed pockets in the school. A phased approach to professional development will allow school leaders to plan for expanding training to all
faculty and staff. School leaders must implement professional development plans as soon as feasible, rather than wait for everyone to be on board. Successful professional development, practices, and student outcomes will serve as the catalyst for buy-in. Finally, school leaders must plan for ongoing support and the addressing of barriers that will exist once the initial professional development opportunity has ended. Planning includes the inclusion of trauma-informed professional development into the school’s strategic plan, as well as the allocation of resources to training and give ongoing support.

Childhood trauma is prevalent, and its impact often negatively influences students’ ability to succeed in the school setting. Schools leaders have a duty to ensure their schools are prepared to meet the needs of traumatized students by implementing trauma-informed approaches and practices. As schools move toward adopting trauma-informed approaches and practices, a significant amount of the responsibility for addressing students’ trauma will fall on classroom teachers. It is imperative that teachers are well equipped with an understanding of trauma and how it impacts students’ development, relationships, academics, and behavior.

Professional development is how many districts will attempt to provide teachers with the knowledge and skills necessary to work with students who have experienced trauma. With professional development being a central component a trauma-informed approach, research on its effectiveness is essential to school leaders and teachers who want to become trauma-informed. This study may serve as guidance for school leaders and trainers responsible for providing teachers with the professional development opportunities necessary to implement trauma-informed practices. Components of effective professional development and the need to plan for ongoing training and support
were highlighted to help the teachers create sustainable changes to their practices and
approaches. It is critical that the professional development teachers receive is of high
quality and enables them to feel confident and competent in their work with students.
Effective professional development can have a significant impact on teachers’ ability to
implement successful trauma-informed practices. Realizing the effectiveness of new
practices opens teachers up to shifts in attitudes and beliefs about working with students
who have experienced trauma. Traumatized students need teachers who will try to
understand how the students’ experiences have impacted their learning and behavior and
teachers who will work to build healthy, supportive relationships.

Teachers are in a unique position to have a tremendous influence on the lives of
their students. Students who have experienced childhood trauma are often vulnerable and
are most in need of adult support. These students depend on school leaders and teachers
to make decisions based on their understanding of trauma and what is the best practice to
help students succeed in the face of adversity. Effectively training teachers, providing
support and resources, and committing to becoming trauma-informed can lead to changes
in teachers’ practice, attitudes, and beliefs, with the goal of improving students’ chances
of success. The journey to student success starts with school leaders being willing and
able to provide teachers with the best professional development, feedback, and support
possible to meet the urgent needs of their students.
References


Appendix A
Informed Consent Form

Statement of Informed Consent for Adult Participants

Examining the Perceived Influence of Professional Development on Teachers’ Trauma-Informed Practices, Attitudes, and Beliefs

SUMMARY OF KEY INFORMATION:

- You are being asked to be in a research study of trauma-informed professional development. As with all research studies, participation is voluntary.
- The purpose of this study is understand the perspectives of educators who have received trauma informed professional development and how they believe the professional development has influenced their trauma-informed practices, attitudes, and beliefs.
- Approximately 12 people will take part in this study. The results will be used for the completion of the researcher’s dissertation.
- If you agree to take part in this study, you will be involved in this study for one individual interview, lasting between 30-60 minutes.
- If you decided to participate, you will be asked to sit for one, 30-60 minutes long individual interview. The interview will take place in your school building at a time that is convenient for you.
- We believe this study has no more than minimal risk. Minimal risks or inconveniences include sitting for up to an hour to participate in an interview.
- You may not directly benefit from this research; however, we hope that your participation in the study may help contribute to the development and implementation of professional development for districts, schools, and educators.

DETAILED STUDY INFORMATION (some information may be repeated from the summary above):
You are being asked to be in a research study of the influence of trauma-informed professional development on teacher trauma-informed practices, attitudes, and beliefs. This study is being conducted at ___________________________. This study is being conducted by: Mitchell Daly, supervised by Marie Cianca, in the Executive Leadership Doctoral Program at St. John Fisher College.
You were selected as a possible participant because___________________________________________.

Click here to enter text.

Please read this consent form and ask any questions you have before agreeing to be in the study.

PROCEDURES:
If you agree to be in this study, you will be asked to do the following:
If you decide to participate, you will be asked to sit for one individual interview. You will be asked questions related to the trauma-informed professional development you received during the 2018-2019 school year. The interview will take place at _______________________________ and last 30-60 minutes. The researcher may follow up with you if there is a need for clarification of your responses. The interview will be audio-recorded. Agreement to be audio recorded is required for participation in this study.

COMPENSATION/INCENTIVES:
You will receive compensation/incentive. Gift cards will be distributed to interview participants at the time of the interview.

CONFIDENTIALITY:
The records of this study will be kept private and your confidentiality will be protected. In any sort of report the researcher(s) might publish, no identifying information will be included. Click or tap here to enter text.

Identifiable research records will be stored securely and only the researcher(s) will have access to the records. All data will be kept on a password protected laptop or in a locked filing cabinet in a private office by the investigator(s). All study records with identifiable information, including approved IRB documents, tapes, transcripts, and consent forms, will be destroyed by shredding and/or deleting after three years.

Audio recordings will be accessed by the researcher and a transcription service. Pseudonyms will be used during interviews. Recordings will be erased after three years.

VOLUNTARY NATURE OF THE STUDY:
Participation in this study is voluntary and requires your informed consent. Your decision whether or not to participate will not affect your current or future relations with St. John Fisher College, __________________________________________. If you decide to participate, you are free to skip any question that is asked. You may also withdraw from this study at any time without penalty.

CONTACTS, REFERRALS AND QUESTIONS:
The researchers(s) conducting this study: Mitchell Daly. If you have questions, you are encouraged to contact the researcher(s) at______________________________
______________________________  Advisor: Dr. Marie Cianca, St. John Fisher College,
The Institutional Review Board of St. John Fisher College has reviewed this project. For any concerns regarding this study/or if you feel that your rights as a participant (or the rights of another participant) have been violated or caused you undue distress (physical or emotional distress), please contact the SJFC IRB administrator by phone during normal business hours at (___) ___-____ or irb@sjfc.edu.

**STATEMENT OF CONSENT:**
I am 18 years of age or older. I have read and understood the above information. I consent to voluntarily participate in the study.

Signature:__________________________________________ Date: _________________

Signature of Investigator: ______________________________ Date: ________________

*Retain this section only if applicable:*
I agree to be audio recorded/transcribed _____ Yes _____ No If no, there is not an alternative for participation.

Signature:__________________________________________ Date: _________________

Signature of Investigator: ______________________________ Date: ________________

Please keep a copy of this informed consent for your records.
Appendix B

Teacher Interview Protocol

Thank you for agreeing to participate in this interview today. The purpose of this interview is to learn more about your experiences with trauma-informed professional development and the implementation of trauma-informed practices. I have prepared questions that I will pose to stimulate discussion. I may ask follow-up questions as needed. Overall, the interview should last approximately 40 to 60 minutes. As a reminder to the information in the Informed Consent form that you signed, I wanted to remind you that the responses shared today will remain confidential. I will not use your name and will avoid reporting information that could be linked back to you personally. This interview will be audio-recorded. The recording and notes related to this interview will be stored securely and then destroyed 3 years after this study has been completed. Are there any questions before we begin?

Interview Questions:

Last year you received professional development on trauma and trauma-informed practices in schools…

1. Please tell me about the trauma-informed training you received last year
   a. What was the focus of the training?
   b. What about the professional development did you find helpful?
   c. Tell me about any informal interaction you had with other staff about the topics of trauma and trauma-informed practices.

2. What got you interested in this professional development opportunity?

3. Tell me about any trainings you had received prior to last year’s training.

4. Describe any additional training and/or support you have received since the initial training.
   a. How has the additional support been helpful?
5. Do you feel the need for any additional trauma-informed training?
   a. If yes, what specifically?

6. What, if any, trauma-informed practices have you implemented?
   a. How have you progressed in implementing these practices?
   b. What changes were easier? Required more support?
   c. How have these practices influenced your students?
   d. Are there practices you are intending to implement but have not at this point?

7. What influence, if any, has your trauma-informed professional development had on your classroom practices?
   a. On your attitudes and beliefs about trauma?
   b. How would you compare your understanding, practices, attitudes, and beliefs about trauma to where you were prior to receiving training?

8. Is there anything else you would like to share about the trainings you received, your practices, attitudes, and/or beliefs?
Appendix C

Administrator Interview Protocol

Thank you for agreeing to participate in this interview today. The purpose of this interview is to learn more about your experiences with trauma-informed professional development and the implementation of trauma-informed practices. I have prepared questions that I will pose to stimulate discussion. I may ask follow-up questions as needed. Overall, the interview should last approximately 40 to 60 minutes. As a reminder to the information in the Informed Consent form that you signed, I wanted to remind you that the responses shared today will remain confidential. I will not use your name and will avoid reporting information that could be linked back to you personally. This interview will be audio-recorded. The recording and notes related to this interview will be stored securely and then destroyed 3 years after this study has been completed. Are there any questions before we begin?

Interview Questions:

Last year you received professional development on trauma and trauma-informed practices in schools…

1. Please tell me about the trauma-informed training you received last year
   a. What was the focus of the training?
   b. What about the professional development did you find helpful?
   c. Tell me about any informal interaction you had with other staff about the topics of trauma and trauma-informed practices.

2. What got you interested in this professional development opportunity?

3. Tell me about any trainings you had received prior to last year’s training.
4. Describe any additional training and/or support you and/or your teachers have received since the initial training.
   a. How has the addition support been helpful?

5. Do you feel the need for any additional trauma-informed training for you or your teachers?
   a. If yes, what specifically?

6. What, if any, trauma-informed practices have been implemented at the building and/or classroom level?
   a. How have you progressed in implementing these practices?
   b. What changes were easier? Required more support?
   c. How have these practices influenced your students?
   d. Are there practices you are intending to implement but have not at this point?

7. What influence, if any, has your trauma-informed professional development had on your teachers’ classroom practices?
   a. On their attitudes and beliefs about trauma?
   b. How would you compare you and/or your teachers’ understanding, practices, attitudes, and beliefs about trauma to where you were prior to receiving training?

8. Is there anything else you would like to share about the trainings received, practices, attitudes, and/or beliefs of you and/or your teachers?
Appendix D
District Support Email

From: _______________
Sent: Friday, September 27, 2019 7:51 AM
To: Daly, Mitchell
Subject: Re: Research Support Request

Mitch

We are aware of your research study and this email is to verify that you have the preliminary permission of the _______________ to collect data from some of our K-5 teachers and administrators. We understand that this will require you to meet with teachers and administrators for individual interviews. ________________ is contingent upon your study being approved by the Institutional Review Board at St. John Fisher College.

Let me know if you need anything else

_____________
## Appendix E
Alignment of Research Questions and Theoretical Domains Framework to Interview Questions

<table>
<thead>
<tr>
<th>Protocol Questions</th>
<th>Research Question</th>
<th>Theoretical Frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Please tell me about the trauma-informed training you received last year</td>
<td>1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?</td>
<td>Guskey’s Model</td>
</tr>
<tr>
<td>a. What was the focus of the training?</td>
<td></td>
<td>SAMHSA’s Key Assumptions</td>
</tr>
<tr>
<td>b. What about the professional development did you find helpful?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Tell me about any informal interaction you had with other staff about the topics of trauma and trauma-informed practices.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. What got you interested in this professional development opportunity?</td>
<td>2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?</td>
<td>Guskey’s Model</td>
</tr>
<tr>
<td>3. Tell me about any trainings you had received prior to last year’s training.</td>
<td>1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?</td>
<td>Guskey’s Model</td>
</tr>
<tr>
<td></td>
<td>2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?</td>
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<tr>
<td>Protocol Questions</td>
<td>Research Question</td>
<td>Theoretical Frameworks</td>
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| 4. Describe any additional training and/or support you have received since the initial training.  
   a. How has the additional support been helpful? | 1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms?  
   2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices? | Guskey’s Model         |
| 5. Do you feel the need for any additional trauma-informed training?  
   a. If yes, what specifically? | 1. What types of professional development, training, and support do teachers find most helpful when attempting to implement trauma-informed practices in their classrooms? | Guskey’s Model         |
| 6. What, if any, trauma-informed practices have you implemented?  
   a. How have you progressed in implementing these practices?  
   b. What changes were easier? Required more support?  
   c. How have these practices influenced your students?  
   d. Are there practices you are intending to implement but have not at this point? | 3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization? | Guskey’s Model, SAMHSA’s key assumptions |
| 7. What influence, if any, has your trauma-informed professional development had on your classroom practices?  
   a. On your attitudes and beliefs about trauma?  
   b. How would you compare your understanding, practices, attitudes, and beliefs about trauma to where you were prior to receiving training? | 2. What influence, if any, do teachers perceive professional development to have on changes in their practices, attitudes, and beliefs about trauma and implementing trauma-informed practices?  
   3. How do teachers’ perceptions of changes in their practice, attitudes, and beliefs align with the four key assumptions of realization, recognition, response, and avoidance of re-traumatization? | Guskey’s Model, SAMHSA’s Key Assumptions |
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<td>8. Is there anything else you would like to share about the trainings you received, your practices, attitudes, and/or beliefs?</td>
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