

Lindenwood University

Digital Commons@Lindenwood University

Dissertations

Theses & Dissertations

Spring 3-17-2020

Trauma-Informed Practices in Schools

Kendra Scott

Lindenwood University

Follow this and additional works at: <https://digitalcommons.lindenwood.edu/dissertations>



Part of the [Educational Methods Commons](#)

Recommended Citation

Scott, Kendra, "Trauma-Informed Practices in Schools" (2020). *Dissertations*. 45.
<https://digitalcommons.lindenwood.edu/dissertations/45>

This Dissertation is brought to you for free and open access by the Theses & Dissertations at Digital Commons@Lindenwood University. It has been accepted for inclusion in Dissertations by an authorized administrator of Digital Commons@Lindenwood University. For more information, please contact phuffman@lindenwood.edu.

Trauma-Informed Practices in Schools

by

Kendra Scott

March 17, 2020

A Dissertation submitted to the Education Faculty of Lindenwood University in

partial fulfillment of the requirements for the degree of

Doctor of Education

School of Education

Trauma-Informed Practices in Schools

by

Kendra Scott

This Dissertation has been approved as partial fulfillment
of the requirements for the degree of
Doctor of Education
Lindenwood University, School of Education

Shelly Fransen
Dr. Shelly Fransen, Dissertation Chair

March 17, 2020
Date

Michelle Brenner
Dr. Michelle Brenner, Committee Member

March 17, 2020
Date

Sherry DeVore
Dr. Sherry DeVore, Committee Member

March 17, 2020
Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work at Lindenwood University and that I have not submitted it for any other college or university course or degree.

Full Legal Name: Kendra Scott

Signature:  Date: 

Acknowledgments

First, I would like to thank Dr. Shelly Fransen; she has been a constant provider of support and encouragement during this entire study. I want to thank my committee members, Dr. Sherry DeVore and Dr. Michelle Brenner, for their guidance. Their support and encouragement have been unquestionably excellent. Also, I would like to thank each focus group participant and the school employees who sent secondary data to support the study. Thank you to my husband, in-laws, and family who helped me every step of the way with prayers and child care during the long hours put toward this dissertation. Lastly, my appreciation goes out to my children, who cheered me on and sacrificed time away so I was able to complete this study.

Abstract

Trauma impacts brain development, language, social and emotional regulation, and school performance (Stateman-Weil, 2015). Educators can positively influence student achievement when the impacts of trauma are understood (Terrasi & de Galarce, 2017). This study involved the analysis of secondary data and teacher perceptions to determine the impact of trauma-informed programming on student achievement in the areas of discipline, absenteeism, and special education referrals. Data were collected through a mixed-methods study. The quantitative portion of the study involved an analysis of secondary data in the areas of in-school suspension incidents, out-of-school suspension incidents, average daily attendance percentages, and the number of special education referrals. The qualitative portion of the study involved an analysis of the perceptions of trauma-informed team members. When comparing the three years before implementation of trauma-informed programming and the two years after implementation, the secondary data revealed there was not a significant difference in the areas of in-school suspension incidents, out-of-school suspension incidents, average daily attendance percentages, and the number of special education referrals. The qualitative data revealed seven themes to support trauma-informed programming: trauma training, relationship-building, staff self-care, school-wide behavior systems, self-regulation, mind-shift, and providing safe learning environments for all students. Trauma-informed programming is feasible and sustainable when all stakeholders allow a paradigm shift supporting trauma-informed practices, policies, and school climate (MODESE, 2019).

Table of Contents

Acknowledgments	ii
Abstract	iii
List of Tables	vii
List of Figures	viii
Chapter One: Introduction	1
Background of the Study	1
Conceptual Framework	5
Statement of the Problem	6
Purpose of the Study	7
Research Questions and Hypotheses	8
Significance of the Study	11
Definition of Key Terms	11
Delimitations, Limitations, and Assumptions	12
Summary	13
Chapter Two: Review of Literature	15
Conceptual Framework	16
Multi-Tiered System	19
Signs and Symptoms of Trauma	21
Impacts of Trauma	22
Executive Functioning	23
Language Delay Due to Trauma	25
Behavior Due to Trauma	26

Absenteeism	26
Trauma Interventions	27
Social-Emotional Learning	29
Whole-School Behavior Supports.....	30
Teacher Well-Being	31
Trauma-Informed Policies	34
Impacts of Trauma-Informed Programming	38
Summary	39
Chapter Three: Methodology	40
Problem and Purpose Overview.....	40
Research Questions and Hypotheses	40
Research Design	43
Population and Sample	44
Instrumentation	45
Validity	46
Reliability.....	47
Data Collection	47
Data Analysis	48
Ethical Considerations	50
Summary	50
Chapter Four: Analysis of Data	52
Quantitative Data	52
Qualitative Data	64

Summary	76
Chapter Five: Summary and Conclusions	78
Findings	78
Conclusions	82
Implications for Practice	94
Recommendations for Future Research	96
Summary	97
References	101
Appendix A	112
Appendix B	114
Appendix C	115
Appendix D	117
Appendix E	118
Appendix F	119
Appendix G	120
Vita	122

List of Tables

Table 1. <i>Sample Northwest Trauma-Informed Consortium School Districts</i>	44
Table 2. <i>In-School Suspension Incidents</i>	55
Table 3. <i>Out-of-School Suspension Incidents</i>	57
Table 4. <i>Absenteeism/Average Daily Attendance Percentages</i>	61
Table 5. <i>Special Education Referrals</i>	63
Table 6. <i>Focus Group Participants by District</i>	64

List of Figures

<i>Figure 1.</i> Medial view of select brain regions relevant to executive functioning	25
<i>Figure 2.</i> Secondary data for in-school suspension incidents	54
<i>Figure 3.</i> Secondary data for out-of-school suspension incidents	56
<i>Figure 4.</i> Secondary data for absenteeism/average daily attendance at School 2	58
<i>Figure 5.</i> Secondary data for absenteeism/average daily attendance at School 3	59
<i>Figure 6.</i> Secondary data for absenteeism/average daily attendance at School 4	60
<i>Figure 7.</i> Secondary data for special education referrals	62

Chapter One: Introduction

Stateman-Weil (2015) researched the impact of trauma on brain development, language development, social and emotional regulation, and school performance and concluded, “What matters most in helping young children process and cope with physical, emotional, and psychological trauma is having important adults whom children trust and rely on to offer them unconditional love, support, and encouragement” (para. 26). Craig (2015) determined, “Trauma-sensitive schools emphasize safety, empowerment, and collaborative partnerships between children and adults” (p. 5). Furthermore, Overstreet and Chafouleas (2016) stated, “Trauma-informed schools respond to the needs of trauma-exposed students by integrating effective practices, programs, and procedures into all aspects of the organization and culture” (p. 2). According to Terrasi and de Galarce (2017), when trauma and its impacts are understood, educators are able to create more proactive learning environments.

In this chapter, the background of the study and the conceptual framework are presented. The purpose of the study, the research questions and hypotheses, and the significance of the study are introduced. Also included in this chapter are the definition of key terms, delimitations, limitations, and assumptions of the study.

Background of the Study

Plumb, Bush, and Kersevich (2016) categorized trauma as acute, chronic, or complex. Acute trauma is defined as a “single event,” while chronic trauma is characterized as a “repeated event” (Plumb et al., 2016, p. 38). Children who live in chronic trauma are at risk for “academic struggles, absenteeism, social challenges, and various kinds of anxiety” (Terrasi & de Galarce, 2017, p. 36). According to Terrasi and

de Galarce (2017), complex trauma is trauma repeated over time. Complex trauma can include prolonged physical abuse, sexual abuse, emotional abuse, neglect, witnessing of domestic violence, poverty, and/or homelessness (Plumb et al., 2016; Terrasi & de Galarce, 2017).

Blodgett and Lanigan (2018) explained adverse childhood experiences as “prolonged exposure of children to potentially traumatic events that may have an immediate and lifelong impact. Adverse childhood experiences can occur across the child, family, or community ecologies” (p. 137). Students with a high number of exposures are at increased risk for lower attendance rates, behavioral difficulty, and falling behind in core academic areas (Blodgett & Lanigan, 2018; Porche, Costello, & Rosen-Reynoso, 2016).

The academic outcomes of students with a higher number of adverse childhood experiences are at greater risk (Blodgett & Lanigan, 2018; Porche et al., 2016).

According to Blodgett and Lanigan (2018), “[As] adverse childhood experiences exposure increased, learning and behavior problems in schools also increased. Single and co-occurring adversities have been shown to negatively affect reading ability” (p. 138). Furthermore, adverse childhood experiences are common in elementary public school students; 59% of students have one or more exposures (Blodgett & Lanigan, 2018, p. 137).

Students living in complex trauma have difficulty trusting their environments (Craig, 2015; Terrasi & de Galarce, 2017). According to Terrasi and de Galarce (2017), students who have experienced traumatic events “may be unable to trust their environment and the people in it, and they often have difficulty forming relationships,

interpreting verbal and nonverbal cues, and understanding other people's perspectives" (p. 36). Students who feel unsafe in their school environments stay in a hypervigilant state and are unable to learn (Diamanduros, Tysinger, & Tysinger, 2018; National Child Traumatic Stress Network Schools Committee [NCTSNSC], 2008; Terrasi & de Galarce, 2017).

Plumb et al. (2016) explained hyperarousal can become normalized, and learning is difficult for the child because the brain is "stuck in survival mode, and the child cannot discriminate between safe and unsafe environments" (p. 39). Students who live in a state of hyperarousal experience negative impacts on the brain (NCTSNSC, 2008; Terrasi & de Galarce, 2017). Hyperarousal can lead to an enlarged amygdala (Morton & Berardi, 2018; Terrasi & de Galarce, 2017).

The amygdala is "located in the limbic area, which is located directly above the brain stem. The amygdala is the body's first responder to danger, immediately triggering a sense of fear, which in turn results in a heightened level of arousal" (Craig, 2015, p. 22). When the amygdala is enlarged, the cerebellar vermis overreacts (Morton & Berardi, 2018; Terrasi & de Galarce, 2017).

The cerebellar vermis is the portion of the brain that receives information from both the body and the brain about the senses of hearing, touch, vision, balance, and proprioception (Carone, 2019). According to Carone (2019), "Proprioception is the ability to sense or perceive the spatial position and movements of your body" (para. 3). This overreaction by the cerebellar vermis causes emotional responses to be magnified and attention to decline (Morton & Berardi, 2018; Terrasi & de Galarce, 2017).

Trauma can adversely affect the brain in the area of “executive functions, weakening children’s concentration, language processing and sequencing of information, decision making, and memory” (Terrasi & de Galarce, 2017, p. 37). According to Op den Kelder, Ensink, Overbeek, Maric, and Lindauer (2017), executive functioning is a “range of mental skills that allow individuals to pay attention, manage their feelings, think in flexible, creative ways, control their impulses, plan and start activities, monitor their performance, and remember and manipulate key information” (p. 1688). Furthermore, Op den Kelder et al. (2017) specified, “Our results indicate quite clearly that children and adolescents exposed to complex trauma experience more deficits in executive functioning than youth exposed to single traumatic events” (p. 1693). Poor executive functioning can disrupt students’ daily living due to difficulties with meeting homework deadlines, impulsivity, avoidance of tasks, overreacting in situations, and being unable to see how their behavior impacts them personally (ADHD Weekly, 2019; Op den Kelder et al., 2017).

Children who have survived traumatic experiences need healthy interactions with loving adults in the school setting (Stateman-Weil, 2015; Terrasi & de Galarce, 2017). To provide healthy student interactions, teachers must understand trauma and be aware of the personal effects of trauma on school staff (Craig, 2015; RB-Banks & Meyer, 2017). Craig (2015) determined once educators understand trauma and how it works biologically in the brain and also in adolescent development, classroom strategies in the areas of teaching and classroom discipline can be implemented to be both empathetic and self-protective.

Teachers are trained to understand how to incorporate trauma-informed practices; however, with a large number of students suffering from trauma, an increase in compassion fatigue among school staff may develop (Elliott, Elliott, & Spears, 2018).

According to Figley (2017):

Compassion Fatigue is a state experienced by those helping people or animals in distress; it is an extreme state of tension and preoccupation with the suffering of those being helped to the degree that it can create a secondary traumatic stress for the helper. (para. 1)

Compassion fatigue can impact teachers by causing poor performance and eventually teacher burnout (Elliott et al., 2018; Guidetti, Viotti, Badagliacca, Colombo, & Converso, 2019). According to the Missouri Department of Elementary and Secondary Education (MODESE) (2019), the Missouri Model for Trauma-Informed Schools addresses the need for staff well-being to better support students in the school environment and combat compassion fatigue.

Conceptual Framework

The Missouri Model: A Developmental Framework for Trauma-Informed Approaches was the framework that guided this study (MODESE, 2018). The Missouri Model includes four stages: trauma-aware, trauma-sensitive, trauma-responsive, and trauma-informed (MODESE, 2018; Missouri Department of Mental Health, 2015). The Missouri Model includes a guiding framework, a definition for each trauma-informed stage of implementation, an explanation for understanding the impact of trauma, guidance on discipline and accountability, and a definition of the principles of trauma-informed practices (MODESE, 2019). The Substance Abuse and Mental Health Services

Administration's framework includes four key assumptions and four Rs: realization, recognize, respond, and resist re-traumatization (Abuse, 2014). The Missouri Model for Trauma-Informed Schools used The Substance Abuse and Mental Health Services Administration's framework to describe trauma (MODESE, 2019).

Abuse (2014) explained, "[A] trauma-informed system realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms; responds by fully integrating knowledge about trauma into policies, procedures, and practices; and seeks to actively resist re-traumatization" (p. 9). Blitz, Anderson, and Saastamoinen (2016) explained trauma-informed school staff understand trauma, recognize the signs and symptoms of trauma in students and staff, respond with schoolwide supports, and reduce re-traumatization with practices promoting healing instead of punishment. This current study was developed based on the Missouri Model for Trauma-Informed Schools' conceptual framework.

Statement of the Problem

The impact of traumatic experiences on both the adverse childhood experience score and on individual student performance has been documented in research studies (Blodgett & Lanigan, 2018; Ortiz & Sibinga, 2017). Blodgett and Lanigan (2018) defined adverse childhood experiences as "prolonged exposure of children to potentially traumatic events that may have an immediate and lifelong impact. Stevens (2012) determined:

Several frameworks exist for trauma-informed schools, [but] empirical studies have yet to identify factors that lead to the adoption, successful implementation, and sustainment of trauma-informed approaches. Furthermore, little is known

about whether the educational workforce finds trauma-informed approaches acceptable and feasible. (p. 4)

Blodgett and Lanigan (2018) and Overstreet and Chafouleas (2016) referred to a lack of research with regard to the trauma-informed approach. Furthermore, researchers have analyzed the impact of traumatic experiences on individual students' brain development, academic performance, and social-emotional regulation; however, there is a lack of research on the feasibility of trauma-informed approaches implemented in the school setting (Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016; Stateman-Weil, 2015).

The problem addressed in this study was the lack of research regarding the impact trauma-informed practices have in school settings. (Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016; Stateman-Weil, 2015; Stevens, 2012). This study was designed to address two specific gaps in research. First, a quantitative approach was utilized to obtain data on the impact trauma-informed programs have on students. Second, a qualitative approach was used to gain educators' perspectives regarding the training, implementation, and effectiveness of trauma-informed programs.

Purpose of the Study

The purpose of this study was to determine if trauma-informed programs impact student behavior and academic performance. A second purpose was to gather the perceptions of educators regarding the impact of trauma-informed programs.

Researchers have linked poor attendance rates, behavioral difficulty, and academic deficits with trauma (Blodgett & Lanigan, 2018; Craig, 2015; NCTSN, 2008). Craig (2015) suggested the shift from zero tolerance to using a trauma-informed approach may

increase student success. There is little to no research regarding the impact trauma-informed programs have on students or the perceptions teachers have regarding the impact of trauma-informed programs (Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016; Stevens, 2012).

Research questions and hypotheses. The following research questions and hypotheses guided the study:

1. What difference, if any, exists in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation?

H₁₀: There is no difference in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation.

H_{1a}: There is a difference in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation.

2. What difference, if any, exists in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium

three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an out-of-school suspension two years after the implementation?

H2₀: There is no difference in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an out-of-school suspension two years after the implementation.

H2_a: There is a difference in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in out-of-school suspension two years after the implementation.

3. What difference, if any, exists in the number of student absences at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation?

H3₀: There is no difference in the number of student absences at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation.

H3_a: There is a difference in the number of student absences at the four schools in one trauma-informed consortium three years preceding the implementation of

trauma-informed programming and the number of student absences two years after the implementation.

4. What difference, if any, exists in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation?

H₀: There is no difference in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation.

H_a: There is a difference in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation.

5. What are the perceptions of trauma-informed teams at three schools in one trauma-informed consortium with regard to the following aspects of trauma-informed programs?

- a. Discipline policies
- b. Attendance rates
- c. Special education referrals
- d. Academic performance
- e. Classroom management
- f. Recognizing signs and symptoms

Significance of the Study

According to Adame (2016), school staff need specific training on signs and symptoms of trauma, classroom management, and effective supports that could be used to educate traumatized children. Adame (2016) recommended future researchers study trauma-informed care implemented in the school setting to provide support for educators. Blodgett and Lanigan (2018) and Stevens (2012) determined an empirical foundation has not been established for a trauma-informed approach in school settings.

This study was conducted to address the existing gap in research regarding the lack of an empirical foundation for trauma programs and the feasibility of different trauma-informed approaches in the education system (Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016; Stevens, 2012). The findings from this study may provide evidentiary documentation from the examination of secondary data, which included special education referrals, discipline referrals, and attendance. Moreover, as suggested by Stevens (2012), the perceptions of educators on the implementation and impact of trauma-informed programs may provide valuable information for school districts considering a trauma-informed approach.

Definition of Key Terms

For the purpose of this study, the following terms are defined:

Adverse childhood experiences. Blodgett and Lanigan (2018) defined adverse childhood experiences as “prolonged exposure of children to potentially traumatic events that may have immediate and lifelong impact. Adverse childhood experiences can occur across the child, family, or community ecologies” (p. 137).

Mindfulness. Ortiz and Sibinga (2017) defined mindfulness as “an evidence-based intervention that supports these important responses to ACEs [adverse childhood experiences], fundamentally enhancing self-regulation and resilience in everyday life and in the face of stress and trauma” (p. 2).

Delimitations, Limitations, and Assumptions

The scope of the study was bounded by the following delimitations:

Time frame. The study was conducted during the fall of 2019.

Location of the study. The location of the study included three Northwest Trauma-Informed Consortium school districts in Missouri.

Sample. The population for this study included Northwest Trauma-Informed Consortium school districts utilizing a trauma-informed program district-wide. The focus group participants included trauma team members from the same Missouri school districts. The trauma team included administrators, counselors, teachers, and support staff.

Criteria. The criteria for inclusion in the study were school districts from the Northwest Trauma-Informed Consortium that had implemented trauma-informed programs for at least two years, had a trauma school team, and had attended trauma training.

The following limitations were identified in this study:

Sample demographics. The sample was a limitation because both quantitative and qualitative data were only gathered from three of the six schools included in the Northwest Trauma-Informed Consortium.

Instrument. The focus group discussion questions were considered a limitation, because the questions were developed by the primary investigator of this study.

The following assumptions were accepted:

1. The responses of the participants were offered honestly and willingly.
2. The sample was representative of the general population of educators who have teaching certificates from the MODESE.

Summary

Overstreet and Chafouleas (2016) stated, “As school personnel increase their understanding of trauma exposure and utilize universal screening to identify the needs of trauma-exposed students, the availability of effective prevention and intervention programs to address the identified need is critically important” (p. 3). Furthermore, Stateman-Weil (2015) realized the importance of having trustworthy adults in children’s lives. This study was conducted to provide relevant information in the area of trauma-informed schools, thereby filling a current gap in the research.

Presented in Chapter One was the background of the study. The Missouri Model for Trauma-Informed Schools was selected as the conceptual framework and was introduced in Chapter One. Also introduced were the statement of the problem, the purpose of the study, and the research questions. Finally, the significance of the study, definitions of key terms, and the delimitations, limitations, and assumptions were addressed.

A review of literature is provided in Chapter Two. The main topics include the multi-tiered system of support, signs and symptoms of trauma, impacts of trauma, trauma intervention, social-emotional learning, whole-school behavior supports, and teacher

well-being. The chapter concludes with an investigation of trauma-informed policies and the impacts of trauma-informed programming.

Chapter Two: Review of Literature

Chapter Two includes a review of research on the signs and symptoms of trauma; the impacts of trauma on academic performance, special education referrals, absenteeism, and suspension; and federal and state trauma policies. The literature is organized as a discussion of the impact of trauma on student performance in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. Included in the literature review is the importance of policy change to improve student success in the public school setting.

Information about the need for trauma-informed programs in school to provide support for students and staff is limited in the research but important for student success (Adame, 2016; Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016). Craig (2016) emphasized, “The high prevalence of unresolved trauma among the school-age population is a public health epidemic that threatens children’s academic and social master” (p. 29). Trauma-informed practices provide strategies for students living with trauma (Craig, 2016; RB-Banks & Meyer, 2017). Moreover, schools should be advocates for using trauma-informed strategies (RB-Banks & Meyer, 2017).

Trauma-informed programming is an initiative to provide safe and supportive educational environments for all students (Chafouleas, Johnson, Overstreet, & Santos, 2016). The Every Student Succeeds Act (2015) provided school districts with guidance to provide trauma-informed programming to support safe learning environments. The vision of the Missouri Model for Trauma-Informed Schools was to create safe, supportive schools by changing ways of thinking, promoting resilient teachers, and generating equitable learning outcomes (MODESE, 2019). According to Plumb et al. (2016), a large

majority of children attend the public education system for 13 years, making school a logical place to provide trauma-sensitive practices for children during their developmental years.

Conceptual Framework

The Missouri Model for Trauma-Informed Schools, developed by the MODESE (2019) and the National Child Traumatic Stress Network Schools Committee (2017), guided this study. The purpose of the Missouri Model is to provide a common language and framework to develop an awareness of trauma in different organizations (MODESE, 2018). The MODESE (2018) defined trauma-aware schools as schools aware of trauma and the impact it has on student academic and behavioral outcomes. The four stages of the model include school districts becoming trauma-aware, trauma-sensitive, trauma-responsive, and trauma-informed (MODESE, 2018). During the final stage of the process, policies and procedures are reviewed, school staff well-being is addressed, and partnerships with key community stakeholders are forged (MODESE, 2019).

The Missouri Model for Trauma-Informed Schools recommended schools provide universal trauma training for all staff members (Dorado, Martinez, McArthur, & Leibovitz, 2016; MODESE, 2019). The purpose of the training is to introduce the basic components of trauma (Dorado et al., 2016; MODESE, 2019). These components include the history of trauma, signs and symptoms of trauma, the impact of trauma, and how to promote resilience to those affected by trauma (Dorado et al., 2016; MODESE, 2019).

Dorado et al. (2016) explained a multi-tiered trauma-informed framework includes creating safe learning environments (Tier 1), developing a school-wide trauma-

informed lens (Tier 2), and supporting students with intensive trauma interventions (Tier 3). Furthermore, creating a diverse trauma team is essential (Craig, 2015; MODESE, 2019). School leadership needs to be involved in the process (Craig, 2015; MODESE, 2019).

Plumb et al. (2016) suggested the first core component of a school district model was to understand and train staff on the impact of trauma. Staff members need to understand how trauma impacts brain development (Plumb et al., 2016). As recommended by the MODESE (2019) trauma-awareness is the first stage of becoming a trauma-informed school. During this stage, introductory training is provided and commonality in staff vocabulary is encouraged (MODESE (2019)).

Becoming trauma-sensitive is the second stage in the process of becoming a trauma-informed school (MODESE, 2019) Trauma-sensitive staff are knowledgeable about trauma; in addition, staff begin to consider adopting the principles of trauma-informed care and then begin the paradigm shift (MODESE, 2018). The creation of trauma teams can begin after schools become trauma-sensitive, which means staff members have participated in professional development on trauma-informed care and community members have been made aware and asked to participate in the process (MODESE, 2019). As suggested by the MODESE (2019), a trauma team should include a “principal, instructional coordinator, guidance counselor, classroom teacher, support staff, student representative, school nurse, and community partner representative” (p. 7). Trauma team members examine school policies to determine if practices and policies need to be changed based on the trauma lens (Craig, 2015; MODESE, 2019; Phifer & Hull, 2016).

The third stage in the model is trauma-responsive (MODESE, 2019). At this stage, school administrators begin to change district practices and policies and implement trauma-informed approaches with other multi-tiered interventions, while staff members demonstrate trauma-informed changes in the school setting (MODESE, 2019). School district staff who are trauma-responsive begin to change the culture and re-think routines and strategies to support students (Craig, 2015; Dorado et al., 2016; MODESE, 2018).

As recommended by the MODESE (2019) in the Missouri Model for Trauma-Informed Schools, trauma-informed is the final stage. According to Phifer and Hull (2016), trauma-informed approaches require more than just adjusted discipline policies and professional development on the signs and symptoms of trauma. Phifer and Hull (2016) determined, “Adopting a trauma-informed approach means creating shifts of thought at the organization level” (p. 202). Furthermore, trauma-informed school staff accept and practice the trauma model and partner with other organizations (MODESE, 2018). Dorado et al. (2016) designated the following trauma-informed guiding principles: “understanding trauma and stress, establishing safety and predictability, foster compassionate and dependable relationships, promoting resilience and social-emotional learning, practice cultural humility and responsiveness, and facilitate empowerment and collaboration” (p. 167). The challenge comes when behavior ideologies differ, creating a significant barrier to adopting trauma-informed approaches (Walkley & Cox, 2013).

School staff begin to realize the fundamental question of what is *wrong* with a student has changed to what has *happened* to a student (MODESE, 2019). According to the MODESE (2019), “During the trauma-informed journey, schools will address all of their practices and policies, introduce new supportive practices and policies, and work to

measure the efficacy of their work. No two schools' journey will look the same" (p. 6). Trauma-informed practices start with changes in knowledge, practice, culture, policies, and systems (MODESE, 2018; NCTSN, 2017).

Multi-Tiered System of Support

A whole-school multi-tiered system of support provides intervention to all students in the school setting (Abuse, 2014; Phifer & Hull, 2016). The University of California-San Francisco's Health Environment and Response to Trauma in Schools Program launched a three-tiered system to support the whole school (Dorado et al., 2016). Dorado et al. (2016) explained the multi-tiered system:

Tier 1 indicating the bottom of the triangle comprising universal supports for all students, Tier 2 indicating the middle of the triangle comprised of selected interventions for students for whom the universal supports are not sufficient and Tier 3 indicating targeted and intensive supports for students for whom both Tier 1 and Tier 2 supports are not sufficient. (p. 165)

The multi-tiered system supported by the NCTSN (2017) was developed to implement schoolwide trauma-informed approaches. The NCTSN (2017) Tier 1 includes the creation of a safe and supportive environment for all students, Tier 2 promotes early identification of students and staff at-risk for trauma exposure, and Tier 3 provides intensive intervention to support students.

Historically, students exhibiting academic and behavior difficulties were referred and placed in special education to access intensive support; however, trauma-informed efforts can provide preventative intervention (Chafouleas et al., 2016). According to Dorado et al. (2016) and the NCTSN (2017), goals are focused on increasing student

success in school and identifying and improving classroom practices of trauma-informed strategies. Goals are also focused on reducing suspensions and expulsions and addressing secondary trauma (Dorado et al., 2016; NCTSN, 2017).

Previously discussed were the Missouri Model and the four steps involved in becoming a trauma-informed school. Cole, Eisner, Gregory, and Ristuccia (2013) specified:

A trauma-sensitive school is one in which all students feel safe, welcomed, and supported and where addressing trauma's impact on learning on a school-wide basis is at the center of its educational mission. An ongoing, inquiry-based process allows for the necessary teamwork, coordination, creativity, and sharing of responsibility for all students. (p. 11)

Cole et al.'s (2013) definition is aligned closely with the Missouri Model, which includes the trauma-responsive and trauma-informed stages. The trauma-responsive and trauma-informed stages involve examination of schoolwide policies and practices through a trauma lens including "school discipline, classroom management, employee well-being, parental involvement, and curriculum and instruction" (MODESE, 2018, p. 7).

The Missouri Model includes a framework to address the five key principles to support trauma-informed schools (MODESE, 2018). The principles include ensuring safety, trustworthiness with positive relationships, choice, collaboration, and empowerment for students to find healing and self-efficacy (MODESE, 2019). The principles of trauma-informed care policy vary, but "the basic principles include the following: safety, trustworthiness and transparency, collaboration and peer support, empowerment, choice, and the intersectionality of identity characteristics" (Bowen &

Murshid, 2016, p. 224). The Substance Abuse and Mental Health Services Administration adheres to six trauma-informed principles including safety; trustworthiness; peer support; collaboration; choice; and cultural, historical, and gender issues (Abuse, 2014).

Signs and Symptoms of Trauma

Trauma is categorized as acute, chronic, or complex (Plumb et al., 2016). According to Walkley and Cox (2013), “Physical abuse, domestic and community violence, motor vehicle accidents, chronic painful medical procedures, and natural disasters are all potentially traumatic experiences” (p. 123). Children living in chronic trauma or who have experienced multiple traumas can have difficulty with daily functioning in the classroom (Morton & Berardi, 2018; NCTSN, 2008). The NCTSN (2008) reported the following behaviors might be observed in elementary school students who have experienced trauma: “anxiety, the worry of violence, change of behavior, change in school performance, hyperarousal, avoidance behaviors, emotional numbing, and worry about the recurrence of violence” (p. 10). Signs and symptoms observed in adolescents might include an “increase in activity level, re-experiencing the trauma, absenteeism, change in activity level, and emotional numbing” (NCTSN, 2008, p. 11). Porche et al. (2016) explained student behaviors due to trauma are many times mistaken for avoidance and refusal to complete academics.

According to Phifer and Hull (2016), acting out behaviors lead to discipline that can re-traumatize students. Craig (2015) explained:

School counselors and administrators sometimes blame children for their reaction to terrible things that happen to them. This is particularly true when children

externalize their reactions to trauma in behaviors that disrupt the school day or derail classroom instruction. Attempts at containing these outbursts frequently result in re-traumatizing consequences, such as time-out, which increase the student's negative arousal. (p. 13)

When school administrators discipline students in a punitive way, the discipline can be harmful (Craig, 2015; NCTSN, 2017; Plumb et al., 2016).

The brain development of children exposed to chronic trauma is susceptible to impairment due to stress response hormones (Morton & Berardi, 2018; Walkley & Cox, 2013). This impairment causes the brain to remain in survival mode, and the child becomes hypervigilant (Plumb et al., 2016; Stateman-Weil, 2015; Terrasi & de Galarce, 2017). The signs of a hypervigilant brain include either extreme withdrawal or acting-out behavior (Terrasi & de Galarce, 2017). Children who live in constant fear overuse the amygdala, which causes the brain to overdevelop (Stateman-Weil, 2015).

The central nervous system controls the fight or flight response (Morton & Berardi, 2018; Plumb et al., 2016). According to Walkley and Cox (2013), "These easily overstimulated children have difficulty with emotional self-regulation and struggle to put feeling into words. Anger, often accompanied by physical aggression, may be their most readily expressed emotion" (p. 123). Phifer and Hull (2016) reported acting out and defiant behavior are often the first symptoms of trauma and directly impact academics.

Impacts of Trauma

The impacts of trauma manifest differently in each student and require different interventions (Phifer & Hull, 2016; Walkley & Cox, 2013). According to Morton and Berardi (2018), "A growing movement toward creating trauma-informed schools has

steadily gained momentum” (p. 489). Educators must re-evaluate the nature and impact of trauma on students to identify which practices of response to use and how the community can become involved in the endeavor (Missouri Department of Mental Health, 2015; Morton & Berardi, 2018).

Adverse childhood experiences have an impact not only on education but on overall mental health (Murphey & Sacks, 2019; Ortiz & Sibinga, 2017; Porche et al., 2016). Trauma at the early stages impacts language development (Craig, 2015). According to the NCTSN (2008), “Trauma can impact school performance, impair learning, traumatized children may experience physical and emotional distress, and you can help children who have been traumatized” (p. 4). Children who experience trauma are more likely to score low on standardized tests, drop out of school, engage in negative behaviors, and be referred to special education (Craig, 2015).

Adverse childhood experiences can have a long-lasting impact both mentally and physically (Murphey & Sacks, 2019). Murphey and Sacks (2019) explained, “One of the most sobering findings regarding childhood adversities is preliminary evidence that their negative effects can be transmitted from one generation to the next” (p. 9). According to Blodgett and Lanigan (2018), higher numbers of adverse childhood experiences increase the risk of retention and poor academic achievement.

Executive functioning. Childhood trauma impacts executive functioning, emotional regulation, and dissociation caused by structural changes during brain development (Cross, Fani, Powers, & Bradley, 2017). Executive functioning skills are important because these skills help children regulate emotions, increase cognitive flexibility, and hold onto new information learned at school (Barr, 2018). Executive

functioning is responsible for inhibitory control, working memory, and cognitive flexibility (Craig, 2015). Inhibitory control involves controlling delayed gratification while working memory stores short-term memory and processes the information into long-term memory (Craig, 2015).

Amygdala and hippocampus (see Figure 1) development are impacted when children live in constant fear (Cross et al., 2017; Stateman-Weil, 2015). Dutta (2019) stated, “[The] hippocampus is a brain structure embedded deep in the temporal lobe of each cerebral cortex. It is an important part of the limbic system, a cortical region that regulates motivation, emotion, learning, and memory” (para 1). According to Barr (2018), “Chronic stress in early childhood not only results in an overly active, orbital frontal cortex response system, it can also result in delayed development of the hippocampus and reduce nerve connections between the hippocampus and the prefrontal cortex” (p. 42). The prefrontal cortex is where memories are stored, and if the hippocampus works effectively, the prefrontal cortex is better able to store learned information (Barr, 2018).

According to Stateman-Weil (2015), an overdeveloped amygdala can “result in children being highly impulsive and reactive and unable to complete higher-order thinking tasks” (p. 74). Furthermore, the brain structure is altered and impairs cognitive and physical development (Walkley & Cox, 2013). Plumb et al. (2016) stated, “The impact of trauma on the developing brain is significant and manifests differently during each stage of development” (p. 38). Moreover, chronic trauma can hinder brain development and lead to poor health and cognition (Terrasi & de Galarce, 2017).

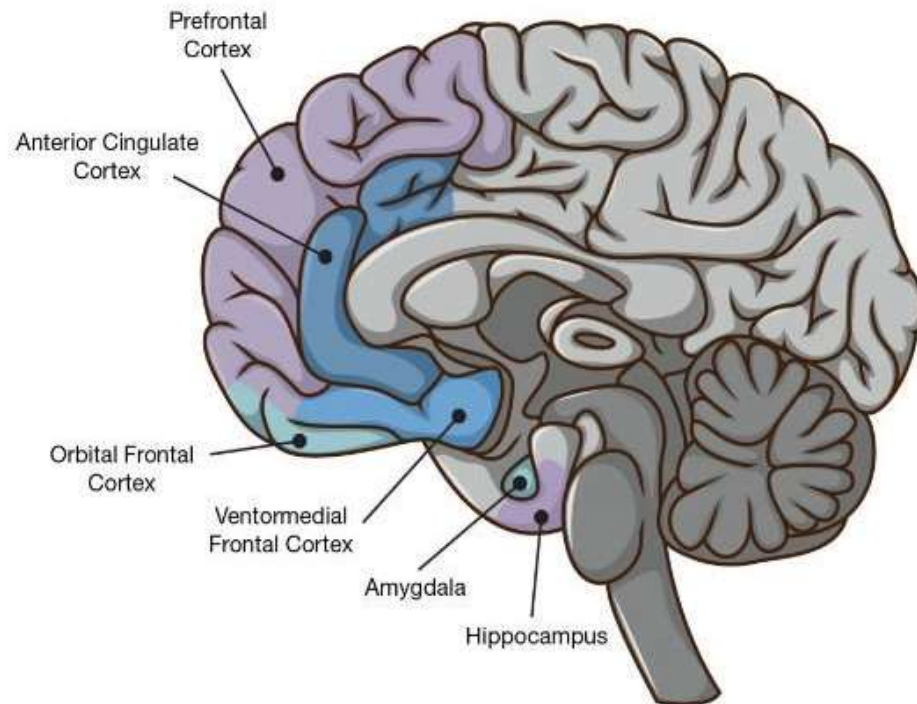


Figure 1. Medial view of select brain regions relevant to executive functioning. From *Executive function: Implications for education* by P. D. Zelazo, C. B. Blair, & M. T. Willoughby, 2016, p. 11. Washington, DC: National Center for Education Research. Copyright 2016 by the National Center for Education Research. Retrieved from files.eric.ed.gov/fulltext/ED570880.pdf

Language delay due to trauma. Early trauma impacts communication skills and overall language development skills (Barr, 2018; Craig, 2015; Stateman-Weil, 2015). Craig (2015) clarified, “The neural architecture of language is embedded in a complex system of larger-scale connectivity with other regions of the brain, including the prefrontal cortex, the hippocampus, the amygdala, and the corpus callosum” (pp. 47-48). Students exposed to trauma miss out on self-talk skills to help monitor their behavior (Craig, 2015; Stateman-Weil, 2015).

Behavior due to trauma. Trauma can manifest in both acting-out and quiet behaviors in children (NCTSNSC, 2008; Terrasi & de Galarce, 2017). The behaviors exhibited by students who have experienced trauma are often mistaken for negative choices in the classroom and are not associated with the child's brain being over- or under-developed (Plumb et al., 2016). Traditionally, classroom disruptive behaviors are viewed as bad choices or defiance (Craig, 2015).

According to Terrasi and de Galarce (2017), children's brains are flexible, and "when teachers fully understand their students' needs, they can provide the physical and emotional space that support what researchers call neuroplasticity or the brain's ability to rewire itself, forming new neural connections" (p. 37). Barr (2018) explained the importance of teachers understanding how the impairment of executive functioning impacts students' social-emotional development. Impacts of trauma include academic, social, and absenteeism challenges (Craig, 2015; NCTSNSC, 2008; Terrasi & de Galarce, 2017).

Absenteeism. Low attendance rates are one of many impacts of student trauma exposure (Blodgett & Lanigan, 2018; Porche et al., 2016). Attendance rates decline for students exposed to violence (NCTSNSC, 2017). Gottfried and Kirksey (2017) studied the impact absenteeism had on students' test performance during the spring semester. According to Gottfried and Kirksey (2017), "The results suggest that on average, each missed day of school in the spring was linked to spring test declines" (p. 124). Absences affect student achievement, whether excused or unexcused (Coelho, Fischer, McKnight, Matteson, & Schwartz, 2015; Gottfried & Kirksey, 2017). Coelho et al. (2015) proclaimed, "Absenteeism in early grades alters the academic trajectory of students,

which can have a prolonged effect on academic and social outcomes” (p. 12). The impacts of chronic absenteeism have raised concern, and state legislators have implemented new programs and interventions to improve low attendance rates (Gottfried & Kirksey, 2017).

The impacts of trauma need to be acknowledged by school employees (Craig, 2015; Porche et al., 2016; Terrasi & de Galarce, 2017). According to the NCTSN (2017), “Schools maintain their critical focus on education and achievement, [but] they must also acknowledge that mental health and wellness are integrally connected to students’ success in the classroom and to a thriving school environment” (p. 1). Porche et al. (2016) discussed the long-term effects of trauma if intervention is missed—mental health diagnoses and health risks into adulthood.

Craig (2015) explained many students are misdiagnosed with a mental health illness or a disability as opposed to the actual problem, which is trauma. According to Zelazo et al. (2016), executive functioning difficulties impact working memory and can lead to specific learning disabilities. Zelazo et al. (2016) also explained other disabilities associated with poor executive functioning skills include autism, attention deficit hyperactivity disorder, and obsessive-compulsive disorder. According to Craig (2015), the misdiagnosis results in students being placed in special education or prescribed medications that do not treat their needs.

Trauma Interventions

Walkley and Cox (2013) explained children respond based on when the traumatic experience occurred in their lives, and interventions should be different for each child. The impact of trauma on brain development can be buffered when children have a

positive relationship with adults who promote resilience and provide effective trauma interventions (Cross et al., 2017; Plumb et al., 2016; Terrasi & de Galarce, 2017).

Focusing on positive relationships and providing consistent daily routines offer support for children who have experienced trauma (NCTSN, 2008; Stateman-Weil, 2015).

Trauma-sensitive teachers foster positive relationships by better understanding trauma-related behavior and providing sensory activities to allow for self-regulation as part of the daily classroom system (Craig, 2015; Terrasi & de Galarce, 2017).

The first step to support students exposed to trauma is to provide a safe school (Dombo & Sabatino, 2019; Jennings, 2019). According to Dombo and Sabatino (2019), safety in school starts with positive connections. Positive teacher-student and peer relationships help redefine relationships for students who have been exposed to trauma (Jennings, 2019).

Supportive relationships with adults in the school help provide security and are an integral part of trauma-informed schools (Dombo & Sabatino, 2019; Jennings, 2019; Murphey & Sacks, 2019). Resilience can be cultivated through self-care, social and emotional skills, and self-regulation (Dombo & Sabatino, 2019; Jennings, 2019; Murphey & Sacks, 2019). Teachers create positive learning environments by providing safety, personal connections, and emotional and behavioral self-regulation (Dombo & Sabatino, 2019). Teaching strategies in the classroom can impact change and help students do their best in a school setting (Cramer, 2018).

According to Craig (2016), self-regulation is impacted by childhood trauma.

Craig (2015) shared:

When something triggers a traumatic memory, the ability to cortically mediate the reaction is compromised. In other words, because these memories are sensory in nature, children cannot use thinking to control their reactions and are likely to express their discomfort physically. (p. 41)

Mindfulness is an evidence-based intervention that promotes self-regulation and everyday resilience (Ortiz & Sibinga, 2017). Harpin, Rossi, Kim, and Swanson (2016) studied the behavioral impacts of mindfulness in a classroom setting. After mindfulness instruction was provided, the treatment group reported emotional regulation and academic achievement increased for participants (Harpin et al., 2016).

Sheinman, Hadar, Gafni, and Milman (2018) researched the long-term impacts of mindfulness and found a significant difference when students used mindfulness-based strategies. Mindfulness programs contribute to children coping with everyday challenges (Sheinman et al., 2018). Schonert-Reichl et al. (2015) conducted a study on the impact of social-emotional learning and mindfulness on executive functioning. The researchers concluded mindfulness training with social-emotional learning promotes positive cognitive and behavioral change (Schonert-Reichl et al., 2015).

Social-Emotional Learning

Children who have experienced trauma have difficulty regulating their emotions (Craig, 2015; Stateman-Weil, 2015; Terrasi & de Galarce, 2017). Brackett, Elbertson, Simmons, and Stern (2019) defined social and emotional learning as the “process through which children and adults acquire and effectively apply knowledge, attitudes, and skills necessary to understand and manage, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible

decisions” (p. 1). Social and emotional learning includes evidenced-based practices in the school setting to promote positive school culture (Brackett et al., 2019; Hymel, Low, Starosta, Gill, & Schonert-Reichl, 2018; Weissberg, 2019). Plumb et al. (2016) discussed social-emotional learning in school is used to address both social and academic difficulties. Social and emotional learning develops the skills of problem-solving, understanding emotions, and expressing feelings (Plumb et al., 2016).

Hymel et al. (2018) advocated for social and emotional learning programming to address challenging behavior in the classroom, focusing on reducing anxiety with mindfulness techniques. Social and emotional learning leads to better outcomes in “classroom behavior, attitudes about themselves, others, and their school, anxiety and stress, and academic achievement” (Brackett et al., 2019, p. 2). Craig (2015) explained teachers can use class pets or plants to support students with delayed social skills. Social and emotional learning programming positively impacts students’ behavioral and academic outcomes in school (Brackett et al., 2019; Hymel et al., 2018; Weissberg, 2019).

Whole-School Behavior Supports

A whole-school multi-tiered system of behavior support provides consistent strategies to respond to problem behaviors in the school setting (Fluke & Peterson, 2015; George, 2018; Noltemeyer, Palmer, James, & Petrusek, 2019). The Behavior Intervention Support Team is a multi-tiered behavior system that responds to escalating behavior (Fluke & Peterson, 2015). Positive Behavior Interventions and Supports is an evidence-based school-wide behavior program to support students in the classroom (Fluke & Peterson, 2015; George, 2018; Noltemeyer et al., 2019).

Positive Behavior Interventions and Supports tiered interventions can be summarized as Tier 1 – universal for all students, Tier 2 – for targeted at-risk students, and Tier 3 – intensive intervention through individual monitoring (George, 2018; Noltemeyer et al., 2019). According to Plumb et al. (2016), the Positive Behavior Interventions and Supports program is used to manage behavior in the classroom. Madigan, Cross, Smolkowski, and Strycker (2016) conducted a study on the long-term impact of whole-school multi-tiered behavior systems and found the Positive Behavior Interventions and Supports program improved behavioral and academic outcomes.

The Positive Behavior Interventions and Supports program utilizes tiered interventions in the classroom to manage escalating behavior, but the strategies do not address the function or cause of the behavior (Plumb et al., 2016). According to George (2018), “A preventive, whole-school approach is necessary for effectively and efficiently supporting all students, including those with challenging behaviors” (p. 340). Challenging behaviors are linked to children who have suffered from traumatic experiences (Blodgett & Lanigan, 2018; Craig, 2015; NCTSNSC, 2008). Increased challenging behaviors in the academic setting are contributing to teacher burnout due to compassion fatigue and secondary trauma (Elliott et al., 2018).

Teacher Well-Being

According to Brunzell, Stokes, and Waters (2018), teachers struggle to manage student behaviors even with effective strategies, and the challenges lead to teacher burnout. Teacher burnout can be due to the impacts of compassion fatigue or secondary trauma (Brunzell et al., 2018; Craig, 2015; Elliott et al., 2018). Elliott et al. (2018)

reported the term *compassion fatigue* was first discussed after the Oklahoma City bombing when first responders began displaying negative job performance.

In education, compassion fatigue is a concern due to working with traumatized students (Elliott et al., 2018). According to Craig (2015):

Compassion fatigue occurs when professionals feel there is nothing they can do to help the children they are responsible for no matter how much effort they expend. These feelings trigger a sense of hopelessness and can throw into question a teacher's beliefs about the meaning of life. (p. 90)

Compassion fatigue, or secondary trauma, may lead teachers to leave the field of education (Craig, 2015; Guidetti et al., 2019).

Brunzell et al. (2018) reminded, "Secondary traumatic stress has come to be understood as a cluster of overlapping concepts including vicarious traumatization and compassion fatigue" (p. 118). Compassion fatigue must be acknowledged, and plans must be implemented to improve teacher well-being (Elliott et al., 2018). Guidetti et al. (2019) conducted a study on mindfulness and how it improves teacher well-being. The researchers found teacher burnout symptoms decreased with mindfulness interventions (Guidetti et al., 2019).

Plumb et al. (2016) and the NCTSN (2017) provided guidance for school districts implementing trauma-informed practices, and the need for self-care was addressed in both of the frameworks. Administrators and decision-makers need to address self-care and the importance of managing stress (NCTSN, 2017). Educators working with students who have experienced trauma need to manage self-care so they are

equipped to respond to and assist children effectively in the classroom (Plumb et al., 2016).

The NCTSN (2008) addressed staff-care and provided guidance through the following Tips for Educators:

1. Be aware of the signs. Educators with compassion fatigue may exhibit some of the following signs:

- Increased irritability or impatience with students
- Difficulty planning classroom activities and lessons
- Decreased concentration
- Denying that traumatic events impact students or feeling numb or detached
- Intense feelings and intrusive thoughts, that don't lessen over time, about a student's trauma
- Dreams about students' traumas

2. Don't go it alone. Anyone who knows about stories of trauma needs to guard against isolation. While respecting the confidentiality of your students, get support by working in teams, talking to others in your school, and asking for support from administrators or colleagues.

3. Recognize compassion fatigue as an occupational hazard. When an educator approaches students with an open heart and a listening ear, compassion fatigue can develop. All too often, educators judge themselves as weak or incompetent for having strong reactions to a student's trauma. Compassion fatigue is not a sign of weakness or incompetence; rather, it is the cost of caring.

4. Seek help with your own traumas. Any adult helping children with trauma, who also has his or her own unresolved traumatic experiences, is more at risk for compassion fatigue.
5. If you see signs in yourself, talk to a professional. If you are experiencing signs of compassion fatigue for more than two to three weeks, seek counseling with a professional who is knowledgeable about trauma.
6. Attend to self-care. Guard against your work becoming the only activity that defines who you are. Keep perspective by spending time with children and adolescents who are not experiencing traumatic stress. Take care of yourself by eating well and exercising, engaging in fun activities, taking a break during the workday, finding time to self-reflect, allowing yourself to cry, and finding things to laugh about. (p. 17)

According to the MODESE (2019) through the Missouri Model for Trauma-Informed Schools, trauma-responsive and informed policies and procedures address staff well-being to combat teacher compassion fatigue and the impacts of secondary trauma. The Missouri Model was developed by Alive and Well Communities Educational Leader's Workgroup after Section 4108 of the Every Student Succeeds Act (2015) and Missouri Senate Bill No. 638 (2016) were enacted.

Trauma-Informed Policies

Skiba and Losen (2016) wrote an article on the philosophy behind zero-tolerance policies and the effects of suspension and expulsion. According to Skiba and Losen (2016), "Zero tolerance was ineffective in either reducing individual misbehavior or improving school safety" (p. 3). Zero-tolerance policies threaten children's access to free

and appropriate education and increase the likelihood of re-traumatization (Craig, 2015; Overstreet & Chafouleas, 2016).

According to Craig (2015), “Rather than improving school safety, zero-tolerance policies put children at risk of arrest for being tardy, having temper tantrums, or disturbing the peace” (p. 6). Schools using alternative classroom strategies such as mindfulness training can help develop cognitive and social-emotional skills, resulting in positive benefits for student behavior (Schonert-Reichl et al., 2015).

Supported in the Every Student Succeeds Act (2015) and Missouri Senate Bill No. 638 (2016) are interventions designed to promote safe and healthy students. The Every Student Succeeds Act of 2015 and the Individuals with Disabilities Education Improvement Act of 2004 reauthorization allocated funds for school districts to implement evidence-based practices to improve academics and behaviors in the classroom (Plumb et al., 2016). Murphey and Sacks (2019) discussed statewide policies should be created to support teachers as they provide learning environments that promote academic success, safety for all students, and positive school culture.

Guidance was provided to state and local educational agencies on trauma-informed practices in the Every Student Succeeds Act (2015). Suggested in the Every Student Succeeds Act (2015) was the implementation of “high-quality training for school personnel, including specialized instructional support personnel, related to effective and trauma-informed practices in classroom management” (Section 4108, para. 2). An allocation of funds to support safe and healthy students was provided for in Section 4108 of the Every Student Succeeds Act (2015). Murphey and Sacks (2019) discussed state

policies should be reviewed to ensure policies focused on school safety and security align with trauma-informed principles.

To address the trauma-informed school initiative outlined in Missouri Senate Bill No. 638, educators from five schools were requested by the MODESE (2018) to pilot intensive trauma-informed training focused on recognizing and responding to signs and symptoms of trauma. The following was established by the MODESE (2018):

For the purposes of this initiative, the following terms are defined as follows:

1. “Trauma-informed approach” – an approach that involves understanding and responding to the symptoms of chronic interpersonal trauma and traumatic stress across the lifespan.
2. “Trauma-informed school” – a school that:
 - a. realizes the widespread impact of trauma and understands potential paths for recovery
 - b. recognizes the signs and symptoms of trauma in students, teachers and staff
 - c. responds by fully integrating knowledge about trauma into its policies, procedures and practices; and
 - d. seeks to actively resist re-traumatization. (p. 12)

Required in the trauma-informed initiative was intensive training in five school districts and a provision that information on trauma-informed practices and training be provided to all school districts in Missouri by the MODESE (Missouri Senate Bill No. 638, 2016).

The Trauma-Informed Schools Initiative provided by the MODESE (2018) was developed to offer support for agencies to implement the basic steps of trauma-informed

practices and to promote consistent practices in different settings. The MODESE (2019) explained:

The journey to becoming trauma-informed is as unique as each school. A checklist to become trauma-informed does not exist, but there is a general process that most organizations find best accelerates their work. This process is an ongoing one, and it generally takes three to five years for a school to feel as though they have addressed all parts of their practices, policies, and culture. (p. 6)

The challenge for school district employees in Missouri is that policymakers do not require school districts to become trauma-informed; the MODESE only provides information on being trauma-informed (MODESE, 2019; Missouri Senate Bill No. 638, 2016).

Bowen and Murshid (2016) wrote a conceptual framework based on the perspective local, state, and federal agencies need to have when considering trauma-informed care policy. It is important for trauma-informed programming to be used in all settings including outside the school environment (NCTSNSC, 2017). The NCTSNSC (2017) explained:

The ultimate goal is to provide clear and consistent messages among partners, including all levels of school governance, federal agencies, state and local government, articulation a clear, strong, coordinated message that trauma-sensitive schools are a priority. These practices include ongoing assessment of the effectiveness of trauma-informed policies, practices, and procedures. (pp. 11-12)

Existing state policies can work with trauma-informed policies to support the provision of safe and supportive learning environments (Murphey & Sacks, 2019). The Every Student Succeeds Act (2015) and Missouri Senate Bill No. 638 (2016) supported trauma-informed practices and procedures.

Impacts of Trauma-Informed Programming

Trauma-informed programming reduces discipline referrals and has a positive impact when school districts change climate and culture to provide students with consistent trauma-informed practices (Walkley & Cox, 2013). Terrasi and de Galarce (2017) asserted, “Good news is schools can be very effective venues for implementing such a comprehensive approach. Because children spend much of their time at school, they have many opportunities to learn and practice the given social, emotional, and behavioral skills” (p. 37). Plumb et al. (2016) provided a model to implement trauma-informed programming; the model addresses the whole child and suggests provisions to lessen the negative impacts of trauma during childhood years. Craig (2015) stated, “With the right type of instruction and emotional support traumatized children can regain their ability to achieve academic and social mastery” (p. 2). Trauma-informed practices allow teachers to work with students to develop brain neuroplasticity to overcome their past trauma (Craig, 2015).

Students should be provided with a safe learning environment that supports their health and safety (Murphey & Sacks, 2019). According to the MODESE (2019), “Schools in Missouri are already reporting lower rates of office referrals and out of school suspensions, positive shifts in attitudes related to trauma-informed care, and are making progress in engaging students and families as active leaders in school culture” (p.

4). Students learn resilience and are rehabilitated due to positive relationships established because of trauma-informed practices (Craig, 2016). Positive relationships are established when teachers collaborate effectively with students about their arousal comfort level in the school setting (Craig, 2016).

Summary

The research questions and literature review for the study were developed based on the conceptual framework discussed in this chapter. Topics addressed included the multi-tiered trauma systems to support student needs, signs and symptoms of trauma, and the impact of trauma. Also detailed in the review of literature were trauma interventions, social emotional learning, whole-school behavior supports, teacher well-being, trauma-informed policies, and impacts of trauma-informed programming.

The methodology of the study is addressed in Chapter Three. Chapter Three includes the problem and purpose overview, research design, population and sample, and instrumentation. Also provided is a presentation of the collection of data, data analysis, and ethical considerations.

Chapter Three: Methodology

Chapter Three will include a thorough description of the methodology used for this study. The problem and purpose of the mixed-method study are outlined. The research questions are reintroduced, and the research design is addressed. The population and sample are described. The instruments used to collect data are detailed. Finally, the data collection and data analysis procedures and ethical considerations are presented.

Problem and Purpose Overview

The purpose of this study was to determine the impact of trauma-informed approaches on student performance, specifically in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. Perceptions of educators were also considered regarding the following aspects of trauma-informed programs: discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma. The data were analyzed to determine the feasibility of trauma-informed approaches. Adame (2016), Blodgett and Lanigan (2018), Overstreet and Chafouleas (2016), and Stevens (2012) explained research is lacking on the feasibility and implementation of trauma-informed programs.

Research questions and hypotheses. The following research questions guided the study:

1. What difference, if any, exists in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the

number of referrals resulting in an in-school suspension two years after the implementation?

H1₀: There is no difference in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation.

H1_a: There is a difference in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation.

2. What difference, if any, exists in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an out-of-school suspension two years after the implementation?

H2₀: There is no difference in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an out-of-school suspension two years after the implementation.

H2_a: There is a difference in the number of referrals that resulted in an out-of-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in out-of-school suspension two years after the implementation.

3. What difference, if any, exists in the number of student absences at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation?

H3₀: There is no difference in the number of student absences at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation.

H3_a: There is a difference in the number of student absences at the four schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation.

4. What difference, if any, exists in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation?

H4₀: There is no difference in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the

implementation of trauma-informed programming and the number of special education referrals two years after the implementation.

H4a: There is a difference in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation.

5. What are the perceptions of trauma-informed teams at three schools in one trauma-informed consortium with regard to the following aspects of trauma-informed programs?

- a. Discipline policies
- b. Attendance rates
- c. Special education referrals
- d. Academic performance
- e. Classroom management
- f. Recognizing signs and symptoms

Research Design

A mixed-methodology was the design for this study. A mixed-methods design combines quantitative and qualitative data and compares the results (Bergin, 2018; Creswell & Creswell, 2018). Included in this study were perceptions of trauma-informed programs and a comparison of quantitative data outcomes. According to Creswell and Creswell (2018), mixed-method research is used to “evaluate both the processes and the outcomes of a program” (p. 216). The qualitative interview questions were used to elicit

perceptions, and quantitative secondary data allowed for comparison of the three years prior to trauma-informed implementation and the two years after implementation.

Population and Sample

The population for the quantitative portion of this study included secondary data collected for 5,035 students within a rural consortium in northwest Missouri. The population for the qualitative portion for this study included 48 trauma team members from the same consortium. All of the districts had implemented trauma-informed programs for at least two years and have attended initial trauma training.

Random sampling gives everyone in the population the opportunity to be selected (Bergin, 2018; Creswell & Creswell, 2018; Fraenkel, Wallen, & Hyun, 2019). A random sample of four districts was selected from the member districts of the consortium. A random number generator was used to select those four districts. A census method was utilized for the quantitative portion of the study, which allowed for analysis of data from the four districts (Fraenkel et al., 2019). The census included secondary data for 3,754 students (see Table 1).

Table 1

Sample Northwest Trauma-Informed Consortium School Districts

School	Trauma Team Members	Total Student Enrollment
School 1	6	2,011
School 2	8	995
School 3	6	337
School 4	8	411

Note. School 1 opted out of the study.

A census was also utilized for the qualitative portion of this study. All 28 trauma team members from the four selected districts were asked to participate in a focus group discussion in each respective district. After receiving permission to participate in the study from School 1, the school opted out of the research study.

Instrumentation

To collect the secondary data for quantitative analysis, an Excel spreadsheet was created for each district employee who entered data for the Missouri Student Information System (MOSIS) (see Appendix A). Data were collected in the areas of in-school suspensions, out-of-school suspensions, attendance rates, and special education referrals to answer the first four research questions.

The instrumentation used specifically to collect qualitative data included interview questions answered through focus group discussions. Ravitch and Carl (2015) clarified, “Studies that explore attitudes, opinions, and experiences in specific groups and contexts are also well suited to the use of focus groups” (p. 167). The focus group discussion open-ended questions were created and developed to elicit the perspectives of trauma-informed team members (see Appendix B). The participants answered questions regarding perceptions of discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma. The questions were created utilizing the review literature and the conceptual framework.

Interview question one was about the process and perceptions of becoming a trauma-informed school (MODESE, 2018). Questions two and three were focused on policy and procedural changes and how the changes help staff identify signs and

symptoms of trauma (Craig, 2015; Missouri Senate Bill No. 268, 2016; Morton & Berardi, 2018; NCTSN, 2008; Overstreet & Chafouleas, 2016; Phifer & Hull, 2016; Plumb et al., 2016; Schonert-Reichl et al., 2015; Skiba & Losen, 2016; The Every Student Succeeds Act, 2015; Walkley & Cox, 2013). The fourth, fifth, and sixth questions were created to elicit perceptions of behavior procedures and the impact of trauma on attendance and special education referrals (Blodgett & Lanigan, 2018; Cross et al., 2017; Stateman-Weil, 2015; Walkley & Cox, 2013). Probed in questions seven and eight were changes in classroom management and the impact of change on student achievement (Cross et al., 2017; Phifer & Hull, 2016; Plumb et al., 2016; Terrasi & de Galarce, 2017).

Validity. Fraenkel et al. (2019) suggested the validity of an instrument is determined by the ability of researchers to defend the inferences made following the collection of data from the instrument. Creswell and Creswell (2018) explained:

The three traditional forms of validity to look for are (a) content validity (Do the items measure the content they were intended to measure?), (b) predictive or concurrent validity (Do scores predict a criterion measure? Do results correlate with other results?), and (c) construct validity (Do items measure hypothetical constructs of concepts?). (p. 153)

The focus group discussion questions were field-tested using the Validation Rubric for Expert Panel (VREP) (Simon & White, 2016). The VREP was developed to help determine face, construct, and content validity (Simon & White, 2016). Simon and White (2016) defined face validity as the instrument's effectiveness in gaining the information needed for the study. Bergin (2018) confirmed, "One general method that

can be used to increase several types of validity and augment the overall ‘trustworthiness’ of data analysis findings is triangulation” (p. 29). Triangulation occurs when different research methods are used within a study to determine if results on the topic confirm the same findings (Johnson & Christensen, 2020). This study involved triangulation of data by comparing the quantitative data, the qualitative data, and the findings presented in the review of literature.

Reliability. Reliability is defined as the consistency of the study and allows for an instrument to maintain consistent results every time used (Creswell & Creswell, 2018; Fraenkel et al., 2019; Johnson & Christensen, 2020). To ensure reliability of the instrument, field-test participants were asked to take the test on two different occasions to determine if the instrument was consistent over time. A qualitative researcher is able to determine internal consistency by documenting all procedures, checking transcripts, comparing data with the coding, and cross-checking codes (Creswell & Creswell, 2018). During the study, reliability was maintained by checking transcripts for errors, coding themes, member-checking, and documenting all procedures during the study.

Data Collection

First, the names and email addresses for the superintendents of the four rural school districts were collected through the school districts’ websites. A permission letter was emailed to the superintendents to request permission for each of the rural districts to participate in the study (see Appendix C). After receiving permission, names and email addresses for members who served in participating rural school districts that had implemented trauma-informed programs for at least two years, had a trauma school team, and had attended trauma training were collected from the superintendent for each school.

Upon approval of the Lindenwood Institutional Review Board (see Appendix D), each district's trauma team leader and the district employee who collects and enters the MOSIS data were contacted by phone to discuss the research study. A follow-up email to school principals included an introductory letter (see Appendix E) and a copy of the research information sheet (see Appendix F), which were provided to participants of the focus groups. The purpose of the focus groups was to elicit perceptions of the process and outcomes of trauma-informed programming and to compare qualitative data to the secondary quantitative data collected.

The district employee who collects and enters the MOSIS data for each district collected the secondary data. The district employee was asked to de-identify the data to ensure anonymity. Data were collected from the three years before implementation of trauma-informed approaches and from the two years after the approaches were implemented. Specific data collected included in-school suspensions, out-of-school suspensions, absenteeism, and special education referrals. The purpose of the data was to determine the impact of trauma-informed approaches on student performance, specifically in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals and to determine the sustainability of the programming for at least two years.

Data Analysis

The first step of the qualitative research analysis was reading through the transcripts of the three focus groups. Significant themes were identified and then categorized to gain understanding (Merriam & Grenier, 2019; Ravitch & Carl, 2015). Ravitch and Carl (2015) explained that during the reading, the researcher must "reflect on

the potential biases that could be employing as data is read” (p. 475). During the next step, the major themes were compared in each of the individual focus groups to determine major themes in qualitative data for each school.

Quantitative data were gathered and analyzed from each of the three school districts. A two-tailed *t*-test was used to evaluate the data to determine if there was a significant difference in in-school suspensions, out-of-school suspensions, absenteeism, and special education referrals three years before implementation and two years after implementation of the trauma-informed program. The two-tailed *t*-test was used to determine if there was a significant difference between the means of two groups (Bergin, 2018; Bluman, 2017).

Qualitative data were gathered through focus group discussions. After the focus group discussions, transcripts were created and checked by participants, themes were grouped together to create codes. According to Blair (2015), content analysis “is dependent on creating labels (codes) that can be applied to data in order to develop data into meaningful categories to be analyzed and interpreted” (p. 16). Burkholder, Cox, Crawford, and Hitchcock (2020) explained open coding as “the process of identifying, labeling, examining, and comparing codes and categorizing them into larger, conceptual categories encompassing a variety of similarly themes codes” (p. 236). Open coding is flexible, starting with looking for simple codes and later seeing the themes lead to more complex codes (Bergin, 2018).

After open coding was used to create the initial codes, a comparison of focus group transcripts was made. Axial coding was then used to determine the key themes. Blair (2015) explained axial coding is when “categories are related to their subcategories

to form more precise and complete explanations” (p. 18). Themes identified with axial coding were reported in the findings section. The main purpose of data analysis was to answer the research questions developed and based on the literature review and conceptual framework (Creswell & Creswell, 2018).

Ethical Considerations

Confidentiality and anonymity were assured to safeguard participants throughout the entire study. Creswell and Creswell (2018) stated, “Attention needs to be directed toward ethical issues prior to conducting the study; beginning a study; during data collection and data analysis; and in reporting, sharing, and storing the data” (p. 90). No data were collected before approval from the Lindenwood Institutional Review Board. All participants were provided with a copy of the Research Information Sheet. The Research Information Sheet included the purpose of the study, what the voluntary participants were asked to do during the study, the approximate time to complete the focus group questions, and how the researcher protected the privacy of the participants.

Summary

In Chapter Three, the methodology and the problem and purpose overview of the study were addressed. The research questions were provided. The population and sample were described. The instrumentation was explained including the validity and reliability of the instruments used. Finally, the data collection, data analysis, and ethical considerations were presented.

Chapter Four includes analyses of quantitative and qualitative data. The quantitative data are discussed and displayed in tables and figures. The qualitative data

are presented by providing the educators' perceptions which were gathered during focus group discussions with trauma-informed team members.

Chapter Four: Analysis of Data

The purpose of this mixed-methods study was to determine if trauma-informed programs impact students' academic performance in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. Research regarding trauma-informed programs is lacking in the areas of feasibility, sustainability, and implementation of trauma-informed programming (Adame, 2016; Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016). The perceptions of trauma teams regarding discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma were considered. The quantitative and qualitative data were analyzed to determine the sustainability and feasibility of trauma-informed approaches. After receiving initial permission from the superintendent from School 1, participants opted not to participate in the study.

Quantitative Data

Data were collected in the areas of in-school suspensions, out-of-school suspensions, average daily attendance percentages, and special education referrals. The district employee who enters MOSIS data provided secondary data from three years before the implementation of trauma-informed practices and two years after the program was implemented. The data were de-identified to maintain anonymity for each participating district. Quantitative data were used to determine the impact of trauma-informed programs on student performance in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals to determine the sustainability and feasibility of the programming for at least two years. Quantitative data

were gathered from each participating school district to answer the first four research questions.

Research question one. What difference, if any, exists in the number of referrals that resulted in an in-school suspension at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an in-school suspension two years after the implementation?

As shown in Figure 2, School 2's in-school suspension incidents increased with the implementation of trauma-informed programming. School 3's data revealed a decrease in in-school suspension incidents, and School 4's data also indicated a decrease in in-school suspension incidents. The secondary data were used to determine if there was a significant difference in in-school suspension incidents three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming for all participating school districts.

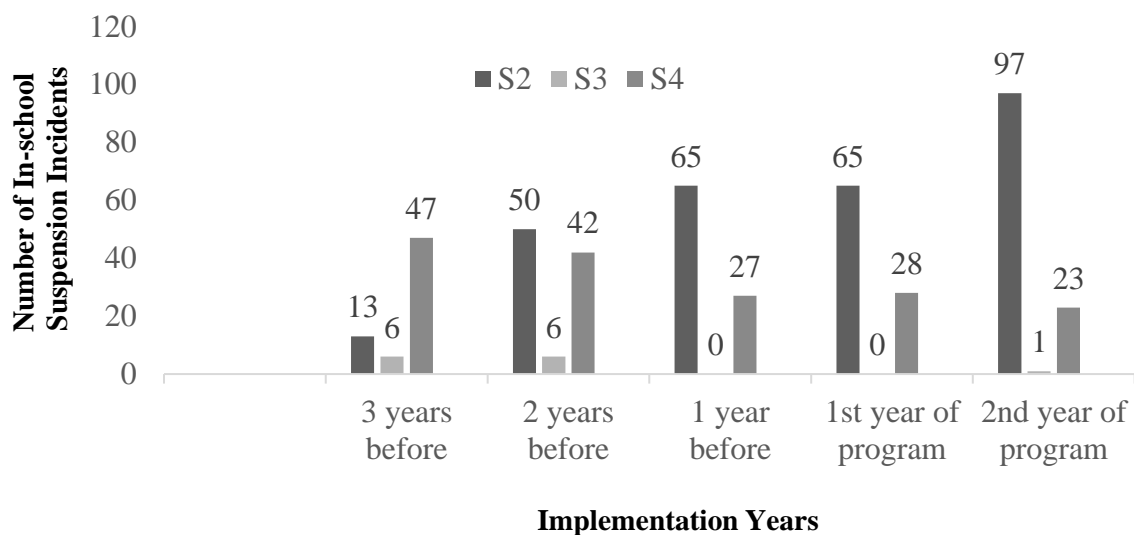


Figure 2. Secondary data for in-school suspension incidents three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming.

Data were statistically compared using a two-tailed *t*-test to determine if there was a difference in the area of in-school suspension (see Table 2). The mean included all three participating schools' data three years preceding and two years after trauma-informed programming. Based on the *p*-value ($P(T \leq t)$ two-tail = 0.783262914), which was greater than the significance level .05, the null hypothesis was not rejected (Bergin, 2018).

Table 2

In-School Suspension Incidents

	3 Years Preceding	2 Years After
Mean	30.66666667	35.66666667
Variance	585.5	1463.066667
Observations	9	6
Hypothesized Mean Difference	0	
<i>df</i>	8	
<i>t</i> Stat	-0.284486099	
$P(T \leq t)$ one-tail	0.391631457	
<i>t</i> Critical one-tail	1.859548038	
$P(T \leq t)$ two-tail	0.783262914	
<i>t</i> Critical two-tail	2.306004135	

Research question two. What difference, if any, exists in the number of referrals that resulted in an out-of-school suspension at the four schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of referrals resulting in an out-of-school suspension two years after the implementation?

As shown in Figure 3, School 2's out-of-school suspension incidents decreased with the implementation of trauma-informed programming. School 3's data also revealed a decrease in out-of-school suspension incidents. School 4's out-of-school incidents

indicated a slight increase. The secondary data were used to determine if there was a significant difference in out-of-school suspension incidents three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming for all participating school districts.

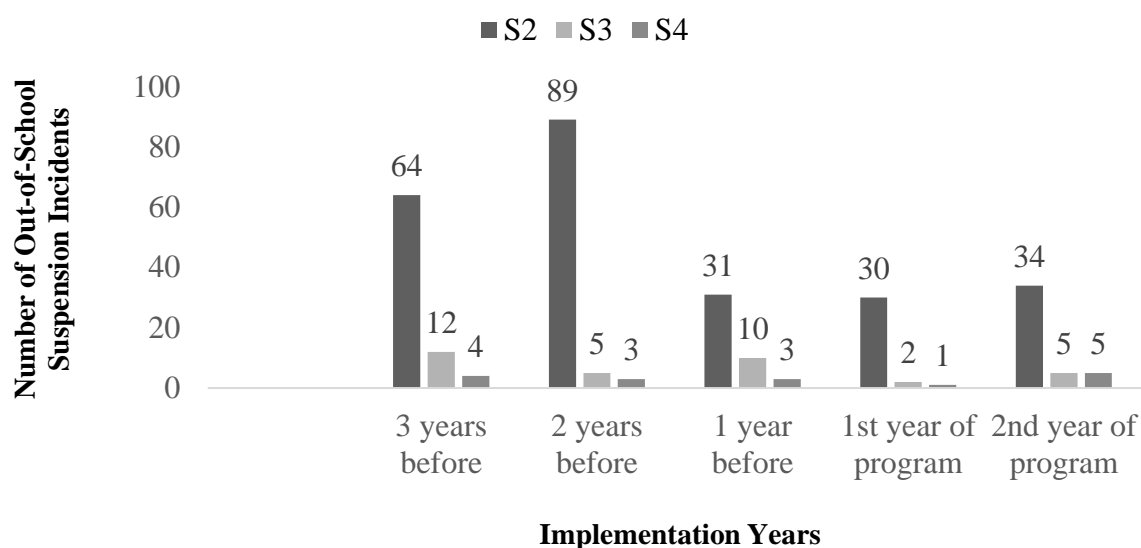


Figure 3. Secondary data for out-of-school suspension incidents three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming.

Shown in Table 3 are the out-of-school suspension incidents three years preceding implementation and two years after implementation of trauma-informed programming. The data were statistically measured using a two-tailed *t*-test to determine if there was a difference between the two means. Based on the *p*-value ($P(T \leq t)$ two-tail = 0.351941887), which was greater than the significance level .05, the null hypothesis was not rejected (Bergin, 2018).

Table 3

Out-of-School Suspension Incidents

	3 Years Preceding	2 Years After
Mean	24.55555556	12.83333333
Variance	981.7777778	224.5666667
Observations	9	6
Hypothesized Mean Difference	0	
<i>df</i>	12	
<i>t</i> Stat	0.968434148	
$P(T \leq t)$ one-tail	0.175970943	
<i>t</i> Critical one-tail	1.782287556	
$P(T \leq t)$ two-tail	0.351941887	
<i>t</i> Critical two-tail	2.17881283	

Research question three. What difference, if any, exists in the number of student absences at the four schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of student absences two years after the implementation?

As shown in Figure 4, School 2's average daily attendance percentage stayed consistent before and after trauma-informed implementation. The secondary data were used to determine if there was a significant difference in average daily attendance percentage three years preceding the implementation of trauma-informed programming

and two years after implementation of trauma-informed programming for all participating school districts.

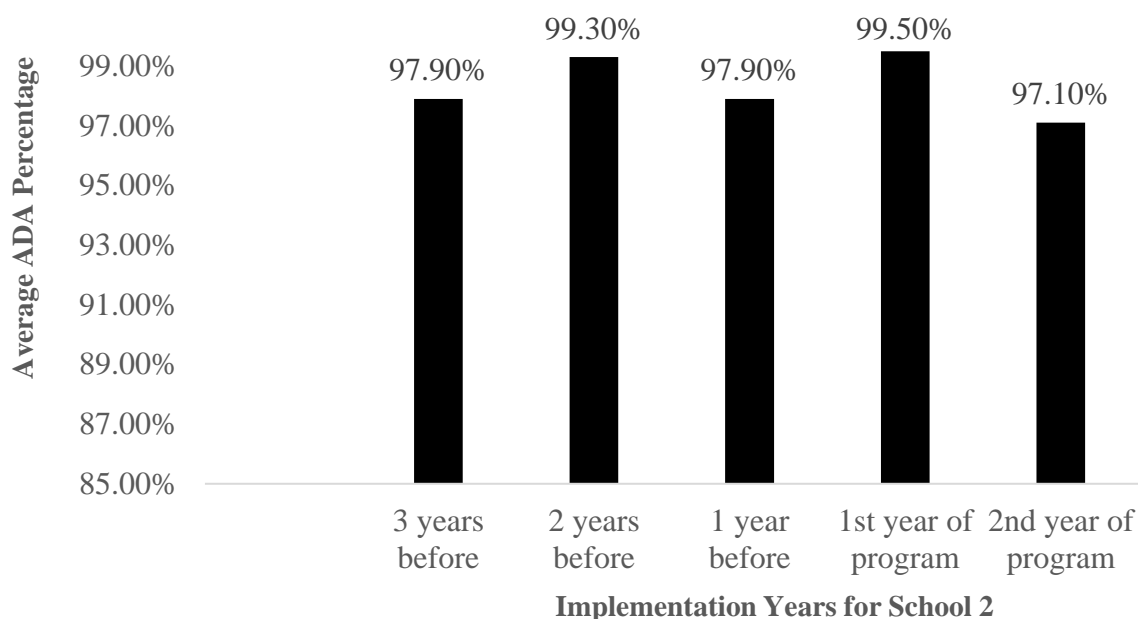


Figure 4. Secondary data for absenteeism/average daily attendance percentage at School 2, three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming.

As shown in Figure 5, School 3's data revealed a slight increase in average daily attendance percentage. The secondary data were used to determine if there was a significant difference in average daily attendance percentage three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming for all participating school districts.

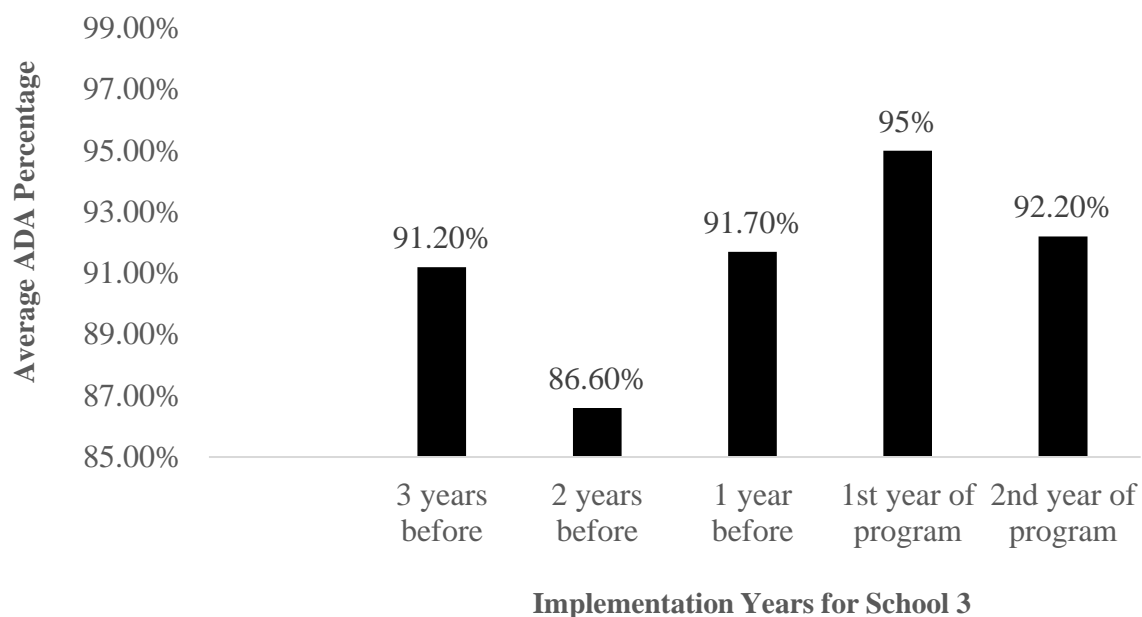


Figure 5. Secondary data for absenteeism/average daily attendance percentage at School 3, three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming.

As shown in Figure 6, School 4's data indicated a slight increase in average daily attendance percentage. The secondary data were used to determine if there was a significant difference in average daily attendance percentage three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming for all participating school districts.

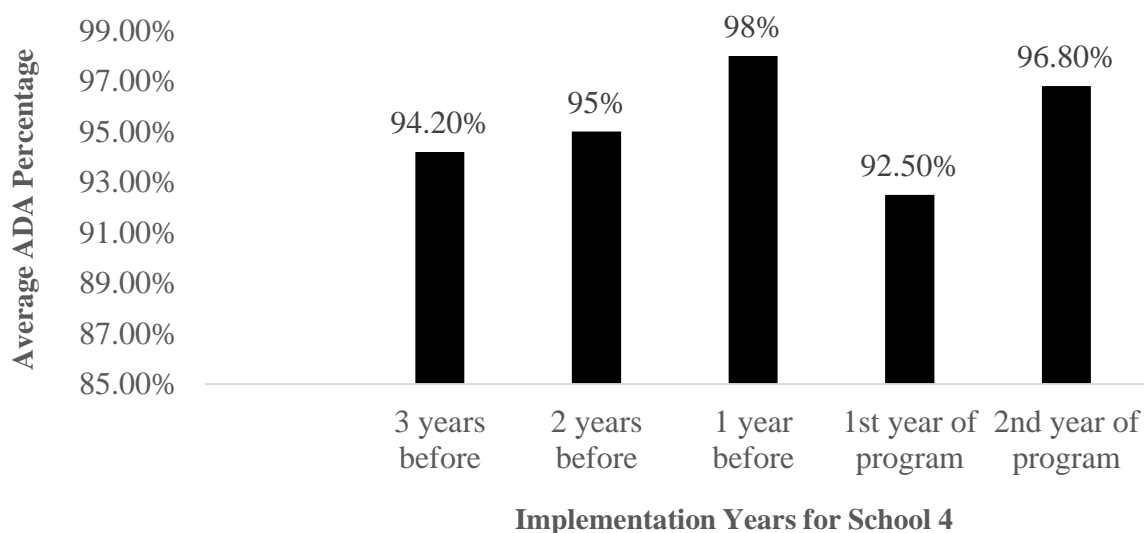


Figure 6. Secondary data for absenteeism/average daily attendance percentage at School 4, three years preceding the implementation of trauma-informed programming and two years after implementation of trauma-informed programming.

Shown in Table 4 is the mean of absenteeism/average daily attendance percentages three years preceding implementation and two years after implementation of trauma-informed programming. Data were statistically measured using a two-tailed t -test to determine if there was a difference. Based on the p -value ($P(T \leq t)$ two-tail = 0.586603798), which was greater than the significance level .05, the null hypothesis was not rejected (Bergin, 2018).

Table 4

Absenteeism/Average Daily Attendance

	3 Years Preceding	2 Years After
Mean	94.64444444	95.63333333
Variance	17.46277778	7.230666667
Observations	9	6
Hypothesized Mean Difference	0	
<i>df</i>	13	
<i>t</i> Stat	-0.55758129	
$P(T \leq t)$ one-tail	0.293301899	
<i>t</i> Critical one-tail	1.770933396	
$P(T \leq t)$ two-tail	0.586603798	
<i>t</i> Critical two-tail	2.160368656	

Research question four. What difference, if any, exists in the number of special education referrals at the three schools in one trauma-informed consortium three years preceding the implementation of trauma-informed programming and the number of special education referrals two years after the implementation?

As shown in Figure 5, the number of special education referrals at all three schools remained consistent over the course of trauma-informed implementation. There was not an increase or decrease in special education referrals after the implementation of trauma-informed programming. The secondary data were used to determine if there was a significant difference in the number of special education referrals three years preceding

the implementation of trauma-informed programming and two years after implementation of trauma-informed programming for all participating school districts.

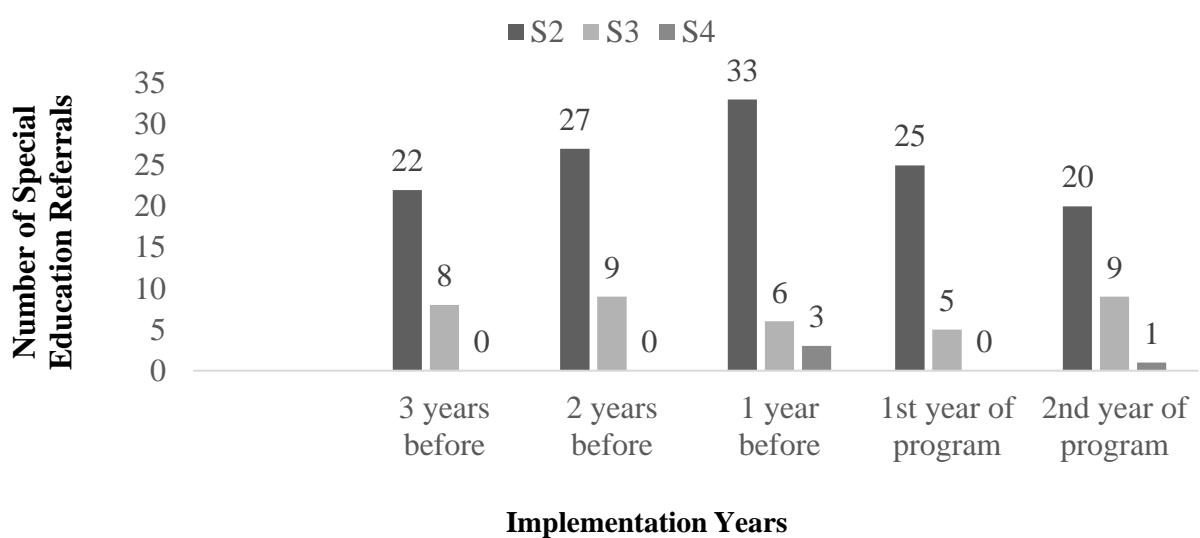


Figure 7. Secondary data for special education referrals three years preceding the implementation of trauma-informed programming and two years after implementation.

A two-tailed *t*-test was used to determine if there was a difference between the mean of the three years preceding implementation and the two years after implementation, as shown in Table 5. Based on the *p*-value ($P(T \leq t)$ two-tail = 0.738799469), which was greater than the significance level .05, the null hypothesis was not rejected (Bergin, 2018).

Table 5

Special Education Referrals

	3 Years Preceding	2 Years After
Mean	12	10
Variance	149.5	106.4
Observations	9	6
Hypothesized Mean Difference	0	
<i>df</i>	12	
<i>t</i> Stat	0.341272857	
$P(T \leq t)$ one-tail	0.369399734	
<i>t</i> Critical one-tail	1.782287556	
$P(T \leq t)$ two-tail	0.738799469	
<i>t</i> Critical two-tail	2.17881283	

The first four research questions were developed to determine if there was a significant difference before and after implementation of a trauma-informed program in the areas of discipline referrals resulting in in-school suspension, discipline referrals resulting in out-of-school suspension, absenteeism, and special education referrals at three schools in one trauma-informed consortium. The data were collected for three years preceding implementation and two years after implementation of trauma-informed programming. For all four research questions, the null hypotheses were not rejected, based on the *p*-values, which were greater than the .05 significance level. There was not sufficient evidence to determine a significant difference in the areas of in-school

suspension incidents, out-of-school suspension incidents, absenteeism, and special education referrals after the implementation of trauma-informed programming.

Qualitative Data

Focus group participants worked for school districts included in the Northwest Trauma-Informed Consortium that had implemented trauma-informed programs for at least two years, had a trauma school team, and had attended trauma training (see Table 6). After receiving initial permission from School 1, the district opted out of participation during the data collection stage.

Table 6

Focus Group Participants by District

School	Number of Focus Group Participants
School 2	6
School 3	5
School 4	7

Focus group discussions. The focus groups discussed eight open-ended questions which were developed using the review of literature and the conceptual framework. Questions were created to elicit the perspectives of trauma-informed team members. Before conducting the interviews, participants were provided with a copy of the Research Information Sheet.

Focus groups were scheduled and conducted at each school district's site with trauma team members including school administrators, teachers, counselors, and support

staff. According to the MODESE (2019) through the Missouri Model, trauma teams should include administrators, counselors, classroom teachers, support staff, and other community stakeholders. Each participant was given a code as his or her identification to maintain anonymity during the interview.

Focus group discussions lasted approximately 30 minutes. All focus group discussions were recorded digitally. After focus group discussions, the recordings were transcribed and sent to the participants for member-checking.

Interview transcriptions were open coded to determine initial simple codes (Bergin, 2018). Axial coding was used after reviewing the open codes to develop themes aligning with the literature review. Data gathered from the focus group discussions were used to answer research question five.

Research question five. What are the perceptions of trauma-informed teams at three schools in one trauma-informed consortium with regard to the following aspects of trauma-informed programs?

- a. Discipline policies
- b. Attendance rates
- c. Special education referrals
- d. Academic performance
- e. Classroom management
- f. Recognizing signs and symptoms

Focus group question one. What was the process of becoming a trauma-sensitive/trauma-informed school?

Participants from all three schools described a similar process of becoming trauma-informed schools. Participant 2a specified:

Three years ago, we were part of the mental health consortium across the county. One of our other members had heard about this process, this training. She wrote a grant. She got the money, and she encouraged members of each school district in the consortium to go and become trained. That is really where that started.

Participants 2a and 2b shared that the original group from their school included those with the most trauma-informed backgrounds. Participant 2a added, “We looked at those that had the most background in trauma-informed care or trauma in general in our scope at the school. And we started with them, and it seemed the most appropriate at the time.”

Participants from School 3 mentioned a grant which funded their training. Participant 3c elaborated, “We had the opportunity with a consortium of other county schools to be a part of a grant that was written in order to use Truman Medical Center services to introduce trauma-sensitive training.” Participants from School 4 mentioned the grant and initial four-day training. Participants 4h and 4f explained both elementary and high school administrators began the back-to-school inservice to share what was learned during the initial training. According to Participant 4f:

It started with two counselors and two administrators that went to the initial training. And then, I know at the elementary end, during our back to school inservice, our administrator went over a summary of what we had learned in that training.

Focus group participants explained the initial process and the expansion of the trauma team throughout the three years. Participants 3d and 3e explained the grant and trauma training provided to the consortium school districts would end this year due to grant funding only lasting three years. The grant provided funding for trauma-sensitive training by Truman Medical Center staff for all three districts. School 3 provided a trauma-sensitive road map (see Appendix G). The trauma team used the road map to guide the district's programming.

Focus group question two. What policies and/or procedures were changed after implementation to help recognize and respond to trauma?

Participants from all three schools explained similar procedural changes but explained policy changes were out of the trauma team's control. Participant 2a explained, "Policy-wise, those are really governed on a higher level than we had power to control. We have a policy service that we purchased those policies." The participants discussed different character curricula, relationship-building, climate change, school-wide behavior systems, self-regulation strategies, and self-care. Participants 2a, 2f, and 2h reported a new character education program was used K-12. Participant 2h detailed the impacts of the character curriculum:

With that character-strong curriculum, we're giving kids specific words to say, definitions of character words, ideas, and concepts they can use to advocate for themselves to solve problems and recognize friends. We got flu shots one day, and our word for September was courage. I heard a kindergartner, she was not happy about getting her flu shot. She used the word courage and talked about

how she didn't want to do it, but she did anyway. She was brave and had courage. The kids are using the language that we are teaching them.

Participants 2f, 3e, and 4d explained relationship-building focused on getting to know both students and staff. Participant 3e stated, "The first year we worked on building relationships with each other and with our students and took very deliberate and proactive steps toward making sure that relationships were solidified."

Participant 4d explained the district's morning points of contact: "Last year we had staff sign up at different entrances and meet and greet kids. Staff got the temperature in the morning. This year our student council have taken over, and the kids are greeting." Participants from School 4 discussed implementing Pals, where the high school and elementary are paired and meet twice a month to participate in different activities. Also, they explained using a sensory room to help students with self-regulation. Participant 4h explained, "The sensory room is used for a lot of our kids, kids that we label as trauma kids."

Self-care was discussed during each focus group discussion. When asked about procedures, participants from the three schools discussed the component of self-care for both students and staff members. Participant 2e shared, "We pushed a very large self-care component, making sure people are taking care of themselves. Trying to be more aware of the mental health with staff, parents, and kids. That is probably one of the biggest overall changes." Also discussed was the culture and climate change including a focus on building relationships. Participant 3c reported, "If you think about the word policies or procedure as far as administratively, it is really a climate change." Focus group question two had similar responses regarding procedure adaptations to meet the

needs of their student population. The procedures included relationship-building, staff self-care, school-wide behavior systems, and self-regulation strategies.

Focus group question three. In what ways have the signs and symptoms of trauma become easier to identify?

Focus group participants from all three schools discussed changing the mindset district-wide. Participants 2e, 3c, and 4f stated the mindset has changed from “What’s wrong with you?” to “What happened to you?” Participants from School 2 discussed the training through professional learning communities on trauma-sensitive language, modeling behavior, and signs to look for in students. Participant 2b detailed:

In the beginning process, there are people at this table that had knowledge of things that went on in kids’ lives other staff did not know. We started sharing what we called struggle stories, and we would share non-descriptive stories. We would not share names, but we would tell about situations that kids were overcoming at home and share that with our staff. We would share these are kids within our walls. And so it kind of gave them an idea of these are kids with struggles that we have no idea are even in our building.

Participants from School 2 discussed the adverse childhood experiences study information was shared with their staff, and this opened their eyes because the staff realized their personal traumas.

Participants from Schools 2 and 3 stated they include their classified staff in the trainings. Participant 2b explained the district began educating their bus drivers to identify trauma: “They are the first ones kids see and the last one at the end of the day.” Participant 3e stated, “Bus drivers have buzzed and let us know if they think somebody is

not okay. The cooks at breakfast have made comments to teachers or administration to let someone know that they noticed that somebody wasn't engaging in conversation." Participants from School 4 discussed the district's changing mindset. Participant 4a related the points of contact help staff to identify signs and symptoms earlier and more easily. According to Participant 4a:

The students are also a little more willing to come to a trusted adult. Someone they trust to let them know some signs they have seen. Also, just being outside the door, being there in the morning. It is easy for us to see a kid's mood and kid's attitude each and every day. There are ups and downs throughout the week.

Participants 4d and 4f discussed how becoming trained has made staff more trauma-aware and mindful of trauma signs and symptoms. The shift in the school district's staff mindset and training all staff has helped identify signs and symptoms of trauma earlier.

Focus group question four. In what ways has the trauma-informed program been a factor in the revision of behavior procedures?

The behavior procedures discussed in all three focus groups centered around relationship-building and being proactive. Focus Group Participant 2h explained staff mind-shift, revisions to focus room procedures, and avoiding re-traumatizing students were all revisions made to the behavior procedures. Participants 2h and 2e discussed sensory items in every classroom to provide calm-down strategies to students.

Participant 2h explained a Behavior Intervention Support Team was being used to provide specific procedures as a Tier 1 intervention in the classroom setting.

Participant 3c shared the Behavior Intervention Support Team and the Seven Habits of Happy Kids were used to provide proactive strategies. Participant 3c stated,

“We are working on Seven Habits of Happy Kids and getting them to learn about being proactive, taking care of themselves, being problem solvers, and having goals.”

Participant 3d discussed how Trauma Training 3.0 focused on students having an active role at the secondary level. According to Participant 3d, “One thing we have learned is that students respond to one another and their care and concern.”

Participants 4c, 4d, and 4h commented on behavior procedures not changing, but the mindset changed about what happened to students and about building relationships with students. The response to discipline had changed and become more proactive. Participant 4h indicated, “When there is a discipline issue, teachers take the time to have conversations with the kid and get to know a little more of what is happening before they are acting on it and sending to administration.” Participants from Schools 2, 3, and 4 discussed proactive changes to discipline procedures to support students in the school environment.

Focus group question five. In what ways has the trauma-informed program affected attendance rates?

Participants from the three schools shared the perception that the school districts’ attendance rates had historically been good but felt strong relationships have improved students staying at school more consistently. Participant 2b discussed staff changed their thinking on the extreme attendance outliers and focused on connecting with those students. Focus Group Participant 2d stated, “I know that when a child has a relationship with somebody at school, it makes them want to come to school. They feel like they have a purpose.” The focus group participants from School 3 discussed that positive relationships have helped students who frequently checked out early or avoided school.

According to Participant 3b, “I think the students that in the past probably would have stayed away from school now are feeling they can come and they know that they have an amazing support system at school.” Participants 3a and 3b discussed students are not being sent home due to behavior as frequently, and school staff are handling the behaviors at school. School 4 Participants 4h and 4e reported relationships have positively impacted student attendance. Participant 4e explained, “Students in the past would have went [*sic*] home because they were emotionally disturbed or something was going on; now they feel more comfortable to talk to a staff member and work through it at school instead of calling home.” All three school focus groups discussed the importance of connection and relationships to improve attendance rates for students.

Focus group question six. In what ways has the trauma-informed program affected the number of referrals for special education?

Participants from Schools 2, 3, and 4 discussed that the trauma-informed program has not really affected the number of special education referrals. Focus Group Participant 4c stated, “I do not think it has really affected it at all. We have had an increase in the amount of special education referrals, but I think trauma-sensitive schools is just one of several things.” Participants 2b, 2g, 3e, 3d, and 4c perceived being trauma-sensitive was not the sole reason for increased special education referrals.

Focus Group Participant 2d discussed how trauma-informed programs have increased self-awareness with staff, students, and parents. The awareness has subsequently increased outside mental health resources. According to Participant 2d, “There is more awareness overall of mental health and its impact globally. But in terms

of sheer numbers, that has not increased or decreased our number of special education referrals, it is just we have approached things differently.”

Participant 2g’s response focused on teachers looking at behaviors differently due to being more trauma-aware. Focus Group Participant 3c further explained classroom teacher responses to behaviors and special education referrals:

I just think that district-wide, we were very aware of the difference between a behavior issue and emotional disturbance. I do not know that we had teachers who were referring kids because they just could not handle them in the classroom. I think they are more likely to address the behavior and figure out what they could do as opposed to just saying, I need this kid out of my room. I think I will refer him.

Participant 3e further discussed teachers only brought up students as a referral if they were trying to figure out if the students were not learning due to behaviors. Participants from the three schools responded similarly, and their perceptions were that special education referrals had not increased or decreased since becoming trauma-sensitive schools.

Focus group question seven. In what ways has the trauma-informed program transformed classroom instructional and management strategies?

Focus group participants from the three schools discussed mindfulness and district-specific programs to support classroom instruction and management strategies. Participants 2h, 3d, and 4e shared sensory strategies and mindfulness were encouraged to relieve stress. The activities have allowed students to remain in the classroom. Focus Group Member 2h submitted, “I think that the biggest impact has been keeping the kids

in the classroom more. Using calming sensory items to deal with little things, keeping them in the room more they are able to receive more instruction.” Participant 4e explained that mindfulness strategies are regularly used in the classroom. Focus Group Participant 3c explained the impact of the Behavior Intervention Support Team program:

Our behavior program called Behavior Intervention Support Team, which is a cornerstone of care. The procedures in the program allow our teachers to have great management systems within the classroom. Does it always work perfectly for everyone? No, but the system, the structure is there. If our students are not able to manage their behaviors in the classroom, we have another staff member who works with those kids and holds on to them working through problems, getting them to, bring themselves selves back to a very calm and good place. And if by the end of the day they’re ready to get back into the classroom, great. And if not, that’s where we’ll start the next day until they are ready to behave and be a learner and allow their classmates to learn. This is all part of that system. I think when we work with that and follow that with great fidelity, layer that with our teachers being informed and aware of trauma sensitivity, when we put all those layers together, I think that just keeps working better and better in our building.

Focus group question seven responses included shifting the mindset, implementing self-regulation activities, behavior-specific interventions, and teachers transforming classroom instruction and management strategies.

Focus group question eight. What trauma-informed strategies are utilized to improve academic performance for students who have experienced trauma?

Participants from the three schools discussed accommodating students without needing a legal document and building positive relationships. Participant 2h detailed:

I think our biggest thing would be our accommodations, both classroom and assessment accommodations. For kids who either need more time or they have a lot of anxiety, giving them a separate setting to take an assessment or complete a task. And just being more understanding that they don't have to be a student that has a 504 or an IEP, that those accommodations can be given for a variety of reasons, including emotional reasons.

Focus Group Participants 4h and 3d had similar responses to 2h and explained accommodations were made based on student needs and not just disabilities. All three focus groups discussed giving grace to students but holding them accountable. The focus groups from all three schools talked about being more proactive and sharing information with staff to support students. Participant 3d stated, "Trauma-sensitivity has encouraged us to be far more proactive and able to share information that we know will help."

Participants 2e, 2b, and 2h discussed creating safe environments for students such as brain breaks and filling the basic needs of students. According to Participant 2h, "We call that Maslow before Bloom, you have to meet their basic needs before they can do any high-level thinking." The focus groups from the three schools were consistent in stating that creating a safe learning environment, meeting students' needs with accommodations (including self-regulation), and recognizing the importance of a significant relationship at school have transformed classroom management and instruction.

Seven major themes were identified from the focus group discussions. Those themes included trauma training, relationship-building, staff self-care, school-wide behavior systems, self-regulation, mind-shift, and providing safe learning environments for all students. These themes were consistent with all focus group discussions are explained in Chapter Five.

Summary

The quantitative section of the study included secondary data collected to determine the impacts of trauma-informed approaches. The individual schools provided secondary data in the areas of in-school suspension incidents, out-of-school suspension incidents, average daily attendance percentages, and special education referrals. Data were compared from three years preceding the implementation of trauma-informed programming and two years after implementation, specifically in the areas of in-school suspension incidents, out-of-school suspension incidents, absenteeism/average daily attendance percentage, and special education referrals. The data were analyzed, and for each of the four quantitative research questions, the null hypothesis was not rejected since the *p*-values were greater than the significance level of .05.

The qualitative data included anecdotal notes found in the focus group transcripts. During all three focus groups, discussions were consistent and focused on procedures and practices learned during trauma training through the Truman Medical Center. The perceptions of each participant were shared to better understand the practices used in trauma-informed school districts.

Chapter Five includes the triangulation of data from the quantitative data, qualitative data, and the review of literature. The findings are presented. The

conclusions are provided along with supporting research from the review of literature.

The implications for practice are detailed, and recommendations for future research are shared.

Chapter Five: Summary and Conclusions

RB-Banks and Meyer (2017) and Craig (2015) declared schools should provide safe learning environments for students using trauma-informed strategies. Trauma impacts brain and language development, emotional regulation, and school performance (Stateman-Weil, 2015). Students impacted by trauma feel unsafe in school environments due to being hypervigilant, which can cause learning difficulties (Diamanduros et al., 2018; NCTSN, 2008; Terrasi & de Galarce, 2017). Forming positive relationships can provide safety and support in the school setting to students exposed to trauma (Craig, 2016; Murphey & Sacks, 2019).

This mixed-methods study was conducted to determine if trauma-informed programming impacts student performance in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. Focus group participants had previously received trauma training by the Truman Medical Center. During the focus group sessions, the participants discussed the mind-shift required to implement trauma-informed programming. The participants also provided perceptions on discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma.

In this chapter, the findings from the research questions are discussed. The conclusions and implications for practice are detailed. Finally, recommendations for future research are presented.

Findings

Quantitative data originated from secondary data reported by the district employee at each of the schools who collected the MOSIS data. The data collected were

from the three years before implementation of trauma-informed programming and two years after the program was implemented. The data were reported in an Excel spreadsheet, and a two-tailed *t*-test was used to determine if there was a significant difference between data from the three years before implementation and two years after implementation of trauma-informed programming.

Research question one was developed to determine if there was a difference between discipline referrals that resulted in an in-school suspension in one trauma-informed consortium three years preceding implementation and two years after implementation of trauma-informed programming. There was not sufficient evidence to support the alternative hypothesis; therefore, the null hypothesis was not rejected. It can be concluded there was no significant difference in referrals resulting in in-school suspension from three years preceding implementation and two years after implementation of trauma-informed programming.

Research question two was developed to determine if there was a difference in discipline referrals that resulted in an out-of-school suspension in one trauma-informed consortium three years preceding implementation and two years after implementation of trauma-informed programming. The null hypothesis was not rejected, because there was not sufficient evidence to support the alternative hypothesis. There was no significant difference in the number of referrals that resulted in out-of-school suspension three years preceding implementation and two years after implementation of trauma-informed programming.

Research question three was developed to determine if there was a difference in average daily attendance percentage in one trauma-informed consortium three years

preceding implementation and two years after implementation of trauma-informed programming. The null hypothesis was not rejected, because there was not sufficient evidence to support the alternative hypothesis. There was no significant difference in average daily attendance between the three years preceding implementation and the two years after implementation of trauma-informed programming.

Research question four was developed to determine if there was a difference in the number of special education referrals in one trauma-informed consortium three years preceding implementation and two years after implementation of trauma-informed programming. The null hypothesis was not rejected, because there was not sufficient evidence to support the alternative hypothesis. There was no significant difference in the number of special education referrals between the three years preceding implementation and the two years after implementation of trauma-informed programming.

The data for the qualitative portion of the study were collected from three focus group discussions. Themes were developed based on open coding after eliciting the perceptions of trauma-informed teams regarding discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma. The themes aligned with the literature review.

The first notable theme during the focus group discussions was trauma training. Participants from all three schools discussed the formal training provided to building trauma teams by the Truman Medical Center. Trauma training was then provided to all school staff based on the information learned from the Truman Medical Center trauma training. Also, training was provided to students and parents.

The second theme was relationship-building. Relationship-building was described as the foundation of trauma-informed programming and included staff relationships with students and student relationships with peers. The second theme was discussed in all three focus groups.

The third theme was staff self-care. Self-care was included in school procedures and was the initial step in becoming a trauma-sensitive school. Staff self-care included understanding the personal impacts of trauma and developing plans for self-care.

The fourth theme was school-wide intervention systems. Each school district utilized different school-wide intervention systems, but all participants discussed the importance of using behavior supports. The school-wide intervention systems were not developed based on trauma-informed programming but were aligned with the programming. The individual schools implemented school-wide behavior systems based on their students' needs.

The fifth theme was self-regulation/sensory. The participants from three schools participating in the focus group discussions discussed self-regulation strategies. Mindfulness and calming corners provided students with proactive strategies to deescalate behavior. The perception of focus group participants was that addressing self-regulation had improved classroom management and allowed for more meaningful learning experiences because students were able to stay in the classroom.

The sixth theme was a mind-shift from traditional methods to trauma-informed programming. Participants from the three schools used the same verbiage when discussing behavioral mind-shift. School staff reported being more empathetic and trying

to understand what happened to the students. The mind-shift allowed staff to respond differently to behaviors in a positive and proactive way.

The seventh theme was safe learning environments. Providing a safe learning environment reduced re-traumatizing students in the school setting. When students' basic needs were met at school, the staff provided a safe learning environment. Positive relationships played a key role in providing a safe learning environment.

Conclusions

Triangulation of data is used in research to validate findings and draw conclusions (Johnson & Christensen, 2020). In this section, each research question is addressed.

The data collected from the review of literature, the quantitative secondary student data, and the qualitative data collected from the focus group discussions have been triangulated to formulate these conclusions.

Research question one. Research question one was developed to determine if trauma-informed practices reduced in-school suspension incidents. Craig (2015) discussed the impact of understanding trauma when he declared, "This link between cause and effect can help educators change school climate, instructional design, and behavior management and thereby build the capacity of all children to reach their full potential" (p. 17). A traumatic past may cause students to have difficulty with impulse control and aggressive behaviors (Craig, 2016; NCTSN, 2008; Stateman-Weil, 2015). Teachers can support students with behaviors due to trauma by teaching social and emotional skills, self-regulation strategies, clear boundaries and expectations, and predictable schedules (Dombo & Sabatino, 2019; Terrasi & de Galarce, 2017).

Those participating in focus groups reported teachers are learning to deescalate behaviors in a proactive way before students are sent to the office for a discipline referral. Schools 3 and 4 reported using the multi-tiered Behavior Intervention Support Team program in the classroom as a triage. Safe seats and calming corners provided opportunities for students to self-regulate.

Focus Group Member 3e stated, “The Behavior Intervention Support Team strategies allow students to stay in the classroom longer. If they have shut down and they are not doing their work, they are still in the class and still hearing the content.”

Participant 4h explained:

When there is a discipline issue, staff take the time to have a conversation with the kid and get to know a little more of what is happening before they are acting on it and having to discipline or send on to administration.

All participants discussed the power of positive relationships when reducing discipline referrals. Although the null hypothesis was not rejected, based on the literature review and qualitative data, trauma-informed programming may have a positive impact on student behavior in the school setting, potentially reducing in-school suspension incidents.

Research question two. Research question two was developed to determine if trauma-informed practices reduced out-of-school suspensions. The NCTSN (2017) reported, “Higher ACE [adverse childhood experience] scores had higher rates of suspension” (p. 1). Educational improvements were needed due to zero-tolerance policies and educators feeling ill-equipped to provide support to students delayed in social-emotional skills and academics (Blodgett & Dorado, 2016). The NCTSN

(2017) explained trauma-informed programs “work to actively counteract the effects of historical trauma, societal oppression including implicit and explicit bias, and institutional oppression including elimination disproportionality in punitive and exclusionary (out-of-school) discipline practices” (p. 9). Trauma-informed teachers can provide a safe learning environment that reduces children feeling unsafe due to punitive responses (Dombo & Sabatino, 2019).

Trauma impacts brain development and makes it difficult for students to regulate emotions (Cross et al., 2017). Neuroplasticity can take place when teachers understand how to provide emotional support to students (Terrasi & de Galarce, 2017). Dombo and Sabatino (2019) explained strategies to teach emotional regulation include emotion labeling, putting a face to emotion, reflecting on behavior, and calming strategies. The MODESE (2019) explained school districts in Missouri implementing trauma-informed programming reported reduced suspensions and office referrals.

Those participating in focus groups reported teachers are learning to deescalate behaviors in a proactive way instead of a reactive way. According to Participant 3a:

We are not sending as many kids home for behaviors due to trauma. We have learned how to handle them in-house. Maybe they are not able to go be in the classroom after an event, but we have them at school.

Schools 2, 3, and 4 discussed mindfulness, sensory rooms, relationships, and empathy have improved behaviors and classroom management. Although the null hypothesis was not rejected, based on the literature review and qualitative data, trauma-informed programming may have a positive impact on student behavior in the school setting, potentially reducing out-of-school suspension incidents.

Research question three. Research question three was developed to determine if trauma-informed practices improved attendance rates. The NCTSN (2017) reported, “Higher ACE [adverse childhood experience] scores had higher rates of unexcused absences” (p. 1). Absences in early grades can have long-lasting impacts on student achievement in school (Coelho et al., 2015).

Gottfried and Kirksey (2017) showed the negative impacts of absenteeism on student standardized test scores. According to Gottfried and Kirksey (2017), “[The] Every Student, Everyday initiative calls on schools and communities across the country to take immediate action by better tracking absence data and reducing chronic absenteeism” (p. 119). Chronic absenteeism is a risk for children exposed to trauma (Blodgett & Lanigan, 2018; Porche et al., 2016; Terrasi & de Galarce, 2017).

Participants from Schools 2, 3, and 4 reported district attendance rates had historically been high. Focus group participants’ perceptions were that students with chronic absences had improved due to establishing positive relationships with trusted adults in the school buildings. Schools 2, 3, and 4 reported the number of students asking to go to the office sick decreased, and students were more often staying at school all day. Although the null hypothesis was not rejected, based on the literature review and qualitative data, trauma-informed programming may reduce the number of students who are chronically absent.

Research question four. Research question four was developed to determine if trauma-informed practices impacted special education referrals. Identification of disabilities such as specific learning disabilities, autism, attention deficit hyperactivity disorder, and obsessive-compulsive disorder can be due to trauma in students (Zelazo et

al., 2016). Craig (2015) specified, “Children are diagnosed with a mental illness or disability that could be better explained as trauma. As a result, many received special education services or medications that do not meet their need because they do not treat the trauma” (p. 13). According to Porche et al. (2016), children with a mental health diagnosis are candidates for Individualized Education Programs due to externalizing or internalizing behaviors impacting their education.

The quantitative and qualitative data did not support a significant difference in the number of special education referrals due to trauma-informed programming. The participants of the focus group discussions shared special education referrals had not increased or decreased. Participant 2b discussed an increase in awareness that something might not be quite right, but that did not always result in a special education referral or 504 referral. Sometimes students were referred to community mental health clinicians.

Research question five. To answer research question five, themes were developed based on the perceptions of trauma-informed teams about discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing signs and symptoms of trauma. The eight focus group questions were asked, and the resulting themes included trauma training, relationship-building, staff self-care, school-wide behavior systems, self-regulation, mind-shift, and providing safe learning environments for all students. Based on the literature review, the themes align with trauma-training frameworks from the NCTSN (2017) and the Missouri Model for Trauma-Informed Schools (MODESE, 2019).

Trauma training. The importance of trauma training was discussed by all three schools’ participants. The trauma training was attended by selected trauma team

members based on their roles in the school. The Missouri Model for Trauma-Informed Schools recommended trauma teams include “between 5-10 individuals; a sample team included principal, instruction coordinator, school counselors, teacher, support staff, parent, school nurse, and community partner representative” (MODESE, 2019, pp. 8-9). The MODESE (2019), through the Missouri Model for Trauma-Informed Schools, suggested the three steps to becoming trauma-informed.

The steps include trauma training, establishing a trauma team, and continued monitoring to change programs, practices, and policies. The Missouri Model was created to provide common language and guidance for schools to become trauma-aware (MODESE, 2018). The universal training included the history of trauma, signs and symptoms of trauma, the impacts of trauma on students, and promoting resilience in students and school staff.

During the focus groups, participants from each school district discussed the universal four-day training they attended for the initial teams created. The participants shared that each year the teams added a team member who attended the initial training. The participants from School 2 explained the team was started based on who had the most background in trauma-informed care, and they continued to add new team members each year based on student interactions.

School 3’s team started with two counselors and one administrator, and the following year the district added support staff and a teacher. The nurse at School 3 was trauma trained through the Missouri School Nurses Association. School 4 started with two counselors and two administrators and grew based on information learned during the initial training. Also, the three trauma team members continued training through annual

professional development provided by the Truman Medical Center. The schools' trauma training and trauma teams align with the guidance provided by the MODESE (2018, 2019).

Relationship-building. Relationship-building was a continuous theme discussed throughout the three focus group sessions; everything circled back to building positive relationships with students and staff. Terrasi and de Galarce (2017) stated, "Informed educators build supportive relationships, explicitly teach executive functional skills, and nurture learning communities that care for all students" (p. 38). Trauma impacts brain development, but positive relationships can provide intervention and teach resilience (Cross et al., 2017; Plumb et al., 2016). Plumb et al. (2016) indicated, "Teachers must be empowered to build relationships with students based on trust, which will help students feel safe in school" (p. 45). Trauma-sensitive teachers develop positive relationships by providing self-regulation strategies in the classroom and understanding behavior caused by trauma (Craig, 2015; Terrasi & de Galarce, 2017).

Participants from Schools 2, 3, and 4 discussed the impact of having one positive relationship in the school; this provides a sense of safety for students. Focus Group Participant 2d shared, "I know that when a child has a relationship with somebody at school, it makes them want to come to school, and they can feel like they have a purpose." Focus group participants at School 3 discussed relationship-building goes beyond just teachers with students but also includes student relationships with peers.

Participants from School 4 shared their experiences with a program that provides high school mentors for elementary students. Participants from the three schools discussed procedures changing to include a focus on creating positive relationships daily.

The three schools have a morning point-of-contact plan in place, which provides multiple morning greetings for each person entering the building. Developing positive relationships with students who exhibit extreme behavior requires teachers to self-monitor their skills (Craig, 2016).

Staff self-care. Staff self-care was the first step in the schools' implementation of trauma-informed programming. The MODESE (2019) addressed staff self-care as part of the Missouri Model for Trauma-Informed Schools. A school that only addresses the impact of trauma on students will struggle with staff burnout, turnover, and compassion fatigue (MODESE, 2019). Elliott et al. (2018) explained the impact of compassion fatigue and the negative effects it has on job performance.

Teachers working with students impacted by trauma can suffer from compassion fatigue or secondary trauma (Brunzell et al., 2018; Craig, 2015; Elliott et al., 2018). Compassion fatigue and secondary trauma lead to teacher burnout (Elliott et al., 2018). Craig (2015) and the NCTSN (2008) warned against compassion fatigue, suggesting teachers should be trained to recognize signs of trauma and be given guidance to avoid secondary trauma stress.

Elliott et al. (2018) explained, "Awareness is key. School leaders must recognize that with increased incidences of student trauma comes increased exposure and risk of compassion fatigue" (p. 29). Teachers who have difficulty managing symptoms of compassion fatigue become teachers who leave education (Brunzell et al., 2018; Elliott et al., 2018).

All three participating school districts have implemented strategies to combat compassion fatigue due to secondary trauma. School 2 implemented a procedure to allow

staff to attend counseling sessions. School 3 discussed developing a road map, and self-care was the focus of year one of trauma-informed training district-wide. Participant 4h explained, “I guess you would say self-care was our first initial push.” Self-care is a focus step in the Missouri Model for Trauma-Informed Schools and was a focus of all three school districts during trauma-informed programming implementation.

School-wide intervention systems. School-wide intervention systems were discussed by the participants from the three schools. The Behavior Intervention Support Team was used by the participating school districts. Fluke and Peterson (2015) explained the Behavior Intervention Support Team as a multi-tiered behavior system that provides strategies to respond to behaviors in the classroom.

Behavior support systems provide teachers with proactive strategies to respond to behaviors in the school setting (Fluke & Peterson, 2015; George, 2018; Noltemeyer et al., 2019). Multi-tiered behavior supports that are implemented district-wide support all children in a proactive and efficient way, including students who display challenging behaviors Behavior Intervention Support Team, Character Strong, and Seven Habits of Happy Kids. School 2 participants explained Character Strong was implemented for all school-age children. It was reported students used the verbiage to overcome stressful situations such as being brave during a flu shot. Participants from School 3 discussed the Behavior Intervention Support Team model is based on building relationships with students to proactively respond to behavior.

Seven Habits of Happy Kids is a proactive program that gives students strategies to problem-solve and set personal goals. Participants from School 4 discussed using the Behavior Intervention Support Team as a triage for students in the classroom. School-

wide interventions are mentioned in the Missouri Model for Trauma-Informed Schools, and each school district that participated in the study described how intervention systems supplemented the trauma-informed programming.

Self-regulation. Self-regulation was a theme that aligned with the literature review and focus group discussions. Craig (2016) explained, “Early childhood trauma affects children’s stress regulation. A whole host of behaviors ranging from low energy, lack of motivation to aggression and defiance can be attributed to traumatized children’s inability to find and sustain a comfortable level of arousal” (p. 32). Children who are overstimulated struggle with self-regulation (NCTSN, 2008; Walkley & Cox, 2013).

School 2 participants discussed sensory items being placed in every classroom to self-regulate in a positive way. Focus Group Participant 3e stated:

Some of our old school teachers who in the past might have been hung up on their no gum rule because I have carpet, understand that maybe this is something the student needs, just to help self-regulate so that he can be okay and be productive in class.

Calming corners were used in the participating schools to provide students with the opportunity to self-regulate. Participants from School 4 discussed shifting the mindset to provide sensory activities for students. All of the participants talked about self-regulation and mindfulness strategies to promote self-regulation.

Mindfulness is an evidence-based intervention to support self-regulation (Ortiz & Sibinga, 2017). Mindfulness programs contribute to self-regulation and impact behaviors in the school setting (Harpin et al., 2016; Sheinman et al., 2018). Participants at School 3 discussed mindfulness was used to transform classroom management strategies. The

strategies taught could be sustainable and used in the classroom. Participants from School 4 discussed the elementary counselor's use of mindfulness in the classroom with students.

Mind-shift. Mind-shift was discussed by the focus groups and supported by the literature review. The Missouri Model for Trauma-Informed Schools advocates buy-in and shifting school beliefs and values to support trauma practices (MODESE, 2019). A paradigm shift is important when creating trauma-informed programming (Blodgett & Lanigan, 2018). Craig (2015) reported, "Research that establishes a link between trauma and children's academic and social failures provides educators with a new paradigm for interpreting student misbehaviors" (p. 5). Walkley and Cox (2013) discussed a challenge for trauma-informed schools is changing the mindset of traditional school programming.

Participants from Schools 2, 3, and 4 discussed the mind-shift with procedures and discipline. The mind-shift includes being more proactive versus reactive. According to Focus Group Participant 2h:

I think a lot has to do with the shifting of our thinking more so than any one thing. Now that we are in our third year of implementation of the trauma-sensitive school's mindset, along with the curriculum, which is how do we get to our why, that has helped with the shift.

The participants from School 3 discussed a district climate change. The mindset change was being more open to communicating with other staff members about student struggles. Participant 3d affirmed:

I have noticed through the trainings that the staff has become a lot more communicative and verbal about things that they see, but also questions that they

might have. Whereas before they would have tried to handle something in their room, either appropriately or inappropriately.

The participants from School 4 suggested communication and proactive strategies have helped with the trauma-informed mindset change. A mind-shift statement that aligned with the Missouri Model for Trauma-Informed Schools was “not what is wrong with you but what happened to you.” The information gained from the literature review and focus group discussions focused on the importance of mind-shift in trauma-informed programming.

Safe learning environments. Safe learning environments are pivotal in trauma-informed programming implementation. Dombo and Sabatino (2019) and Jennings (2019) discussed providing a safe learning environment is the first step in trauma programming. Terrasi and de Galarce (2017) stated, “Once students feel safe, welcomed, and included, there is no reason why they cannot develop positive relationships, healthy habits, and the ability to regulate their own emotions and behaviors, as well as succeed academically” (p. 37). Trauma-sensitive teachers foster positive relationships and provide self-soothing activities to create safe learning environments for students (Craig, 2016).

Participants from Schools 2, 3, and 4 discussed meeting students’ basic needs to provide a safe learning environment. Focus Group Participant 2b shared:

We have really taken a focus on meeting those basic things. Teachers are doing a lot more than we had to in the past filling a need that parents may be used to filling. You know there had been times that a student needed to take a nap, they

didn't sleep well at night, and an hour nap at school made a huge difference for them. It's not just about your academic learning, it's about being your best self. Participants from School 3 asserted fostering a safe learning-environment can provide students with an education and the opportunity to "break the cycle." Participants from School 4 declared school should be a place kids feel safe and have the ability to express themselves. Participants from School 4 encouraged all students to have a safe adult in the school building. All focus group participants felt safe learning environments provided students with opportunities to learn and grow in the area of social-emotional development.

Implications for Practice

Trauma-informed practices are unique to each individual school district (MODESE, 2019). Ongoing training is required to address changing practices and policies (MODESE, 2019). Trauma-informed programming is growing, and continued improvement is needed to support students and teachers in the educational setting.

Training for teachers. Teachers must receive training to understand trauma, the impacts of trauma, and effective strategies to support students who have experienced trauma. Understanding behaviors is an essential step in building a teacher's ability to respond to students impacted by traumatic experiences (Craig, 2016). Plumb et al. (2016) discussed the need for training about evidence-based practices in the school setting.

The NCTSNSC (2017) argued the importance of professional development in the area of trauma literacy. School administrators and leaders need to share the impact of trauma on brain development, behavior, and student achievement (NCTSNSC, 2017). Craig (2015) explained district-wide action planning raises awareness of trauma-

informed practices. Plumb et al. (2016) emphasized schools need to provide continuing education to educate staff in developing positive relationships, teaching social-emotional skills, and providing academic support for students who suffer from trauma.

Professional development. Teachers must be provided professional development, which may promote staff well-being to avoid teacher burnout. Providing professional development about successful strategies which can be implemented to avoid teacher burnout is critical (Elliott et al., 2018; NCTSN, 2017). The MODESE (2019) established:

It is beneficial to start by first addressing staff well-being. Staff well-being is multi-faceted and includes not only the physical, mental, and emotional health of the staff, but also includes making sure that staff have the appropriate tools, resources, and preparation to support students. (p. 9)

School leaders need to acknowledge and plan to combat compassion fatigue with training for staff (Elliott et al., 2018; MODESE, 2019; NCTSN, 2017).

Provide funding. To support sustaining trauma-informed programming in the public education setting, school districts must consider how the program will be funded. Missouri Senate Bill No. 638 (2016) and the MODESE (2019) provided guidance for school districts to support trauma-informed programming but did not provide funding for all school districts. According to the MODESE (2019), “SB [Senate Bill] 638 requires DESE to provide information to schools, but this does not represent a requirement for any school to provide trauma training to staff or begin the journey to becoming trauma-informed” (p. 4).

Plumb et al. (2016) explained funding should be used to provide district-wide training, reimburse staff or trainers for attending or presenting information, and purchase trauma tools to be used in the classroom. The participants explained the expenses of the trauma-informed training. Participants from School 3 discussed the issue of sustaining trauma-informed programming without funding from the grant provided to the Northwest Trauma-Informed Consortium school districts.

Recommendations for Future Research

Future studies on trauma-informed programming should consider elementary and secondary schools separately. An investigation of secondary schools would provide understanding of effective research-based strategies to support secondary staff and students. The study could be designed to compare effective strategies used in elementary settings, secondary settings, and strategies used at both levels to support trauma-informed programming.

Another recommendation for future research would be to include parent and student perceptions to gain a holistic view of the effectiveness of trauma-informed programming. The perceptions of parents and students should be compared to those of school staff to determine if trauma-informed practices are personally impacting the lives of students and parents. The perceptions of students and parents would allow a better understanding of feasibility and sustainability in a holistic manner. The MODESE (2019) suggested both parents and students should be engaged in the decision-making process regarding a trauma-informed program.

Lastly, a similar study could be replicated to examine the effects of trauma-informed programming five years preceding implementation of trauma-informed

programming and five years after implementation. This would allow school districts to determine the impacts of sustained trauma-informed practices. The data would show the educational and behavioral impacts of sustained five-year trauma-informed programming.

Summary

The purpose of this study was to determine the impact of trauma-informed programming on student performance in the areas of in-school suspension incidents, out-of-school suspension incidents, absenteeism, and special education referrals. Secondary data, focus group participants' perceptions, and the literature review were all considered and triangulated to determine the impact of trauma-informed programming. The study was significant, because it addressed the lack of research in the area of trauma-informed programming and its feasibility in the educational system (Blodgett & Lanigan, 2018; Overstreet & Chafouleas, 2016; Stevens, 2012).

Chapter One included a background of the study which described how trauma affects not only students but also those educators who witness the effects of trauma on their students in the classroom (Elliott et al., 2018; Figley, 2017; Terrasi & de Galarce, 2017). The Missouri Model: A Developmental Framework for Trauma-Informed Approaches was introduced as the conceptual framework. The statement of the problem, the purpose of the study, and the research questions and hypotheses were provided. The significance of the study, which addressed the lack of research regarding trauma-informed programs in education, was addressed. Also included in Chapter One were the definition of key terms, delimitations, limitations, and assumptions of the study.

The review of literature and conceptual framework were included in Chapter Two. The five stages of The Missouri Model: A Developmental Framework for Trauma-Informed Schools were explained in detail (MODESE, 2019). The review of literature included how a multi-tiered system of support can provide schools with comprehensive intervention for all students (Abuse, 2014; Phifer & Hull, 2016). Also addressed were the signs and symptoms of trauma for staff to watch for including students who refuse to complete assignments or who isolate themselves (Porche et al., 2016). The impacts of trauma provided in Chapter Two included how trauma affects executive functioning, language delay, behavior, and absenteeism in students affected by trauma.

Next, the areas of trauma interventions, social-emotional learning, and whole-school behavior supports were provided. Teacher well-being, trauma-informed policies, and the impacts of trauma-informed programming in schools were detailed. Finally, the review of literature included support for the initiative for trauma-informed programming supporting all students in their learning environments (Chafouleas et al., 2016; MODESE, 2019; The Every Student Succeeds Act, 2015).

In Chapter Three, the problem and purpose of the study were restated. Also provided in Chapter Three was a detailed description of the population and sample. The quantitative sample included secondary student data from a rural consortium in northwest Missouri. The qualitative sample included trauma teams from the same consortium. Random sampling was used to select the districts which participated in the study (Bergin, 2018; Creswell & Creswell, 2018; Fraenkel et al., 2019). A description of the instrumentation was provided. The mixed-methods design for this study included both quantitative and qualitative data (Bergin, 2018; Creswell & Creswell, 2018). Secondary

data were collected to determine the impacts of trauma-informed schools in the areas of in-school suspension, out-of-school suspension, absences, and special education referrals. The qualitative data were collected to compare the perspectives of trauma team members from three Northwest Missouri Trauma-Informed school districts.

A discussion of how the data were analyzed was provided. Inferential statistics were applied using a two-tailed *t*-test. Chapter Three concluded with an explanation of the ethical considerations utilized in the study.

An analysis of quantitative and qualitative data were presented in Chapter Four. The quantitative data were analyzed from three years before implementation of trauma-informed practices and two years after the program was implemented in the areas of in-school suspension, out-of-school suspension, average daily attendance percentages, and special education referrals. The null hypothesis was not rejected for each of the quantitative research questions.

The interview questions were discussed with three focus groups; participants included administrators, counselors, teachers, and support staff. During the qualitative phase of the study, seven major themes were identified. The seven major themes included trauma training, relationship-building, staff self-care, school-wide behavior systems, self-regulation, mind-shift, and providing safe learning environments for all students.

Chapter Five included the findings and conclusions of this study. Implications for practice were described including providing appropriate trauma training and staff self-care professional development opportunities. Finances to sustain the trauma-informed program are critical.

Finally, recommendations for future research were provided. Suggested was an investigation of secondary school trauma-informed programs and a comparison of elementary and secondary trauma-informed strategies used at both levels. Also recommended was a qualitative study of parental and student perceptions regarding the sustainability and feasibility of trauma-informed programs. The final recommendation was a suggestion to replicate this study by extending the time frame from three years before implementation and three years after implementation to five years before and after implementation.

References

- Abuse, S. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Adame, M. D. (2016). *A qualitative study exploring for educators tenets of trauma informed care beliefs and behaviors* (Doctoral dissertation, Grand Canyon University). Retrieved from <https://pqdtopen.proquest.com/doc/1850206899.html?FMT=AI>
- ADHD Weekly. (2019, January). *Executive function affects your life and goals*. Retrieved from <https://chadd.org/adhd-weekly/executive-function-affects-your-life-and-goals/>
- Barr, D. A. (2018). When trauma hinders learning. *Phi Delta Kappan*, 99(6), 39-44. Retrieved from <http://www.kappanonline.org/barr-trauma-hinders-learning/>
- Bergin, T. (2018). *An introduction to data analysis: Quantitative, qualitative and mixed methods*. Thousand Oaks, CA: SAGE Publications Limited.
- Blair, E. (2015). A reflexive exploration of two qualitative data coding techniques. *Journal of Methods and Measurement in the Social Sciences*, 6(1), 14-29. doi:10.2458/azu_jmmss_v6i1_blair
- Blitz, L. V., Anderson, E. M., & Saastamoinen, M. (2016). Assessing perceptions of culture and trauma in an elementary school: Informing a model for culturally responsive trauma-informed schools. *Urban Review: Issues and Ideas in Public Education*, 48(4), 520-542. Retrieved from <http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebSCOhostcom.ezproxy.lindenwood.edu/login.aspx?>

direct=true&db=eric&AN=EJ1116945&site=ehost-live

- Blodgett, C., & Dorado, J. (2016). *A selected review of trauma-informed school practice and alignment with educational practice*. Pullman, WA: CLEAR Trauma Center, Washington State University. Retrieved from <https://s3.wp.wsu.edu/uploads/sites/2101/2015/02/CLEAR-Trauma-Informed-Schools-White-Paper.pdf>
- Blodgett, C., & Lanigan, J. D. (2018). The association between adverse childhood experience (ACE) and school success in elementary school children. *School Psychology Quarterly*, 33(1), 137-146. Retrieved from <https://doi-org.ezproxy.lindenwood.edu/10.1037/spq0000256.supp>
- Bluman, A. G. (2017). *Elementary statistics: A step by step approach* (10th ed.). London, UK: McGraw-Hill International Book Company.
- Bowen, E. A., & Murshid, N. C. (2016). Trauma-informed social policy: A conceptual framework for policy analysis and advocacy. *American Journal of Public Health*, 106(2), 223-229. doi:10.2105/AJPH.2015.302970
- Brackett, M. A., Elbertson, N. A., Simmons, D. N., & Stern, R. S. (2019). *Implementing social and emotional learning (SEL) in classrooms and schools*. Naples, FL: National Professional Resources, Inc.
- Brunzell, T., Stokes, H., & Waters, L. (2018). Why do you work with struggling students? Teacher perceptions of meaningful work in trauma-impacted classrooms. *Australian Journal of Teacher Education*, 43(2), 116-142. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1171405.pdf>

- Burkholder, G. J., Cox, K. A., Crawford, L. M., & Hitchcock, J. H. (Eds.). (2020). *Research design and methods: An applied guide for the scholar-practitioner*. Thousand Oaks, CA: SAGE Publications, Incorporated.
- Carone, D. (2019). Cerebellar vermis. Retrieved from <https://www.medfriendly.com/cerebellar-vermis.html>
- Chafouleas, S. M., Johnson, A. H., Overstreet, S., & Santos, N. M. (2016). Toward a blueprint for trauma-informed service delivery in schools. *School Mental Health, 8*, 144-162. doi:10.1007/s12310-015-9166-8
- Coelho, R., Fischer, S., McKnight, F., Matteson, S., & Schwartz, T. (2015). The effects of early chronic absenteeism on third-grade academic achievement measures. In *Workshop in public affairs*. Madison, WI: Board of Regents of the University of Wisconsin System. Retrieved from <http://www.lafollette.wisc.edu/images/publications/workshops/2015-dpi-absenteeism.pdf>
- Cole, S. F., Eisner, A., Gregory, M., & Ristuccia, J. (2013). *Helping traumatized children learn: Safe, supportive learning environments that benefit all children*. Boston, MA: Massachusetts Advocates for Children Trauma and Learning Policy Initiative.
- Craig, S. E. (2015). *Trauma-sensitive schools: Learning communities transforming children's lives, K-5*. New York, NY: Teachers College Press.
- Craig, S. E. (2016). The trauma-sensitive teacher. *Educational Leadership, 74*(1), 28-32. Retrieved from http://www.ascd.org/publications/educational_leadership/sept16/vol74/num01/The_Trauma-Sensitive_Teacher.aspx

- Cramer, N. V. (2018). Using trauma-informed pedagogy to make literacy and learning relevant and engaging for students of poverty. *Texas Association for Literacy Education Yearbook*, 8, 77. Retrieved from http://www.texasreaders.org/uploads/4/4/9/0/44902393/2018_tale_yearbook.pdf#page=77
- Creswell, J., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Los Angeles, CA: SAGE Publications Inc.
- Cross, D., Fani, N., Powers, A., & Bradley, B. (2017). Neurobiological development in the context of childhood trauma. *Clinical Psychology: Science and Practice*, 24(2), 111-124. doi:10.1111/cpsp.12198
- Diamanduros, T. D., Tysinger, P. D., & Tysinger, J. (2018). Trauma and its impact on children. *Communique*, 46(6), 1. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db&AN=EJ1172551&site=ehost-live>
- Dombo, E. A., & Sabatino, C. A. (2019). Trauma care in schools: Creating safe environments for students with adverse childhood experiences. *American Educator*, 43(2), 18. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1218781.pdf>
- Dorado, J. S., Martinez, M., McArthur, L. E., & Leibovitz, T. (2016). Healthy environments and response to trauma in schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health*, 8(1), 163-176. doi:10.1007/s12310-016-9177-0
- Dutta, S. S. (2019, August 20). *Hippocampus functions*. Retrieved from <https://www.news-medical.net/health/Hippocampus-Functions.aspx>

- Elliott, K. W., Elliott, J. K., & Spears, S. G. (2018). Teaching on EMPTY: As more students suffer from trauma, compassion fatigue is becoming a problem for teachers and administrators alike. *Principal*, 98(2), 28-29. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eft&AN=133084913&site=ehost-live>
- Figley, C. (2017). *Did you know?* Retrieved from <https://www.compassionfatigue.org/index.html>
- Fluke, S. M., & Peterson, R. L. (2015). *Behavior intervention support team (BIST)*. Lincoln, NE: Student Engagement Project, University of Nebraska-Lincoln and the Nebraska Department of Education. Retrieved from <https://k12engagement.unl.edu/strategy-briefs/Project%20BIST%2012-17-15%20LK.pdf>
- Fraenkel, J., Wallen, N., & Hyun, H. (2019). *How to design and evaluate research in education* (10th ed.). New York, NY: McGraw-Hill Education.
- George, H. P. (2018). Introduction to the special issue of *Behavioral Disorders*: Positive behavior interventions and supports. *Behavioral Disorders*, 43(3), 340-343. doi:10.1177/0198742918763951
- Gottfried, M. A., & Kirksey, J. J. (2017). “When” students miss school: The role of timing of absenteeism on students’ test performance. *Educational Researcher*, 46(3), 119-130. doi:10.3102/0013189X17703945
- Guidetti, G., Viotti, S., Badagliacca, R., Colombo, L., & Converso, D. (2019). Can mindfulness mitigate the energy-depleting process and increase job resources to prevent burnout? A study on the mindfulness trait in the school context. *PLoS*

One, 14(4), e0214935. Retrieved from <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0214935>

Harpin, S. B., Rossi, A., Kim, A. K., & Swanson, L. M. (2016). Behavioral impacts of a mindfulness pilot intervention for elementary school students. *Education*, 137(2), 149-156. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=eft&AN=120179274&site=ehost-live>

Hymel, S., Low, A., Starosta, L., Gill, R., & Schonert-Reichl, K. (2018). Promoting mental well-being through social-emotional learning in schools: Examples from British Columbia. *Canadian Journal of Community Mental Health*, 36(Special Issue), 97-107. Retrieved from <https://www.cjcmh.com/doi/pdf/10.7870/cjcmh-2017-029>

Jennings, P. A. (2019). Teaching in a trauma-sensitive classroom: What educators can do to support students. *American Educator*, 43(2), 12. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1218755.pdf>

Johnson, R. B., & Christensen, L. (2020). *Educational research: Quantitative, qualitative, and mixed approaches*. Thousand Oaks, CA: SAGE Publications, Incorporated.

Madigan, K., Cross, R. W., Smolkowski, K., & Strycker, L. A. (2016). Association between schoolwide positive behavioural interventions and supports and academic achievement: A 9-year evaluation. *Educational Research and Evaluation*, 22(7-8), 402-421. doi:10.1080/13803611.2016.1256783

Merriam, S. B., & Grenier, R. S. (Eds.). (2019). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco, CA: Jossey-Bass.

- Missouri Department of Elementary and Secondary Education. (2018). *The trauma-informed schools initiative*. Jefferson City, MO: Author. Retrieved from https://dese.mo.gov/sites/default/files/cnsl_Missouri_Model%20school_guidance_doc.pdf
- Missouri Department of Elementary and Secondary Education. (2019). *The Missouri model for trauma-informed schools*. Jefferson City, MO: Author. Retrieved from https://dese.mo.gov/sites/default/files/cnsl_Missouri_Model%20school_guidance_doc.pdf
- Missouri Department of Mental Health. (2015). *The Missouri model: A developmental framework for trauma*. Jefferson City, MO: Author. Retrieved from <https://dmh.mo.gov/trauma/MO%20Model%20Working%20Document%20february%202015.pdf>
- Missouri Senate Bill No. 638. §161.1050, 98th RSMo (2016). Retrieved from <https://legiscan.com/MO/text/SB638/id/1409104>
- Morton, B. M., & Berardi, A. A. (2018). Trauma-informed school programming: Applications for mental health professionals and educator partnerships. *Journal of Child & Adolescent Trauma, 11*(4), 487-493. doi:10.1007/s40653-017-0160-1
- Murphey, D., & Sacks, V. (2019). Supporting students with adverse childhood experiences. *American Educator, 43*(2), 8-43. Retrieved from https://www.aft.org/sites/default/files/ae_summer2019_aces.pdf
- National Child Traumatic Stress Network Schools Committee. (2008). *Children trauma toolkit for educators*. Los Angeles, CA, & Durham, NC: National Center for

Child Traumatic Stress. Retrieved from <https://www.nctsn.org/resources/child-trauma-toolkit-educators>

National Child Traumatic Stress Network Schools Committee. (2017). *Creating, supporting, and sustaining trauma-informed schools: A system framework*. Los Angeles, CA, and Durham, NC: National Center for Child Traumatic Stress. Retrieved from <https://www.nctsn.org/resources/creating-supporting-and-sustaining-trauma-informed-schools-system-framework>

Noltemeyer, A., Palmer, K., James, A. G., & Petrusek, M. (2019). Disciplinary and achievement outcomes associated with school-wide positive behavioral interventions and supports implementation level. *School Psychology Review*, 48(1), 81-87. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1210611.pdf>

Op den Kelder, R., Ensink, J. B. M., Overbeek, G., Maric, M., & Lindauer, R. J. L. (2017). Executive function as a mediator in the link between single or complex trauma and posttraumatic stress in children and adolescents. *Quality of Life Research*, 26(7), 1687-1696. doi:2048/10.1007/s11136-017-1535-3

Ortiz, R., & Sibinga, E. M. (2017). The role of mindfulness in reducing the adverse effects of childhood stress and trauma. *Children*, 4(3), 16. doi:10.3390/children4030016

Overstreet, S., & Chafouleas, S. M. (2016). Trauma-informed schools: Introduction to the special issue. *School Mental Health*, 8(1), 1-6. doi:10.1007/s12310-016-9184-1

Phifer, L. W., & Hull, R. (2016). Helping students heal: Observations of trauma-informed practices in the schools. *School Mental Health*, 8(1), 201-205. doi:10.1007/s12310-016-9183-2

- Plumb, J. L., Bush, K. A., & Kersevich, S. E. (2016). Trauma-sensitive schools: An evidence-based approach. *School Social Work Journal, 40*(2), 37-60. Retrieved from <http://www.communityschools.org/assets/1/AssetManager/TSS.pdf>
- Porche, M. V., Costello, D. M., & Rosen-Reynoso, M. (2016). Adverse family experiences, child mental health, and educational outcomes for a national sample of students. *School Mental Health, 8*(1), 44-60. doi:10.1007/s12310-016-9174-3
- Ravitch, S. M., & Carl, N. M. (2015). *Qualitative research: Bridging the conceptual, theoretical, and methodological*. Thousand Oaks, CA: Sage Publications.
- RB-Banks, Y., & Meyer, J. (2017). Childhood trauma in today's urban classroom: Moving beyond the therapist's office. *Educational Foundations, 30*(1-4), 63-75. Retrieved from <http://ezproxy.lindenwood.edu:2048/login?url=https://search-ebshost-com.ezproxy.lindenwood.edu/login.aspx?direct=true&db=eric&AN=EJ1173234&site=ehost-live>
- Schonert-Reichl, K. A., Oberle, E., Lawlor, M. S., Abbott, D., Thomson, K., Oberlander, T. F., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: A randomized controlled trial. *Developmental Psychology, 51*(1), 52. doi:10.1037/a0038454
- Sheinman, N., Hadar, L. L., Gafni, D., & Milman, M. (2018). Preliminary investigation of whole-school mindfulness in education programs and children's mindfulness-based coping strategies. *Journal of Child and Family Studies, 27*(10), 3316-3328. doi:10.1007/s10826-018-1156-7

- Simon, M. K., & White, J. (2016). Survey/interview validation rubric for expert panel-VREP©. Retrieved from dissertationrecipes.com/wp-content/uploads/2011/04/Expert-Validation-v3.pdf
- Skiba, R. J., & Losen, D. J. (2016). From reaction to prevention: Turning the page on school discipline. *American Educator*, 39(4), 4. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1086522.pdf>
- Stateman-Weil, K. (2015). Creating trauma-sensitive classrooms. *Young Children*, 70(2). Retrieved from <https://www.naeyc.org/resources/pubs/yc/may2015/trauma-sensitive-classrooms>
- Stevens, J. (2012, October 3). The adverse childhood experiences study – the largest, most important public health study you never heard of – began in an obesity clinic. *ACES Too High News*. Retrieved from <https://acestoohigh.com/2012/10/03/the-adverse-childhood-experiences-study-the-largest-most-important-public-health-study-you-never-heard-of-began-in-an-obesity-clinic/>
- Terrasi, S., & de Galarce, P. C. (2017). Trauma and learning in America’s classrooms. *Phi Delta Kappan*, 98(6), 35-41.
- The Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015). Retrieved from <https://www.congress.gov/bill/114th-congress/senate-bill/1177>
- Walkley, M., & Cox, T. L. (2013). Building trauma-informed schools and communities. *Children & Schools*, 35(2), 123-126.
- Weissberg, R. P. (2019). Promoting the social and emotional learning of millions of school children. *Perspectives on Psychological Science*, 14(1), 65-69. Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/1745691618817756>

Zelazo, P. D., Blair, C. B., & Willoughby, M. T. (2016). *Executive function: Implications for education* (NCER 2017-2000). Washington, DC: National Center for Education Research. Retrieved from files.eric.ed.gov/fulltext/ED570880.pdf

Appendix A

Secondary Data Sheet

Secondary Data for In-School Suspensions

School	3 years before	2 years before	1 year before	1st year of program	2nd year of program
S1					
S2					
S3					
S4					

Secondary Data for Out-of-School Suspensions

School	3 years before	2 years before	1 year before	1st year of program	2nd year of program
S1					
S2					
S3					
S4					

Secondary Data for Absenteeism/ Average Daily Attendance

School	3 years before	2 years before	1 year before	1st year of program	2nd year of program
S1					
S2					
S3					
S4					

Secondary Data for Special Education Referrals

<u>School</u>	<u>3 years before</u>	<u>2 years before</u>	<u>1 year before</u>	<u>1st year of program</u>	<u>2nd year of program</u>
S1					
S2					
S3					
S4					

Appendix B

Focus Group Questions

1. What was the process of becoming a trauma-sensitive/trauma-informed school?
2. What policies and/or procedures were changed after implementation to help recognize and respond to trauma?
3. In what ways have the signs and symptoms of trauma become easier to identify?
4. In what ways has the trauma-informed program been a factor in the revision of behavior procedures?
5. In what ways has the trauma-informed program affected attendance rates?
6. In what ways has the trauma-informed program affected the number of referrals for special education?
7. In what ways has the trauma-informed program transformed classroom instructional and management strategies?
8. What trauma-informed strategies are utilized to improve academic performance for students who have experienced trauma?

Appendix C
Permission Letter

Date:

RE: Permission to Conduct Research in the _____ School District

Dear _____:

I am writing to request permission to conduct research in the _____ School District. I am currently pursuing my doctorate through Lindenwood University and am in the process of writing my dissertation. The study is entitled, *Trauma-Informed Practices in Schools*. Dr. Sherry DeVore, my research supervisor, has given her approval for me to send you this request. Dr. DeVore's email address is sdevore@lindenwood.edu and cell phone number is [REDACTED]. Please feel free to contact her if you have questions about this study.

I am asking permission to collect data on discipline, attendance, and special education referrals. Also, if possible, I would like to interview members of the trauma team from six elementary schools. Only members who have implemented trauma-sensitive strategies for two or more years will be asked to participate in the focus group.

If you agree, please sign below, scan this page, and email back to me, Kendra Scott, at ks384@lindenwood.edu. Your approval to conduct this study will be greatly appreciated. I would be happy to answer any questions or concerns that you may have regarding this study.

Sincerely,

Kendra Scott, Doctoral Student at Lindenwood University

Approved by:

Print name and title here

Signature

Date

Appendix D

Institutional Review Board Approval

Aug 27, 2019 1:00 PM CDT

RE:

IRB-20-13: Initial - Trauma-Informed Practices in Schools

Dear Kendra Scott,

The study, Trauma-Informed Practices in Schools, has been approved as Exempt.

Category: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

The submission was approved on August 27, 2019.

Here are the findings:

- This study has been determined to be minimal risk because the research is not obtaining data considered sensitive information or performing interventions posing harm greater than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.

Sincerely,

Lindenwood University (lindenwood) Institutional Review Board

Appendix E

Introductory Letter

Date:

You are being asked to participate in a research study. This study is being conducted to determine the impact of trauma-informed approaches on students' school performance, specifically in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. The focus group questions will elicit perceptions with regard to the following aspects of trauma-informed programs: discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing the signs and symptoms of trauma.

During this study, you will be asked to answer eight open-ended questions that focus on your perspectives on trauma-informed programs. It will take about an hour to complete this study. Your participation is voluntary. You may choose not to participate or to withdraw at any time. There are no risks from participating in this project. There are no direct benefits for you participating in this study.

Thank you for your consideration,

Kendra Scott

Appendix F**LINDENWOOD****Research Information Sheet**

You are being asked to participate in a research study as a member of a focus group. We are conducting this study to determine the impact of trauma-informed approaches on students' school performance, specifically in the areas of in-school suspension, out-of-school suspension, absenteeism, and special education referrals. The focus group questions will elicit perceptions with regard to the following aspects of trauma-informed programs: discipline policies, attendance rates, special education referrals, academic performance, classroom management, and recognizing the signs and symptoms of trauma. During this study, you will be asked to answer eight open-ended questions that focus on your perspectives on trauma-informed programs. It will take about an hour to complete this study. The four focus groups will each include 5-8 trauma team members who participate in the Northwest Missouri Trauma-Informed Consortium.

Your participation is voluntary. You may choose not to participate or to withdraw at any time.

There are no risks from participating in this project. There are no direct benefits for you participating in this study. We will not collect any data which may identify you.

We will do everything we can to protect your privacy. We do not intend to include information that could identify you in any publication or presentation. Any information we collect will be stored by the researcher in a secure location. The only people who will be able to see your data include members of the research team, qualified staff of Lindenwood University, and representatives of state or federal agencies.

Who can I contact with questions?

If you have concerns or complaints about this project, please use the following contact information:

Kendra Scott at ks384@lindenwood.edu

Dr. Shelly Fransen at sfransen@lindenwood.edu

If you have questions about your rights as a participant or concerns about the project and wish to talk to someone outside the research team, you can contact Michael Leary (Director - Institutional Review Board) at 636-949-4730 or mleary@lindenwood.edu

Appendix G

Trauma-Sensitive Schools Roadmap for School 3

Year 1:

Focus: SELF CARE

As a team, complete trauma-sensitive schools crosswalk to determine needs.

- August PD
 1. Present initiative to staff during beginning of the year PD (slideshow)
 2. Understanding trauma, self-care: finding the time, and hugging a porcupine handouts
 3. Have elementary and secondary staff complete building needs assessments to create goals.
- January PD
 1. Check-in, share results, share student stories.
 2. Create Power Plans for self-care.
 3. Discuss self-regulation strategies. Provide fidgets, mindful minute cards, additional resources.

Year 2:

Focus: RELATIONSHIPS

- August PD
 1. Start with the Why – [REDACTED] slip and the thought process behind the Why
 2. Share how the Why helped us create our vision. Post vision statement as well as the goals created.
 3. Re-education of Trauma (examples of big vs. “small” traumas)
 4. Transition into relationships – how relationships reduce trauma, how they impact students where they are, the power of empathy and understanding
 5. Break-out groups: improving relationships with 1. Students; 2. Staff; 3. Parents/Community
 6. Empathy video: ‘What I want my teacher to know’
 7. Where do we go from here? How will we put this into practice? Create personal relationship goals for 18-19 school year.
- January PD
 1. Relationship “building buddies” (assign teachers at each level)
 2. Self Esteem take-away activity (hands for each teacher – individuals anonymously write positive characteristics on each finger of the hand)
 3. ACES quiz question activity (stand in line, step forward if the statement pertains to you; face those in line behind, place hand on heart to honor the challenge)
- April PD
 1. Teacher Olympics – “newlywed game” for teacher buddies, staff team building rotation

Year 3:**Focus: RESILIENCE – SUSTAINABILITY**

- August PD
 1. Remind staff of where we've been and where we are going
 2. Discuss growth/fixed mindset and empathy
 3. Famous Failures bulletin boards/door posters
 4. Listening activity
 5. Student training/nominations for leadership academy
 6. Motivational speaker for climate/culture: [REDACTED]
 - January PD
 1. ACES surveys for all staff
 2. Small group breakouts to process
 3. Resilience related activity
 - February PD
 1. 30 minute check-in
 - April PD
 1. Expressive arts project – discuss challenges, comfort level, resilience, and parallel to how students may feel when presented with similar expectations in a classroom setting
 2. Revisit year 1 survey results. Complete post-survey to determine growth.
-

Vita

Kendra D. Scott attended Evangel University for her undergraduate degree, Drury University for her master's degree, and Arkansas State University for her specialist degree. She obtained a bachelor's of science in Psychology with a minor in Social Sciences in 2010. She graduated with a master's degree in Special Education in 2012. In 2016, she received her specialist degree in Educational Leadership.

Kendra started her teaching career with Branson Public Schools in Branson, Missouri. She taught special education American History, World History, and Government for five years. In 2015, she started her current position as a special education process coordinator.