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Trauma Sensitive Schools

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Thank you to my parents for fostering a love for learning. To my mom who gave me a heart for people in need and my dad who nurtured a desire to always make a difference.

Abstract

Recent research has shown that an astounding number of children have faced adverse childhood experiences. Due to this fact, many of the students sitting in American classrooms have traumatic backgrounds that can cause a variety of side effects including a lack of academic focus, depression, PTSD, and low social-emotional abilities. Schools are the perfect place to implement trauma sensitive frameworks to provide these students an accessible education. Effective trauma sensitive schools are relational, empowering, and consistent. With these traits, research has shown that depression and PTSD symptoms can be reduced, behavior problems can be decreased, and attendance can increase.

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CHAPTER I: INTRODUCTION

Need for Trauma Sensitive Schools

The Substance Abuse and Mental Health Services Administration (SAMHSA) defines trauma as:

> experiences that cause intense physical and psychological stress reactions. It can refer to a single event, multiple events, or a set of circumstances that is experienced by an individual as physically and emotionally harmful or threatening and that has lasting adverse effects on the individual's physical, social, emotional, or spiritual well-being. (Substance Abuse and Mental Health Services Administration, Key Terms, 2014).

Every year in the United States millions of youth are exposed to traumatic events. In a study of children age 9-13 that were followed until they were 16 (N=1420), more than two-thirds of the children reported at least 1 traumatic event by age 16 (Copeland, Keeler, Angold, & Costello, 2007). Though violence is more prevalent in urban areas compared to suburban and rural areas, according to the Bureau of Justice, that does not mean traumatic events are not happening elsewhere. In a study of 136,549 sixth, ninth, and twelfth grade students from all across Minnesota, 28.9% reported at least one adverse childhood experience (Duke, Pettingell, McMorris & Borowsky, 2010). Traumatic events happen in war torn countries, impoverished neighborhoods, and in the wealthiest of suburbs. The effect of trauma on learning is dramatic and it can have mental, physical, emotional, and behavioral effects.

Adverse Childhood Experiences

The study of adverse childhood experiences (ACE) and effects on the brain and

learning has become a major topic of discussion in public schools across the country. The Minnesota Department of Health (2013) considers the following to be ACE: mental illness of a household member, problematic drinking or alcoholism of a household member, illegal street or prescription drug use by a household member, divorce or separation of parents, domestic violence toward a parent, incarceration of a household member, and physical, sexual, or emotional abuse (Baurn, Peterson-Hickey, Ayers & Scott, 2013). One of the first and largest ACE studies was conducted in 2005. In this study, 17,337 adults in the United States were surveyed and the study found that 63.9 percent had experienced at least one significant traumatic event by age 16; meanwhile, 38 percent experienced multiple traumatic events by that same age (Anda et al., 2005). This same study reported that ACE's led to premature death among family members as well as other serious health concerns. The evidence of such long-term physical consequences of childhood trauma demands the public's attention.

Not only ACE's have a lasting physical effect, but they also often produce significant psychological effects. Some children develop new fears, separation anxiety, nightmares, sadness, loss of interest in normal activities, reduced concentration, decline in schoolwork, anger, and even Post-Traumatic Stress Disorder (PTSD) (Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents, 2008). These psychological changes have direct impact on a child's school performance. Students affected by trauma may start the day with intentions of being successful and fitting in with other students; but in spite of their good intentions they can find themselves frustrated, audacious, difficult, and without hope by the end of the day. Children who live in violent homes and/or environments see the world through a different lens than those who grow

up with stable, calculable home lives. For these children school is unpredictable, their brains have been wired to be on the lookout for threats at all times (Cole et al. 2005). A recent study on soldiers who have returned from Operation Iraqi Freedom found that 14% were experiencing PTSD (Tanielian, 2008). When a soldier returns from combat, the military first checks for symptoms of PTSD so that proper supports can be put in place. Yet in a study of 96 students living in impoverished neighborhoods in Miami, 34.5% of met the full criteria of having PTSD and 48.8% were symptomatic but did not meet the full criteria (Berman, Kurtines, Silverman & Serafini, 1996). By this information the percent of students in classrooms with PTSD is higher than that of American soldiers returning from war in the Middle East.

The ACE study mentioned above (Duke, Pettingell, McMorris & Borowsky, 2010), found that adverse events made for more violent children. The more adverse experiences a student had, the more likely they were to commit violent acts. When students who had four or more adverse events were compared with students with no adverse-event experiences, the likelihood of violence perpetration increased from two to seven fold and 2.7 to 10 fold for females and males respectively (Duke, Pettingell, McMorris & Borowsky, 2010). It is essential that educators consider how they are serving students impacted by trauma and what it looks like to support these students' needs.

Trauma's Affect on Learning

There is a growing amount of research on how trauma can affect academic performance. In 2008, a three-year study with 2nd-5th graders took place (N=162). Of these students, 19 percent identified as African American, 45 percent Hispanic, and 33 percent Caucasian. There was also a range of social economic status determined by

qualification status for free or reduced lunch. Of these students, 38 percent came from low-income families (receiving free lunch), 12 percent came from middle-income families (receiving reduced lunch), 34 percent came from high-income families (ineligible for free or reduced lunch), and 16 percent were missing that data. The study evaluated the connection between two pieces of data: the number of traumatic events experienced during this three year period and reading scores based on standardized test percentile ranks. In this study, students who had no experience with trauma showed no significant change in their reading scores. However, students who had experienced moderate amounts of trauma had scores that dropped significantly, from 52.7 to 43.6 from year one to year three. The high exposure group experienced a drop of 57.5 to 51.3 from year two to year three. The data suggests that traumatic experiences directly affect student's ability to learn and show their knowledge on a standardized reading test (Duplechain, Reigner, & Packard 2008).

Traumatized children are not able to process verbal information the same as other students. They may receive the same lecture, but it can appear to go in one ear and out the other. These students can often also have a hard time understanding cause and effect relationships. When the world around is seemingly chaotic and unpredictable it can be hard to grasp a sense of personal efficacy or control (Cole et al. 2009). Many traumatized children experience attention problems. It appears to teachers that they have an inability to pay attention. "They do not pay attention because they are unable to distinguish between relevant and irrelevant information. They tend to misinterpret innocuous stimuli as traumatic and, if not interpreted as traumatic, they tend to ignore sensory input." (Streek-Fischer & Van Der Kolk, 2000, p. 912). Many studies have associated trauma with

disruptive behavior, low academic performance, and higher dropout rates in schools (Wolpow, Johnson, Hertel, & Kincaid, 2009). With all of these barriers to learning it is clear that unique interventions need to be put into place, which provide the support, predictability, and safety that will ensure traumatized children learn.

Bruce Perry is a leading American child psychiatrist and Senior Fellow at the Child Trauma Academy. He raises an incredible concept that schools cannot and should not turn away from:

> If 20 million people were infected by a virus that caused anxiety, impulsivity, aggression, sleep problems, depression, respiratory and heart problems, vulnerability to substance abuse, antisocial and criminal behavior, . . . and school failure, we would consider it an urgent public health crisis. Yet, in the United States alone, there are more than 20 million abused, neglected and traumatized children vulnerable to these problems. Our society has yet to recognize this epidemic, let alone develop an immunization strategy. (Perry, 2014, para. 1).

History of Trauma Sensitive Schools

How to be a Trauma-Sensitive School (TSS) has become a growing topic in American education in the past decade. Schools are looking to find the best ways to support students who have experienced trauma. The idea of providing equitable education for these students has been addressed through many different names: Trauma Informed Education (TIE), Trauma-Informed Practice (TIP), Trauma-Informed Positive Education (TIPE), Trauma-Informed Schools (TIS), Positive Behavioral Intervention and Supports (PBIS). These are the current big names in this domain. All of the abbreviations mentioned above have the same purpose; to provide structure/framework for schools to meet the particular

needs of students exposed to childhood trauma. For the purpose of this thesis TSS will be the abbreviation used.

Research has only recently begun on the topic of TSS and a few major publications have led the way on what a TSS should look like. In 1995, Sandra Bloom wrote *Creating Sanctuary in the Schools.* It was the first of its kind, laying the groundwork for why public schools were the best avenue to reach the greatest number of traumatized students, and to outline what such service should look like. In 1998, Ann Masten and Douglas Coatsworth published *The Development of Competence in Favorable and Unfavorable Environments: Lessons from research on successful children.* It was composed of compiled research on the common traits that competent and resilient children share. They found that no matter what kind of environment these competent and resilient children came from they had (1) a parent or caregiver that filled a positive mentorship role, (2) good cognitive skills that would predict academic success and rule abiding behaviors, and (3) the ability to self-regulate (Masten & Coatsworth, 1998).

In the following years, multiple large initiatives emerged supporting the development of these three crucial needs: *Helping Traumatized Children Learn* was a publication by the Massachusetts Advocates for Children that was the first real handbook for schools that gave a framework for trauma-sensitive environments (Cole et al. 2005). *The Heart of Teaching and Learning* taught a philosophy called compassionate teaching that enveloped similar traits to provide the best climate for students dealing with trauma; it was developed as a backbone for the Washington state public schools (Wolpow, Johnson, Hertel, & Kincaid, 2009). Schools are the perfect entry point for mental health services. In creating TSS, students have the opportunity to access the support they need. Overall,

trauma informed practices are best practice, and students who have not been greatly affected by trauma can also benefit from these teaching strategies. This research will analyze the following questions: What are the characteristics of an effective TSS? What are the outcomes for children who have experienced a TSS?

Personal Connection

I have spent my first two years as an educator in Minneapolis Public Schools teaching 6th-8th-grade math. I could not have imagined what these kids would teach me and how they would challenge me. As a naïve first year teacher I thought that all 13 year olds would just naturally find the same excitement in exponential equations that I did. But I soon began to realize my students were coming to school with a very different perspective of the world than I ever had: unpredictable, threatening, and hopeless. To them, school was not a place they felt they belonged. At Jefferson, 95 percent of students live in poverty, and 23 percent are labeled homeless or highly mobile. I have students who have spent years of their childhood in refugee camps, who can describe leaving part of their family behind to cross the Rio-Grande, and who write poetry about the day their dad was shot. Almost all of the kids who walk into my classroom bring enormous amounts of hidden baggage.

I grew up thinking that I wanted to teach because I wanted to show that we are all born mathematicians, that our brains are logic making, pattern seeking machines. I still believe that, but it has not taken me long to realize that teaching is much more than simply teaching how to solve for x. If we do not meet our students in the unique way that they need, then no matter what amazing activities we do, the information will not sink in. I am continually challenged to find ways to reach students who have completely unpredictable home-lives and lingering effects of trauma running through their heads all day. This

challenge is what has made me so passionate about the research of this thesis on effective trauma sensitive schools.

Chapter II: LITERATURE REVIEW

Overview of Research Process

The research for this study was completed initially using the Bethel University library databases including Academic Search Premier, EBSCO, JSTOR, ProQuest, PsycARTICLES, and ScienceDirect. Google Scholar was used later in the research process. Only academic, peer-reviewed articles and books were used. Search terms included: trauma sensitive schools, trauma informed education, adverse childhood experiences, intervention, multi-tiered system of supports, social emotional learning, violence, poverty, prevention, and titles and authors found in references in preliminary reading. In the initial reading many studies were found on small group, pull out, interventions or in non-traditional school settings (Day et. al., 2015; Harden et. al., 2015; Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013; Kataoka et. al., 2003; Morsette et. al., 2009; Salloum & Overstreet, 2012; Stein et. al., 2003; West, Day, Somers, & Baroni, 2014; Mendelson, Tandon, O'Brennan, Leaf, & Lalongo, 2015). These studies found a lot of success but allowed too many unidentified students to never get the intervention and education that they deserve. The task then became finding whole school studies that implemented similar strategies and understanding how small group interventions could be used in the scope of a whole school intervention.

Characteristics of a Successful Trauma Sensitive School

There are three key characteristics that run through every effective trauma sensitive school: they are relational, empowering, and consistent/predictable. These characteristics affect the school from the top down to provide support for all students, especially those who have experienced traumatic events in their childhood.

Relational

Depending on the particular model, the relational component of TSS is referred to differently. In the ARC model from *Helping Traumatized Children Learn,* by Cole et al., "A" stands for attachment. In this model one of the three main foci is building strong attachments between children and caregivers (Cole et al. 2005). However, this is not the only way this program would be considered relational. It is impossible to create a trauma sensitive school without having strong positive relationships between staff and students as well as creating a community among students. In *The Heart of Teaching and Learning,* by Wolpow, Johnson, Hertel, and Kincaid, the second of three domains focuses in on safety, connection, and assurance. Here teachers work on being relationship coaches by teaching students how to have positive relationships with peers and adults (Wolpow, Johnson, Hertel, & Kincaid 2009). Trauma sensitive schools are based in forming trusting relationships between staff and students and between students and their peers.

In a qualitative study of court-involved females at a charter high school (N=39), students participated in a trauma-informed intervention. Students were then asked to discuss causes of externalizing behaviors and give suggestions for improving school culture in an effort to minimize the occurrence of these behaviors. This study by West, Day, Somers, and Baroni (2014) draws its data from a school with an emphasis on social-emotional learning. Knowing their students were entering school with many traumatic experiences, they stressed reducing student disciplinary issues by creating a TSS based on *The Heart of Teaching and Learning: Compassion, Resilience, and Academic Success*. Using this framework they taught self-regulation and social skills to help students control emotions and get along with others (West, Day, Somers, & Baroni, 2014).

The Midwestern school that took part in this study exclusively serves female, court-involved students almost all of who have a history of abuse and neglect. Approximately 90% of students have a mental health diagnosis. The girls who took part in the focus groups were all 14-18 years old. Of the participants, 44% were placed in this residential facility as a result of youth crime and 56% were placed due to abuse and/or neglect. Based on this data it is safe to assume these girls have been exposed to a range of traumatic events (West, Day, Somers, & Baroni, 2014).

In this school all staff were trained using *The Heart of Teaching and Learning (HTL)* curriculum. Staff took part in multiple half-day trainings prior to the start of the school year followed by monthly two-hour staff development sessions utilized to check in and refine their trauma-informed practice. This curriculum puts great emphasis on building strong attachments between students and staff and among peers. HTL's second of seven principles emphasizes providing unconditional positive regard, which is described as

> the various ways an adult shows genuine respect for students as persons. Students struggling with trauma don't need another adult to tell them what is wrong with them. What they do need, what helps them thrive, is an adult who treats them with simple sustained kindness, and adult who can empathize with the challenges they face moving between home and school" (Wolpow, Johnson, Hertel, & Kincaid, 2009, p. 71)

Another major focus point of HTL is attunement, defined as "the capacity to accurately read the cues of others and respond appropriately" (Wolpow, Johnson, Hertel, & Kincaid, 2009, p. 81). Children lacking history with trustworthy adults may struggle to make healthy relationships; however, with consistent practice they can learn to develop these

connections, (Wolpow, Johnson, Hertel, & Kincaid, 2009). The HTL intervention empowered students to develop meaningful relationships with adults, and it taught students how to react appropriately to peers and staff so that they could build significant relationships.

In addition to HTL the school created what they called the Monarch Room (MR). The MR was introduced as an alternative to suspension within the school's discipline system. The MR was open to students for the entire school day. When a student's behavior was out of control to the point of disrupting the learning of others, a student could ask to go to the MR or be asked to go by a staff member. While in the MR a variety of trauma-sensitive interventions could take place. Students often problem solved, used talk therapy, and/or sensory-motor activities while in the MR. Once students had de-escalated, they returned to class and their visit was documented. Staff would note the triggers that sent them there along with the interventions that were used. The whole visit took about 10 minutes (West, Day, Somers, & Baroni, 2014).

As a part of the study, students were asked to respond to a series of prompts related to descriptions of behaviors externalized at school, the experiences preceding these behaviors, and the best way to create a positive learning environment for students who come to school with traumatic backgrounds. Seven key themes were gathered from the responses of these 39 girls. The first four themes revolved around factors that trigger outbursts in behavior, and the last three were related to school staff. Students articulated their need for relationships and the need for teachers to encourage/teach respect for others (West, Day, Somers & Baroni, 2014), epitomizing the HTL focus on developing positive relationships. The girls in this study realized they were not on the journey of

school alone, but were accompanied by other students and staff; if it was to be a positive experience, everyone needed to feel respected. The students also indicated the importance of classroom management, and the positive impact of the trauma sensitive interventions. Students spoke of the MR and the relief it provided during times of escalation, noting

> If you're having troubles in class or you just need somewhere to calm down or someone to talk to, or you need somewhere you can use your coping skills you can go there. There's a staff who sits in there, Ms. X, and I talk to her frequently because she's- like I have a trust built up with her… (West, Day, Somers, & Baroni, 2014, p. 62)

The MR provided an additional place for students to build meaningful relationships and it provided students with relationship-building skills to use with peers when things became tense in the classroom. The authors attributed the improvement in student behavior to positive staff-student relationships.

A 2005 Canadian study on middle school students found a similar theme. Lakeview Middle Years School is a large urban school in a western Canadian city. Roughly 50% of students live below the poverty line and about 50% live in single parent families. Gangs, violence, crime, drugs, and alcohol are prevalent in the community and naturally have a significant impact on students attending school. Many students come to school with traumatic backgrounds; their struggles in school often manifested in behavior and discipline problems (Penner & Wallin, 2012).

In the 2004-2005 school year Lakeview Middle Years School began a focus to increase school attachment and create a restitution process to supplement their discipline policy. The study defined school attachment as, "the feeling of student ownership, bonding,

and connectedness associated with the school and prominent figures in the school" (Penner & Wallin, 2012, p. 3). This is a direct link to the relational piece of a TSS. As mentioned in Chapter I, Masten and Coatsworth (1998) found it essential to resilience that a child has a parent or caregiver that fills a positive mentorship role. When home-life is inconsistent or one parent is often gone working multiple jobs to provide for their single parent home, this component can often be lacking. Lakeview made an emphasis of intentionally building positive student-staff relationships, creating inclusive classroom environments, and encouraging involvement in extra-curricular school activities to increase school attachment (Penner & Wallin, 2012).

The qualitative part of this study included an interview with five teachers who were present for Restitution I training and implemented school attachment strategies in their classrooms. Five students who had learned these strategies and had ten or more discipline referrals by the end of the 2008/2009 school year were also interviewed. During the interview process all participants were asked their perceptions of the effectiveness of the strategies used. The authors found that all students and teachers agreed that positive relationships between staff and students are imperative in students feeling connected at school and, in turn, keeping student behavior in check at school. All teachers agreed that building in time to create relationships with students helped students belong. One teacher stated, "I think you have to be intentional about building relationships. I don't think it happens because you're in the same room with kids. I think it has to be intentional" (Penner & Wallin, 2012, p. 11). Overall, this study found that student attachment practices along with restitution provide a great platform from which students are able to make positive behavioral choices, no matter what life may look like for them outside of school.

Quantitative data to support this was gathered from the beginning of the 2004-2005 school year through the 2008-2009 school year. Out of school suspensions decreased from 266 to 92 students and days suspended went from 775 to 264 total days. Discipline referrals, in-school suspensions, sent home for the day, detentions, and mediations all also decreased considerably (Penner & Wallin, 2012). The authors of this study felt that developing positive relationships with students was the most important piece in connecting students with school, and that it was essential in successful behavior management.

Children with traumatic backgrounds have often lacked positive adult relationships. Schools have the ability to supplement this need but it takes intention and authenticity to be fruitful. The crux of these studies is reinforced by Tom Cavanagh who wrote *Creating Schools of Peace and Nonviolence in a Time of War and Violence*; "at the core of what schools are about is relationships . . . you can get the curriculum right, but if the relationships are not right, the school will not succeed" (Cavanagh, 2008, p. 71).

Empowering

Another key component to TSS is constantly empowering students. This is fundamental in the success of every study thus far. In the study mentioned above by West, Day, Somers, and Baroni (2014), *The Heart of Teaching and Learning* curriculum was used. In HTL the first of their seven principles for teachers is "Always Empower, Never Disempower" (Wolpow, Johnson, Hertel & Kincaid, 2009, p. 72). Teaching self-regulation and competency is the most empowering thing a school can do. It gives students a voice that can be understood. Empowerment may take many forms: it may look like giving students a voice in their education, providing a set of skills or strategies to help students

cope with trauma and/or stressors in their life, or a focus for educators to never put a student down, but to always build them up. Sandra Bloom sums up this part of TSS in *Creating Sanctuary in the School* when she says, "If children understand more about what they are going through, how their own minds and bodies are affected by the violence around them, they will become more empowered to make different decisions," (Bloom, 1995, p. 423)

In a study of 49, 7th and 8th graders attending two Baltimore City Public Schools, students participated in a 12-session group intervention that taught skills for regulating emotions and making effective decisions. Students were not screened for exposure to trauma prior to recruitment into the study. Of these students, 29 were randomly assigned to the intervention group (RAP club) and attended 45-minute sessions twice a week for six weeks. Each session was lead by a mental health counselor and young adult community member using the interventions Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS), one of the National Child Traumatic Stress Network's (NCTSN) top recommended interventions (Mendelson, Tandon, O'Brennan, Leaf, & Lalongo, 2015).

The intervention included psycho-education, cognitive behavioral therapy (CBT), and mindfulness strategies. Students were educated about the nature and effects of stress, provided CBT to help create better problem-solving and communications skills, and practiced mindfulness to help them correctly identify their emotions so that they can respond to them intentionally rather than impulsively, sometimes through something as simple as breathing.

Data gathered for this study was based on teacher surveys on each student in the intervention and control groups on the topics of: dysregulation, social competence,

academic competence, and authority acceptance. It was found that RAP Club improved teacher-reported outcomes essential for school success. Teacher surveys indicated large amounts of growth in all four of the above-mentioned categories for all students in the intervention group. Prior to the study, five of the 29 intervention students showed elevated baseline depression; all five students showed a reduction in symptoms by the end of the intervention. The authors of this study believe a more universal approach with whole class delivery would be able to reach more students (Mendelson, Tandon, O'Brennan, Leaf, & Lalongo, 2015). Public schools are not funded to provide pullout models like this on such a large scale. Also, bringing in community members to increase engagement shows great promise for programs like this, teaching students how to be mindful in their reactions and decisions.

A similar pullout model study was conducted in 2003 specifically for Latino immigrant children. Eleven 3rd-8th-grade schools in Los Angeles gave students the opportunity to participate in this study. Students completed a self-report questionnaire on the topic of exposure to violence and symptoms. Of the 879 students who participated, 276 recounted exposure to violence and clinically significant symptoms of PTSD and/or depression. Of those, 229 were randomly chosen to participate in the intervention or be on the waitlist (control group). Students participated in an eight-session group intervention based on Cognitive-Behavioral Intervention for Trauma in Schools (CBITS) by L. H. Jaycox; this was unpublished at the time and was the pilot study of this program (Kataoka et al., 2003). Jaycox later published her book *Cognitive-Behavioral Intervention for Trauma in Schools* in 2004. CBITS uses CBT skills, as mentioned in the last study, to target PTSD and depression symptoms. In each session of this intervention, there would be a lesson taught

using cartoons, games, and conversation, in addition to worksheets to do at home between sessions. Students were given skills of relaxation in order to fight anxiety, mindfulness to conquer negative thoughts, social problem-solving practice, and education on how to react to trauma (Kataoka et al., 2003). These skills empower students to be in control of their lives and give them the techniques to find peace in chaos. The results of this study showed a dramatic decrease in PTSD and depression symptoms for intervention participants.

Another CBITS study took place in 2007 on an American Indian reservation. This was very similar the Kataoka et al. (2003) study but was delivered in 10 sessions and was modified to be more culturally relevant for these students. For example, when able, an elder or spiritual leader said a traditional prayer before the group began. This study had the same focus of giving students strategies to be mindful and cope with the various ways trauma has affected them through the use of cartoons, games, and other culturally relevant practices. Acceptance to the study was based on reported depression or PTSD symptoms based on the *Life Events Scale* and the *Child PTSD Symptoms Scale* along with parental consent. Parental consent was the main barrier to having more students participate. Only seven out of 48 sixth grade students were granted permission to participate in the CBITS intervention. A large amount of attrition was experienced during this study as well, only four students completed. The other three were removed for extreme circumstances. However, of the four who completed the program three experienced a significant decrease in PTSD and/or depression symptoms (Morsette et al., 2009).

A third CBITS study took place in East Los Angeles during the 2001-2002 school year. This study was unique because it was conducted with a randomized controlled trial. Participants were composed of 6th graders from two middle schools who reported

exposure to violence and had clinical levels of PTSD or depression symptoms. To create the control group, 65 students were randomly chosen to be on the "waitlist" and 61 were immediately put into the intervention group. School mental health professionals ran the small group intervention (5-8 students per group) in a 10-session program similar to the CBITS studies mentioned above in the Kataoka et al. (2003) study (Stein et. al., 2003). Participants of both groups received a pre-test and post-test that included self-reporting PTSD (range 0-51) and depression symptoms (range 0-52), a teacher-reported classroom rating survey (range 6-30), and a parent-reported psychosocial dysfunction survey (range 0-70). After the three-month intervention students who were randomly assigned to the intervention group had remarkably lower scores on the PTSD symptoms survey (8.9 vs. 15.5), the depression symptoms survey (9.2 vs. 12.7), and the psychosocial dysfunction survey (12.5 vs. 16.5). There was no significant change for the teacher-reported classroom survey. This intervention showed again the success of the empowering mindfulness techniques that the CBITS program provides. It reinforces the fact that providing students with the skills they need can be incredibly powerful.

A group of community members from the South side of Chicago took a different approach to providing trauma sensitive education for students in their schools called the Truth 'n Trauma Project (TNT). This project was founded by Chicago State University where faculty from the social work, psychology, counseling, criminal justice, communication, media arts, and theatre departments collaborated to design a program that could be run by high school students. There were 44 students chosen as participants, selection criteria included an expressed concern about community violence and evidence of leadership in formal or informal settings. Participants met on the CSU campus two days

per week after school for training in restorative practices, trauma-informed practices, and psycho-education. Students then were given the opportunity to choose a focus area: trauma-informed practice, video production, action research, or theatre. Over the course of 9 months these students would meet and have a whole group peace circle to check in and then move to dive deeper into their respective focus areas. Each group had the same overarching framework of empowering teens and restorative practice with a theme of trauma awareness throughout (Harden et. al., 2015). TNT developed parts of their framework from an empowerment based positive youth development program called "The Five C's of Positive Youth Development" (Travis & Leech, 2014, p. 3). The five "C's" include competence, character, connection, confidence, and caring. TNT strategically wove these empowering traits into their program.

The founders of TNT wanted to focus on providing the opportunity for youth to involve their peers and lead others in addressing violence rather than simply be informed on the subjects. Hence, after the participants had received their own trauma-informed training they were given the chance to create their own trauma-informed modules. These included cultural references that would engage a young audience. Students were enthusiastically involved in the research and development of the modules, which was crucial to the engagement of the participants and eventually their audiences (Harden et. al., 2015). This model empowered students at every step; it gave students the skills to make an impact not only for themselves but also for others.

Students took the Ozer Empowerment Survey before and after participating in TNT; this survey is used to track changes in empowerment through the lens of self-esteem, academic achievement, social climate, and sense of community. The final survey responses

suggested significant increases in student involvement in school and communities as well as improved view of empowerment-related characteristics, which include self-improvement, creativity, talent, cooperation with others, the ability to work hard, and the ability to problem solve. At the end of the 9 months students also took part in an exit interview, which provided qualitative data for the study. Students responded with candid, humble responses. Many also voiced a desire to lead in different ways, one student responded, "I expect to be able to reach out to people who have been traumatized, to help them through their traumatic events, and just to inform people on the things that I learned so maybe they can carry it on and tell others," (Harden et al., 2015, p. 72).

A small group study on 6-12 year olds (N=72) in New Orleans looked into the effects of a Grief and Trauma Intervention (GTI). This study took place three years after Hurricane Katrina, which inflicted trauma throughout the entire city. Students qualified for this intervention if they had experienced hurricane trauma, community or family violence, or death in the family. Students were then randomly assigned to either the GTI-C (standard coping strategies course) or the GTI-CN (standard coping strategies plus a trauma narrative) group. Within both groups significant relationship building took place to build a group that was physically and emotionally safe for participants. The GTI-C group met in 10 sessions and learned coping skills along with studying the topics of resiliency, safety, and reconnection. Along the way students created a book called *My Story* or *My Coping Book*, which they were instructed to share with a trusted adult in their life. The GTI-CN group received all the same training plus a systematic process of having students narrate their traumatic events through DDWW (Draw, Discuss, Write, Witness) (Salloum & Overstreet, 2012). Both groups were empowering students by giving them positive ways to deal with

their trauma and build ways for them to be in control.

The results from this study were similar between the two groups. The main outcome was that PTSD symptoms were significantly reduced and maintained through a 12-month follow-up. In the GTI-CN group, 18 children reported clinically significant PTSD symptoms (according to the UCLA-PTSD Index) and at the 12-month follow-up only two children were still in that category. Similarly with the GTI-C group, 13 children reported clinically significant PTSD symptoms and at the 12-month follow-up only three children were still in that category. In addition to these results, depression and grief symptoms were also decreased, perceived social support was increased, and parents reported that their children were internalizing symptoms less (Salloum & Overstreet, 2012). This study of a tier-two intervention shows the positive effect intentional trauma-informed small groups can have. Though this is not a school wide program, this provides strong data for a program that can work after students have been identified as having significant trauma in their lives.

A New Zealand study on a school wide depression prevention program showed positive results while using many trauma sensitive strategies in two middle schools. Depression is often a side effect of trauma but can affect anyone. One of the schools was from a low socio-economic urban area and one was from a middle class rural area. Participants (age 13-14) were grouped randomly into the intervention group (n=207) and a placebo group at both schools (n=185). Students in the intervention group participated in a weekly program called RAP-Kiwi (Resourceful Adolescent Program). The program used cognitive-behavioral and interpersonal therapy principles taught by the classroom teacher in weekly lessons. Meanwhile, the placebo group had a focus on having fun but did

not implement the elements thought to have an effect on preventing depression. In the RAP-Kiwi curriculum students learned a variety of tools such as relaxation techniques, conflict resolution, self-awareness, and building self-esteem. These skills were taught through group work, games, and role-playing in weekly meetings (Merry, McDowell, Wild, Bir & Cunliffe, 2004).

Students were assessed before and after the program and then at 6, 12, and 18 months after the program was completed. Participants were measured on the Beck Depression Inventory II (BDI-II), where the range of scores is 0-63, and the Reynolds Adolescent Depression Scale (RADS), where the range is 0-89. The mean decrease from the baseline score to the immediate post-test score on the BDI-II was 1.82 for the RAP-Kiwi group and 0.32 for the placebo; on the RADS there was an average decrease of 2.31 for the intervention and 0.07 for the placebo group from pre to post-test. Using the categories created on the BDI-II 16 students went from moderate/severe to minimal/mild and 5 students changed from minimal/mild to moderate/severe leaving a net improvement of 11 students. Meanwhile, the placebo group had a net deterioration of 3 students going from minimal/mild to moderate/severe. The immediate success of the program was evident at the post-test. The change from the baseline on the RADS was consistently greater for the RAP-Kiwi group than the placebo in the follow-ups at 6, 12, and 18 months post-intervention (Merry, McDowell, Wild, Bir & Cunliffe, 2004). RAP-Kiwi is another example of trauma-sensitive interventions being positive for all students.

A study on long-term effects of an intervention called *Positive Action* (PA) tracked students over the course of five years to determine the effectiveness of improving student behavior, academics, and school involvement at all three levels of school (elementary,

middle, and high). *Positive Action* is a social-emotional framework for elementary schools (K-6th) that focuses on positive thought. Taking a holistic approach to students PA is integrated through out the entire school working to create teacher-student relationships, increase parent involvement, improve instructional practices of teachers, and develop positive self-concepts. PA is implemented in daily social-emotional lessons (15-20 minutes), positive classroom management, and a school-wide climate program (Flay & Allred, 2003). This program empowers students to be in control of their thoughts, which impacts every ounce of their being.

This study evaluated a large, urban, southeastern public school district that had a significant number (N=45) of schools that had implemented PA for at least four years (non-PA, n=28). Of the schools who used PA, the average length of implication was seven years. Secondary academic and behavior data was then collected along with the percentile of students coming from feeder elementary schools that used PA. Schools were sorted into three categories: high-PA (80-100% of students were PA graduates), medium-PA (60-79% of students were PA graduates), and low-PA (less than 60% of students were PA graduates). In high schools, it was found that medium-PA schools performed 2-6% better, and high-PA schools scored 9-15% better than low-PA schools on five different standardized achievement tests. When high school dropout rates were compared, low-PA schools had dropout rates 11% higher than medium-PA schools and 37% higher than high-PA schools. Similar results were found in middle school data. For reading, medium-PA schools scored 10.8% higher than low-PA schools and high PA schools scored 16.5% higher. In math, medium PA schools scored 11.4% better than low PA schools and high PA schools scored 20.6% better than the low PA schools. In addition, students in medium PA

middle schools had 31-37% less problem behaviors resulting in discipline referrals than low PA middle schools and 52-75% less for high PA middle schools (Flay & Allred, 2003).

This data shows a clear long-term dose-response relationship for academic and social variables. There were numerous indicators of the success of this social emotional program after years had gone by. *Positive Action* embraces the connection between character, behavior, and academic achievement empowering students through relationships, problem solving, and a positive climate to learn in. In turn, PA provides a foundation that gives students the confidence to perform at a high level academically and behaviorally no matter what background they come from.

Social-emotional learning curriculums are a great place for schools to start when looking to provide their students with structured empowering skills. A meta-analysis of 213 social-emotional learning studies including 270,034 kindergarten through 12th grade students from 1960-2008 showed consistent positive effects (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). This study revealed that students exposed to SEL had improved social and emotional skills, attitudes, behaviors, and academic performance compared to control groups. Though simply using a SEL curriculum will not provide all of the support needed in a TSS, it does provide a base of skills for students and staff to implement.

Consistency/Predictability

According to Maslow's Hierarchy of needs, physiological needs and safety must be met before focusing on any other parts of a person's development, (Maslow, 1943). This idea still stands in schools. When a child's home life is inconsistent or unsafe, or when

there is no guarantee that there will be food in the cabinets, committing the quadratic formula to memory becomes an inconsequential task. Students need to be able to know what to expect when it comes to their schedule, to discipline, to how the school works. School must be a place where students feel safety and predictability. In another light, no matter how great the program or perfect the initiative is, without consistency it will not be effective. School is the perfect place to provide consistent support for all students. In Sandra Bloom's *Creating Sanctuary in the Schools*, she posts a great statement,

> If we cannot do anything to change the homes these children live in, then we must expand their options. Let us provide them with an alternative reality. After all, they spend a considerable amount of their waking hours in school for at least 9 months out of every year. We have no idea how rehabilitative those hours could be if our priorities were structured differently, without jeopardizing educational requirements. (Bloom, 1995, p. 422)

One of *The Heart of Teaching and Learning's* six principles is maintaining high expectations. Within this principle the emphasis is consistency and predictability. "Consistent expectations, limits and routines send the message that the student is worthy of continued unconditional positive regard and attention" (Wolpow, 2009, p. 73). Consistency allows students to start to see the difference between arbitrary rules and purposeful rules that provide safety and are in their best interest.

A study using the *Heart of Teaching and Learning* (Wolpow, Johnson, Hertel, & Kincaid, 2009) took place in 2015 through the lens of student perceptions of their school environment. This study took place at a public charter school for court involved youth (all female). At this school the *HTL* curriculum was used in small groups and as a framework

for social interactions and relationships between students and staff. Along with *HTL*, this school utilized a Monarch Room (MR) as was described previously and a Dream Catcher Room (DC). As defined earlier students typically only spend about 10 minutes in the MR; the DC room is an extension of the MR. If students are unable to deescalate in the MR the DC room allows them an extension to work out their problem. Students are able to stay in the DC room for the entire day but usually return after an hour or so. Due to the number of different moving pieces in this intervention, to ensure fidelity in proper execution teachers received classroom observations and individual coaching by a therapist certified in trauma and attachment. Consistency throughout the school was crucial the effectiveness of this intervention (Day et. al., 2015).

All students were enrolled from September 2012 and June 2013 and had a history of abuse and neglect. Of the 184 students who enrolled in the program, baseline data for 143 girls were available. Comparative data existed for 70 students who completed both the baseline and the posttest surveys. The average length of enrollment at this charter school is 3 to 6 months, so clearly many participants were not at the school for the entire academic year. However, 72% were a part of the intervention for 6 months or more.

Students participated in the Student Needs Survey (SNS), a 25-item, self-reporting survey using Glasser's choice theory to asses a child's school needs and measure how those needs are met through the student's perspective. Score's are summed to a total between 0 (strong need) and 100 (weak need) for school response. A score of 75 or higher represents that a student's needs are adequately met. Students also took a self-reporting Post-traumatic Symptoms survey (CROPS) that scores 0 to 50, students with a score higher than 19 indicated significant problems with PTSD. Finally, the 70 students responded to 6

closed-ended questions developed by the research team to gather information on student perceptions of school climate (Day et al., 2015). From start to finish there was significant positive change in the CROPS survey; the mean was reduced from 22.7 to 20.16 by the post-test. This showed again that PTSD symptoms could be reduced by consistent trauma-informed practice. However, there was also significant change in the other direction on the Student Needs Survey. In the SNS the mean went down from 68.15 to 65.24, in discussion by the authors they believed that this change was due to the fact that many students became more aware of their need through this curriculum, which in turn drove their score to reflect more need.

The authors of this study attribute the success in reducing PTSD symptoms to consistent implementation of the HTL curriculum along with the MR and DC room. Though, there was not signification statistical change in the student perspective of school climate it is believed that this is due to the fact that this school was already consistently responding to student need. Schools that serve students involved with foster care or homeless and highly mobile populations have an even higher need for consistency across their school along with other supports, "Integration of trauma sensitivity in schools that serve court-involved youth also necessitates interagency coordination, collaboration, and information sharing between child welfare, juvenile justice, mental health, and education systems to ensure educational stability and continuity" (Day et al., 2015, p. 1099).

A study using the ARC (attachment, self-regulation, and competency) framework from the NCTSN on youth in two residential schools (n=126) showed similar results. In the two facilities that participated, over 90% of the children had a documented history of exposure to numerous traumas and out-of-home placements due to emotional struggles.

The aim of this intervention was to maximize the effect by offering a consistently-trauma-sensitive space that stretched beyond the individual therapy hour and impact their entire milieu (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013).

The ARC framework puts a large emphasis on consistent responses from adults to provide opportunity for positive attachments. One of the foundational goals is to, "Increase predictability and consistency in the youths' environment and interpersonal interactions," (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013, p. 685). This included small groups, consistent responses to problem solving, common visual cues throughout the entire facility, along with consistent goal setting and check-ins. Both schools took to an entire overhaul of their schools from admin, to staff, to the appearance of their facility; for example, one of the schools was described as looking like a dark hospital, not safe or inviting, they brought in posters and color to make the environment more welcoming.

Over the course of the 2006-2007 school year, the self-elected participants at these two schools took part in weekly small groups in addition to the general overhaul of the philosophy of the schools. One of the schools ran a 16-session small group called Grow Strong and the other a 22-session group called Stepping-Stones. Both groups had consistent structure from week to week embracing the themes of the ARC framework. Stepping Stones was composed of a check-in, mindfulness activity, goal activity, and ended with a grounding exercise and review. Whereas, Grow Strong began with a self-regulation exercise, then a rating of physiological/emotional response to the exercise, snack, homework review, psycho-education on an ARC skill, and then closing with another self-regulation exercise. The implementation of consistent routines and rituals was paramount in both groups. (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013)

Participants took part in a baseline along with three follow-ups. The UCLA PTSD Reaction Index was used to assess frequency of symptoms during the past month. This 22-item survey has participants rank symptoms from 0 (none of the time) to 4 (most of the time). The mean base-line score was 33.22 and was lowered to 29.46 on the first follow-up and stayed consistently at 29.53 by the 3rd follow-up. Both of these residential facilities also tracked the number of times students were required to be physically restrained due to hurting themselves or others over the course of the study. Combined the two programs saw a 54% reduction in the number of restraints per month used. Neither program was concentrating on restraint reduction; however, they both integrated parts of the ARC framework that focused on promoting staff attunement (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013).

Many studies on TSS are done in the contexts of small group pullouts, or residential programs, or other isolated settings. These methods, though often successful for those involved, allow others to fall through the cracks and can often require resources that are not available for all public schools. Bath (2008) explored this idea; compiling research on what it is that clinicians are focusing on in these isolated programs and created *The Three Pillars of Trauma-Informed Care*: safety, connections, and managing emotions. He claimed there is no reason that people other than licensed health care professionals, including classroom teachers, cannot provide these three things starting with a consistently safe environment.

> The notion of safety is multi-faceted and has many elements that need to be considered by care providers in addition to the more obvious needs for physical and emotional safety. For example, consistency, reliability, predictability, availability,

> honesty, and transparency are all attributes that are related to the creation of safe environments for children. (Bath, 2008, p. 19)

A whole class study with 4th graders in a public school studied the effects of a social emotional learning program on all students, regardless of prior trauma experience (n=92). The intervention used was called *I CAN DO*; which ran as a 13-session whole class curriculum co-taught by classroom teachers and a clinical-psychology graduate student. During sessions students learned to practice positive coping skills in relationship to potential stressful life events. The author of the curriculum also attended roughly 20% of sessions to ensure consistent implementation. Teachers were also consistently referencing the same coping skills throughout the day while not in a specific session so students could feel confident using them in many situations (Dubow, Schmidt, McBride, Edwards, & Merk, 1993).

In this study, students were divided by classes into an immediate-intervention group and a delayed-intervention group. This allowed the authors to assess whether students were able to maintain the skills they learned even while not formally receiving the intervention. The program was assessed using four separate measures including: Facts/Attitudes (14-items) that looked at attitudes towards specific stressors, Self-Efficacy (19-items) where children rated their perceived amount of difficulty to enact coping responses, Problem Solving (6-items) where students would list their responses (thoughts and actions) toward a given potential stressful situation, and Social Support Network size where students listed every person they could/would seek help from to solve hard problems. It was found in both groups that after receiving the intervention, improvements were shown in their ability to come up with effective solutions to stressful situations. The

self-efficacy of the first group did not increase from the baseline to the post-test; however, did increase significantly by the follow-up five months later. This delayed result posed the possibility that though students may not initially show growth in these new skills, that with more time to practice they may gain more confidence in using them (Dubow, Schmidt, McBride, Edwards, & Merk, 1993). This study showed that with consistent intervention all students could benefit from the social emotional learning that comes with a TSS.

Another study on the effectiveness of *Responsive Classroom* (RC), a social emotional framework, took place in an urban, northeast school district and showed positive academic results. RC infiltrates every aspect of a school and puts an equal emphasis on social learning as it does academic. RC is based in consistency throughout an entire school starting with a morning meeting each day, following with rules and logical consequences, along with purposeful student-teacher relationships. RC emphasizes social, emotional, and self-regulatory skills as primary goals with the purpose of leading to academic competency. Rather than teaching individual skills, RC intertwines social-emotional learning and self-regulation into all aspects of the school day. In this study, teachers were trained in RC in a weeklong summer class and then received professional development and coaching throughout the school year (Rimm-Kaufman, Fan, Chiu, & You, 2007). RC was developed with consistency at the forefront, everyday students participate in Morning Meeting, Quiet Time, and Closing Circle, which provide opportunities for students to feel safe, accepted and regain focus if needed (Denton & Kriete, 2000). Along with consistent responses from adults, this provides a safe learning environment for students who have experienced trauma.

In this study, children from six elementary schools in a single school district were

divided into three cohorts by grade to participate. Half of the schools had received RC training and were actively implementing it school wide and the other half were not using RC. The 2nd grade cohort was tracked for three years, the 3rd grade cohort was tracked for two years, and the 4th grade cohort was tracked for one year before moving to middle school. Across all three grade levels and schools, cohorts were composed of 53.63% ethnic minorities and 35.32% qualified for free or reduced lunch. At each school the same requirements were in place for math and reading curriculum as well as time required by the district to spend on math and literacy.

Student achievement data was gathered using the Degrees of Reading Power test and the CMT-Math test that has a different number of items depending on grade and has cut-off scores for each grade sorting into three levels: Remedial, Proficient, and Goal. Different numbers of student's data were used for each subject based on the number of students test results available. The reading data yielded a Cohen's d value of .16 and .21, which does not imply a significant effect. However the math data collected showed impressive results at every grade. Based on the categories given by the CMT-Math test and the data gathered from the 4th grade students who were at RC schools (n=264), they were found to be 2.5 times more likely to attain a Proficient level compared to the control school (n=235). For the 3rd grade cohort with two years of RC education, the RC intervention group (n=291) was 2.75 times more likely to be Proficient and 3.24 times more likely to reach the Goal math level compared to the control group (n=223). For the second grade cohort, with three years of RC exposure (n=214), similar results were found; students were 2.20 times more likely to attain a proficient score and 6.37 times more likely to receive Goal levels in contrast to the control group (n=174) (Rimm-Kaufman, Fan, Chiu, & You, 2007).

The data here showed significant correlation between not only the use of RC but also to the duration that students were exposed to RC and academic success. Consistent implementation of this framework yielded more academic success for students.

A recent study on four San Francisco Public schools showed positive results after implementing a whole school trauma-informed approach called HEARTS (Healthy Environments and Response to Trauma in Schools). Of the schools that participated, three were K-5 schools and one was a K-8. Due to funding, HEARTS was implemented for different amounts of time in each school (School A- 5 consecutive years, School B- 4 years with a one year gap, School C- 2 years, and School D- 1.5 years). The HEARTS program is a multi-tiered system of support with a consistent trauma-sensitive lens (Dorado, Martinez, McArthur, & Eibovitz, 2016).

The four schools based all tiers on the ARC framework from *Helping Traumatized Children Learn* (Cole et. al., 2005). Attachment, Self-Regulation, and Competency were embedded at every level of the schools supports. Tier 1 was composed of SEL for all students that emphasized coping with stress, psycho-education and workshops for parents on coping with stress, and providing a trauma-sensitive systems for staff to use such as PBIS (Positive Behavioral Interventions and Supports) and restorative practices. Tier 2 was comprised of psycho-educational interventions for at-risk students, Coordinated Care Team meetings with multiple involved adults to address needs of at-risk students, and systematic checks of discipline policies and alternatives to suspensions. Lastly, Tier 3 included school-based therapy for students and families with trauma-related mental health services, including parent/caregivers to be involved in their child's psychotherapy, and making efforts to improve district wide Educationally Related Mental Health Services

(ERMHS) (Dorado, Martinez, McArthur, & Eibovitz, 2016). At every level HEARTS is consistently providing a trauma sensitive view for students, staff, and parents/caregivers.

The teacher reported HEARTS Program Evaluation Survey was used to assess this program before and after. All questions were answered on a 5-point Likert scale. From the teacher perspective, students' ability to learn went from a mean of 2.76 to 3.55, time on task in the classroom went from a mean of 2.68 to 3.4, time spent in the classroom went from a mean of 2.69 to 3.64, and attendance went from a mean of 2.77 to 3.24. Teachers found significant growth in all four of these engagement factors. School A, who implemented HEARTS for five consecutive years, reported the number of referrals/suspensions decreased from 674 to 87 per year, the number of incidents involving physical aggression went from 407 to 58 per year, and the number of out of school suspensions went from 56 to 3 per year (Dorado, Martinez, McArthur, & Eibovitz, 2016). The whole-school outcomes observed in this study can be attributed to the consistency/predictability that the schools provided for all students to learn.

Consistency throughout staff, administration, and discipline is crucial when attempting to make a whole school shift. At every tier of intervention the same trauma-sensitive lens must be used. It is not enough for students to have just one class of their day meeting their needs, it takes start to finish in every class. They must be met with consistent reasonable discipline, safety, and responses from adults to feel the safety needed to learn.

CHAPTER III: DISCUSSION AND CONCLUSION

Summary

It has become abundantly clear in recent years that the students walking through the halls of America's schools are coming to school with significant baggage. Children from all walks of life are facing adverse childhood experiences, which inflict trauma (Anda et al. 2005); from rural to urban areas trauma is dark plague yielding a variety of side effects. Children who have experienced trauma often have mental health issues such as depression, anxiety, and PTSD (Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents, 2008). Research also reveals significant correlations between traumatic events and lower academic performances (Duplechain, Reigner, & Packard, 2008; Streek-Fischer & Van Der Kolk, 2000; Wolpow, Johnson, Hertel, & Kincaid, 2009).

This research intended to discern the characteristics of a TSS and determine the outcomes of an effective TSS. In this search it was found that there are only a few studies on whole school interventions. Many studies have been conducted on small groups and non-traditional school settings. However, using the few school wide studies along with the strategies and frameworks used in other trauma sensitive interventions, a few characteristics stood out. Effective trauma sensitive schools must be relational, empowering, and consistent. Every study on TSS or programs included these three features in some fashion.

A major affect of trauma in children is often a lacking positive relationships with adults outside of school. *The Heart of Teaching and Learning* (Wolpow, Johnson, Hertel, & Kincaid, 2009) and *Helping Traumatized Children Learn* (Cole et al., 2005), two of the most successful trauma sensitive frameworks, built in a major emphasis on relationships. West,

Day, Somers, and Baroni (2014) and Day (2015) both showed the importance of relationships using qualitative studies after implementing HTL in their schools. They posit, building strong relationships is what created student buy-in at school. Penner and Wallin (2012) found similar results in an intervention focused on creating positive attachments after emphasizing community building and relationships. Students felt they had a place where they were belonged and, as a result, were more successful. Hodgdon, Kinniburgh, Gabowitz, Blaustein, and Spinazzola (2013) found after implementing the ARC framework in a residential school, that by emphasizing the building of strong attachments, negative student behaviors decreased dramatically compared to students who were not exposed to this framework. Students perform better when they feel connected to school, whether they have experienced trauma or not; building intentional positive relationships in schools is best practice.

The second fundamental piece of a TSS is that it is empowering. The *Oxford Dictionary* defines *empower* as "Make (someone) stronger and more confident, especially in controlling their life and claiming their rights," (Empower, 2017). This is exactly what a good school does and it is what students who have experienced trauma desperately need. Multiple studies using CBITS repeatedly showed how teaching mindfulness and coping strategies could decrease depression and PTSD symptoms (Kataoka et al., 2003; Morsette et al., 2009; Stein et. al., 2003). Other programs such as the RAP Club (Mendelson, Tandon, O'Brennan, Leaf, & Lalongo, 2015) and GTI (Salloum & Overstreet, 2012) also found significant improvement in mental health symptoms over the course of a school year with intentional SEL. To empower is not simply teaching mindfulness and coping to deal with mental health, but also giving students a voice and competency in order to be successful in

other parts of life. The Truth n' Trauma project taught students skills to use to provide students confidence in their abilities and give them the opportunity to make a difference in their community. This empowered students to not only take control of their own life but to impact others in a positive way as well. Flay and Allred (2003) studied the long-term academic affects of students participating in the school wide trauma sensitive program *Positive Action;* they found that high school student performance on standardized testing in reading and math was directly correlated to participation in this elementary school program. The effects of PA were not simply immediate but remained apparent five years later. The fundamental purpose of schools is to empower students; traditionally people think of that as an academic role, however, literature is beginning to show that SEL and mindfulness skills are almost equally important.

The final trait that a TSS must have is consistency and predictability. This is a two-part trait, one being consistent implementation of trauma sensitive strategies in all parts of the school and the second being a predictable environment for students. This idea starts back with Maslow's Hierarchy of needs; children must feel safe before they can learn. A large part of this is trait is comprised of consistent responses from adults. Day (2015) found significant decrease in PTSD symptoms after students were exposed to consistent responses from all adults in their school and the HTL curriculum. Similarly, Hodgdon et al. (2013) found significant improvements in mental health symptoms as well as a decrease in violent behavior after a school adopted the ARC framework that extended to provide a consistent, inviting work environment. Rimm-Kaufman, Fan, Chiu, and You (2007) studied the impact of *Responsive Classroom* (RC) on academic performance. RC is completely founded in consistent routines and rituals during the school day, when implemented

correctly teachers and staff throughout the school use the same language, non-verbal communication, poster, and responses to discipline. The authors found a positive correlation for math scores after studying three separate cohorts for 1-3 years. Dorado, Martinez, McArthur, and Eibovitz (2016) studied the results of a multi-tiered trauma sensitive system called HEARTS for five years. After consistent implementation there was a dramatic decrease in referrals, suspensions, and physical aggression. In addition, teachers found that though they were spending more time on SEL, students' ability to learn, time on task in class, and time spent in class all increased significantly. These studies found success in various domains and attribute much of that to consistency.

In these studies, the most commonly measured outcome was also where the most improvement was found. Students' mental health was affected positively in almost every study conducted. PTSD symptoms were dramatically reduced in the studies using CBITS (Kataoka et al., 2003; Morsette et al., 2009; Stein et. al., 2003), the ARC framework (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013), *The Heart of Teaching and Learning* (Day et. al., 2015), as well as other small group interventions (Salloum & Overstreet, 2012). In addition, depression symptoms according to the Children's Depression Inventory, the Beck Depression Inventory, and the Mood and Feelings Questionnaire were decreased as a result of TSS interventions (Mendelson, Tandon, O'Brennan, Leaf, & Ialongo, 2015; Kataoka et al., 2003; Stein et. al., 2003; Merry, McDowell, Wild, Bir, & Cunliffe; 2004; Salloum & Overstreet, 2012). As students learn more about the reality of overcoming their trauma they become more aware of the supports around them, one study specifically measured this and found students felt greater social support than when they began (Salloum & Overstreet, 2012). These outcomes are the direct result of

being intentional about teaching coping skills as well as mindfulness (Dubow, Schmidt, McBride, Edwards, & Merk, 1993).

Another common product of TSS is that students have less behavior problems. When schools are more predictable and safe, they do not set off as many triggers that often contribute to students' acting out behaviors. It was found that students are more willing to accept authority when they are involved in a trauma-sensitive intervention (Mendelson, Tandon, O'Brennan, Leaf, & Ialongo, 2015). As a result, students were observed to have less violent behaviors in school (Hodgdon, Kinniburgh, Gabowitz, Blaustein, & Spinazzola, 2013; Flay & Allred, 2003).

Trauma sensitive schools provide an environment where students feel they belong. Being safe and consistent are important, but having a discipline policy that keeps kids in class is also imperative. Multiple studies found that students are in class more after implementing trauma-sensitive strategies (Penner & Wallin, 2012; Flay & Allred, 2003; Rimm-Kaufman, Fan, Chiu, & You, 2007). A natural result of students being in class more is that more learning happens. Numerous studies found an increase in academic competence (Mendelson, Tandon, O'Brennan, Leaf, & Ialongo, 2015; Flay & Allred, 2003).

Professional Application

What brought me to this research was a constant thought: How can I serve my students better? It became clear I was missing something; I could talk about adding and subtracting negatives for the whole year but some still may never get it. I wanted to find tangible strategies and frameworks that I could use in my school. In all my research, I

constantly had my students' faces in mind, thinking what would this look like in my classroom or in my school?

The research was very clear, we can drill academics from every angle, and we can spend more time on literacy or math, but if we do not include social emotional learning for many students, it will just not be enough. Sandra Bloom said it best in *Creating Sanctuary in the School,*

> Likewise, progressive schools are broadening the role of education to include emotional literacy as important a subject matter as reading, writing, or arithmetic. Few people kill because they cannot read, write, or do sums, but they do perpetrate against others within a context of emotional illiteracy. If we cannot teach children how to get along with other people and feel better about themselves, the other educational skills are almost irrelevant. (Bloom, 1995, p. 411)

There are incredible pressures on teachers to make their students perform academically. Due to this pressure, school leadership may find it to be a large risk to give up valuable time from academics to focus on the social emotional learning. However, Dorado, Martinez, McArthur, and Eibovitz (2016) showed using the HEARTS program that teachers found that students were more focused and in the end spent more time learning when they put more value on SEL.

Schools have the responsibility to make sure intentional relationship building and social-emotional learning is taking place consistently. It is vital to train all staff and ensure they are can effectively implement trauma-sensitive strategies. This trauma sensitive lens must consistently run through the routines and rituals of a classroom to the discipline

policy. I believe all teachers truly want to do what is best for their students. However, many do not realize what exactly it is that their students need.

To begin, there is definite need for professional development that provides a picture of how trauma affects children especially within school. This will help create teacher buy in that is imperative to the consistent implementation and success of any school wide intervention. A trauma-sensitive framework needs to be chosen whether it be *Helping Traumatized Children Learn* (Cole et al., 2005)*, The Heart of Teaching and Learning* (Wolpow, Johnson, Hertel, & Kincaid, 2009)*,* Responsive Classroom (Denton & Kriete, 2000), or another system. This allows everyone in the school to be on the same page and have common values such as relationship building, SEL, and empowering dialogue. Following that, teachers must build on the foundation of relationships they have built and continue to be consistent with their responses, yielding non-stop grace. I believe teachers have a desire to reach every student. However, a recipe of steps that will fix every child does not exist. We must use the relationships we build with a trauma sensitive lens to reach all of our students and continually work to provide the extra supports they may need. Schools have the ability to empower students academically but must find a way to balance it with emotional literacy as well. When students feel better about themselves and more in control of the world around them, they will learn more.

Limitations of Research

This research did experience limitations, the largest and most significant drawback being the lack of school wide studies. Many pull out interventions and non-traditional schools were studied. However, in these settings students have been placed based on known conditions or symptoms. This allows many students in mainstream classes who are

unidentified to slip through the cracks; thus leaving no data to evaluate the effect of interventions on all students. Due to the mental health focus of most trauma-sensitive interventions, many studies only evaluated the mental health outcomes. This left only a few studies that evaluated outcomes in the classroom, such as academic performance and time on task. Within the studies that evaluated change in depression and PTSD symptoms there was a lack of consistent test instruments used. Almost each study used a different questionnaire/index.

Implications for Future Research

There is a clear demand for more research on whole school trauma sensitive interventions. There are a variety of well-developed trauma-sensitive curriculums but very little whole school data to back them up. Research shows that small groups can be incredibly effective in reducing negative mental health symptoms but very little data exists to compare when used in a tradition classroom. Studies could look for connections between TSS and academics, mental health, attendance, discipline referrals or suspensions, as well as sustainability within a school. It would be instrumental to study students regardless of previous trauma exposure and potentially find that trauma-sensitive strategies are best practice for all students. Another field that could use more research is the long-term effects of TSS. Many studies had up to an 18 month follow-up, but it would be very beneficial to educators and potentially create more buy in of the positive effects if data existed showing positive difference lasting though a child's education.

Conclusion

Trauma is a very real part of our society today; it affects children and adults alike. If schools continue to run as they always have, they are going to see the trends of recent

years continue: a decrease in performance and behavior and an increase of teacher burn out. We must do something radical. We must change the way we have always done things to adapt to the needs of the children in our classrooms. District mandates can require a certain curriculum, laws can be passed, administration can provide professional development but if individual teachers do not buy in and provide relational, empowering, and consistent classrooms nothing will change. We must provide emotional literacy as well as academic literacy if we want to empower students with the education they deserve. As educators we have such great opportunity before us, we have the ability to provide students the lens to see that they are not simply a result of what has happened to them but rather a masterpiece that they can define.

References

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

Bath, H. (2008). The three pillars of trauma-informed care. *Reclaiming Children & Youth, 17(3),* 17-21.

Baurn, A., Peterson-Hickey, M., Ayers, J., & Smith, S. (2013) *Adverse Childhood Experiences in Minnesota.* Retrieved from Minnesota Department of Health Website: http://www.health.state.mn.us/divs/cfh/program/ace/content /document/pdf/acesum.pdf

Berman, S. L., Kurtines, W. M., Silverman, W. K., & Serafini, L. T. (1996). The impact of exposure to crime and violence on urban youth. *American Journal of Orthopsychiatry, 66*(3), 329-336. doi:10.1037/h0080183

Bloom, S. L. (1995). Creating sanctuary in the school. *Journal for a just & Caring Education, 1*(4), 403.

Cavanagh, T. (2008). Creating schools of peace and nonviolence in a time of war and violence. *Journal of School Violence, 8*(1), 64-80. doi:10.1080/153882208020 67912

Cole, S., Greenwald O'Brien, J., Geron Gadd, M., Ristuccia, J., Luray Wallace, D., & Gregory, M. (2005). *Helping Traumatized Children Learn.* Boston, MA: Massachusetts Advocates for Children.

Copeland, W. E., Keeler, G., Angold, A., & Costello, J. (2007). Traumatic events and posttraumatic stress in childhood. *Archives of General Psychiatry*, *64*, 377- 384.

Day, A. G., Somers, C. L., Baroni, B. A., West, S. D., Sanders, L., & Peterson, C. D. (2015). Evaluation of a trauma-informed school intervention with girls in a residential facility school: Student perceptions of school environment. *Journal of Aggression, Maltreatment & Trauma, 24*(10), 1086-1105. doi:10.1080/10926771.2015.1079279

Denton, P., & Kriete, R. (2000). *The first six weeks of school*. Greenfield, MA: Northeast Foundation for Children.

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

Dubow, E. F., Schmidt, D., McBride, J., Edwards, S., & Merk, F. L. (1993). Teaching children to cope with stressful experiences: Initial implementation and evaluation of a primary prevention program. *Journal of Clinical Child Psychology, 22*(4), 428. Retrieved from https://search.proquest.com/docview/194217693

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

Duplechain, R., Reigner, R., & Packard, A. (2008). Striking differences: The impact of moderate and high trauma on reading achievement. *Reading Psychology, 29*(2), 117-136. doi:10.1080/0270271080196384

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432. doi:10.1111/j.1467-8624.2010.01564.x

Flay, B. R., & Allred, C. G. (2003). Long-term effects of the positive action program. *American Journal of Health Behavior, 27 Suppl 1*, S6. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12751643

Harden, T., Kenemore, T., Mann, K., Edwards, M., List, C., & Martinson, K. (2015). The truth N' trauma project: Addressing community violence through a youth-led, trauma-informed and restorative framework. *Child & Adolescent Social Work Journal, 32*(1), 65-79. doi:10.1007/s10560-014-0366-0

Hodgdon, H., Kinniburgh, K., Gabowitz, D., Blaustein, M., & Spinazzola, J. (2013). Development and implementation of trauma-informed programming in youth residential treatment centers using the ARC framework. *Journal of Family Violence, 28*(7), 679-692. doi:10.1007/s10896-013-9531-z

Jaycox, L. (1004). *CBITS: Cognitive behavioral intervention for trauma in schools* (1st ed.) Sopris West.

Kataoka, S. H., Stein, B. D., Jaycox, L. H., Wong, M., Escudero, P., Tu, W., Zaragoza, C., & Fink, A. (2003). A school-based mental health program for traumatized latino immigrant children. *Journal of the American Academy of Child & Adolescent Psychiatry, 42*(3), 311-318. doi:10.1097/00004583-200303000-00011

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*, 370-396.

Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist, 53*(2), 205-220. doi:10.1037/0003-066X.53.2.205

Mendelson, T., Tandon, S.D., O'Brennan, L., Leaf, P.J., & Ialongo, N.S. (2015). Brief report: Moving prevention into schools: The impact of a trauma-informed school-based intervention. *Journal of Adolescence, 43*, 142-147. doi:10.1016/j.adolescence.2015.05.017

Merry, S., McDowell, H., Wild, C. J., Bir, J., & Cunliffe, R. (2004). A randomized placebo-controlled trial of a school-based depression prevention program. *Journal of the American Academy of Child & Adolescent Psychiatry, 43*(5), 538-547. doi:10.1097/00004583-200405000-00007

Morsette, A., Swaney, G., Stolle, D., Schuldberg, D., Van Den Pol, R., & Young, M. (2009). Cognitive behavioral intervention for trauma in schools (CBITS): School-based treatment on a rural american indian reservation. *Journal of Behavior Therapy and Experimental Psychiatry, 40*(1), 169-178. doi:10.1016/j.jbtep.2008.07.006

Penner, C. & Wallin, D. (2012). School attachment theory and restitution processes: Promoting positive behaviors in middle years schools. *Canadian Journal of Educational Administration and Policy,* (137), 1-36. Retrieved from http://files.eric.ed.gov/fulltext/EJ996777.pdf

Perry, B. (2014). What we stand for. Retrieved August 11, 2017 from https://www.childwise.org/what-we-stand-for/

Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents. (2008) *Children and Trauma: Update for Mental Health Professionals.* Retrieved from American Psychological Association Website: http://www.apa.org/pi/families/resources/children-trauma-update.aspx

Rimm-Kaufman, S. E., Fan, X., Chiu, Y., & You, W. (2007). The contribution of the responsive classroom approach on children's academic achievement: Results from a three year longitudinal study. *Journal of School Psychology, 45*(4), 401-421. doi:10.1016/j.jsp.2006.10.003

Salloum, A., & Overstreet, S. (2012). Grief and trauma intervention for children after disaster: Exploring coping skills versus trauma narration. *Behavior Research and Therapy, 50*(3), 169-179. doi:10.1016/j.brat.2012.01.001

Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence: A randomized controlled trial. *Jama, 290*(5), 603-611. doi:10.1001/jama.290.5.603

Streeck-Fischer, A., & Kolk, Bessel A Van Der. (2000). Down will come baby, cradle and all: Diagnostic and therapeutic implications of chronic trauma on child development. *Australian & New Zealand Journal of Psychiatry, 34*(6), 903-918.

Substance Abuse and Mental Health Services Administration (2014). Key Terms: Definitions. SAMHSA *News*. *22(2).* Retrieved from https://www.samhsa.gov /samhsaNewsLetter/Volume_22_Number_2/traumatip/key_terms.html

Travis, R., & Leech, T. G. J. (2014). Empowerment-Based positive youth development: A new understanding of healthy development for african american youth. *Journal of Research on Adolescence, 24*(1), 93-116. doi:10.1111/jora.12062

Tanielian, T. L. (2008). *Invisible wounds of war*. Santa Monica, CA: RAND.

West, S. D., Day, A. G., Somers, C. L., & Baroni, B. A. (2014). Student perspectives on how trauma experiences manifest in the classroom: Engaging court-involved youth in the development of a trauma-informed teaching curriculum. *Children and Youth Services Review, 38*, 58. doi:10.1016/j.childyouth.2014.01.013

Wolpow, R., Johnson, M., Hertel, R., & Kincaid, S.. (2009). *The heart of teaching and learning: Compassion, resiliency, and academic success* (3rd ed.). Olympia, Washington: Washington State Office of Superintendent of Public Instruction (OSPI) Compassionate Schools.