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THE BENEFITS OF A TRAUMA-SENSITIVE SCHOOL ENVIRONMENT ON STUDENTS AND THE STAFF WHO SUPPORT THEM

A MASTER'S THESIS

SUBMITTED TO THE FACULTY

OF BETHEL UNIVERSITY

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ELLA E. CARLSON

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THE BENEFITS OF A TRAUMA-SENSITIVE SCHOOL ENVIRONMENT ON STUDENTS AND THE STAFF WHO SUPPORT THEM

Ella E. Carlson

May 2019

Advisor's Name: Charles S. Strand, Ed.S.

Program Director's Name: Katie Bonawitz, Ed.D.

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Abstract

Teachers are seeing more and more students who are going through traumatic life events. These events are affecting their developing brain, school behavior and academic success. These events are having a secondary effect on teachers, creating burnout and secondary trauma. Teachers are becoming overwhelmed with their students academic needs and behavioral supports to make them more successful in school. School administrations are trying to find proper supports for all students in the classroom while providing teachers with meaningful professional development strategies. These strategies involve schools transitioning to a trauma-informed environment where students and teachers feel supportive and successful. The following literature review focuses on trauma in schools, the supports teachers need to service their students and the interventions that have worked for teachers and schools.

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CHAPTER I: Introduction

Definition of Trauma

There are many definitions of trauma and what is to be considered a traumatic event in a person's life. Research from Blodgett and Lanigan (2018) dives into the term Adverse Childhood Experiences, also known as ACEs, and what that looks like for a child. They define ACEs as "the prolonged exposure of children to potentially traumatic events that may have immediate and lifelong impact" (Blodgett & Lanigan, 2018, p. 137). These events may come from child maltreatment, family stress and dysfunction, community violence or natural disasters. And it may not be just one of these things but ACEs can result from a combination of these events. A second definition of trauma from the Substance Abuse and Mental Health Services Administration (SAMHSA) says:

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. (as cited in Crosby, 2015, p. 223)

Both definitions from above mention the long-term effects of traumatic events which brings up the potential for Post-Traumatic Stress Disorder (PTSD) developing in people who experience trauma.

From the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) comes the criteria to determine if someone is suffering from PTSD symptoms that may require further support. There are eight different criteria when diagnosing people with PTSD. The most recent DSM-5 has added a subtype for children 6 years old and younger to lower the threshold and have

a more accurate read on symptoms in young children (Black & Grant, 1956). Most of the criteria relates to exposure to traumatic events through first-hand or second-hand events, the presence of intrusion symptoms like memories or dreams, continual avoidance of people or places related to event, negative alterations in thoughts and moods and changes in reactivity like hypervigilance or recklessness (Black & Grant, 1956). The diagnostic criteria for PTSD symptoms is ever evolving but as we can see from a very condensed list of criteria, it can have a very profound impact on people's daily and future lives. Regardless of the definition, PTSD and trauma has an impact on daily living and the emotions and chemical makeup of the brain.

Trauma and the Brain

We now know from many years of research how traumatic life events can impact the brain and brain functioning. From a literature review done by Mahajan (2018), she stated:

Research indicates that childhood PTSD may have an impact on 3 interrelated pathways of development that is- the maturation of specific brain areas at particular ages, the physiological and neuro-endocrinological responses and the ability to coordinate cognitions, behaviours and emotional regulation. (p. 849)

Continued research dives deeper into how trauma can affect specific parts of the brain that may control certain responses. For example, cortisol tends to increase in children or adults who have experienced traumatic events. Having an increase in cortisol levels impacts your response or non-response to dangerous situations. Sometimes the person's response can appear to be a heightened, overdramatized response to something that, to anyone else, would be a mild stimulus. On the other hand, the person's response could be mild or a non-response to something that, to anyone else, would be an intense stimulus (Mahajan, 2018).

Childhood trauma especially impacts the development of the brain's right hemisphere. The right hemisphere of the brain is the main control center for expressions, communication, instinctive emotional response and physiological response. Typically, the right hemisphere of the brain is the one most sensitive and fragile to traumatic events when children are developing. It is important for teachers, especially elementary, to understand how executive functioning in the brain is fragile and impacted in many ways (Barr, 2018). Children who are experiencing trauma and show signs of PTSD have more activation in the right hemisphere of the brain (Mahajan, 2018). The relationship between the development of the right hemisphere of the brain, cortisol levels and the stress of trauma, can all contribute to future mental health problems arising from childhood into adulthood. Information regarding good mental health is growing due to increased research and increased support systems. Support systems include family, psychologist, social workers and much more. Schools have been able to incorporate supports such as counselors and social workers as needs for these services have increased over the years.

History of School Support Systems

There is not much to be known about the history of trauma affecting students' school experience. From talking to my parents about their education, they could not recall having school counselors or school social workers available in their schools. However, this could be due to not being a student who may have shown needs for these services. I believe as our society has done more research on the brain and more research about mental health, we have come to realize that trauma can impact many areas of life especially in school-aged children.

School counseling developed originally as vocational guidance led by teachers in the classroom. Teachers were assigned this role along with the continuation of their other teaching duties when vocation guidance was starting out. The teachers completing this role barely had any

curriculum to go by other than a list of duties they had to accomplish (Gysbers & Henderson, 2001). As people realized the need for a more structured program, it evolved into a specialized service people received and were able to access professionally. Vocational guidance started long ago but school counseling as we know it today started in schools around the 1970s (Cinotti, 2014). Similar to school counseling is school social work. The social work practice started in the community setting, helping families with attendance, behavior and providing community resources. Then as more needs evolved, social workers became a necessary part of the school environment (Sherman, 2016). With the development of the Rehabilitation Act of 1973 and eventually the Individuals with Disabilities Education Improvement Act (IDEA), school social workers job boundaries grew smaller. They began to be more specialized educators and take on more responsibilities when dealing with students that had complex needs (Sherman, 2016). Today, school counselors and school social workers take on many roles from aiding in special education services to leading student small groups and collaborating with community resources.

Trauma and Special Education

We have learned that trauma has many definitions, can lead to PTSD and can impact the brain, daily living and the future. But how does trauma relate to special education? Experience trauma or ACEs does not mean a student qualifies for special education. Each student who gets considered for special education services goes through an evaluation process to determine if these services are needed and best for the student's academic success. There are many different qualifications for different disabilities and learning styles but in the end, special education is in place to support the student through their academic career.

As we learned earlier, trauma can affect different parts of our lives and has a meaningful impact on the developing brain. Changes in the brain can influence our decision-making skills,

our social skills and our emotional reactions to different stimuli. In school, social and emotional skills are important factors in a students' ability to learn. If a student appears to have higher emotional reactions to stimuli or is lacking social skills and isolated, teachers may look into special education criteria. We cannot assume all students in special education have ACEs or all students with ACEs will be in special education. The two are not directly related but do intertwine and it is important as educators to know our students background and how to help them succeed.

Personal Connection to Trauma and Special Education

My experience as a special education teaching aid for four years and my education to become a special education teacher, has brought me to explore trauma and teaching as my thesis topic. When I started as a teaching aid I was unaware of the complex life situations my students were living and surviving in. Working in a Title I school, I learned quickly that most of the students lived in low socioeconomic status, were refugees and even homeless. I could see how school impacted their learning environment. For some students, school was a safe place to learn, eat and be taken care of. For others, it was a place of stress and discomfort for not being smart enough or having everything they needed. I could see how teachers were being affected by their student's life. Teachers would have a difficult time keeping the attention of the class because of one or two students. Teachers felt like there was not enough academic support for their students who may be falling behind.

For those years, I worked in a level three, developmental cognitive delay classroom with students in kindergarten through third grade. Those students also may have gone through adverse life events which affected their learning and behaviors. In all my experience in special education, there are a few students that stick out and brought me to look into trauma and teaching. One student in particular was clearly going through some emotional and physical abuse at home that really impacted the behaviors we saw in school. Our role as teaching staff shifted to be more aware of the impact her home life was having on her school life. As a team, we struggled to decide what support the student needed and how to find it. When the student was removed from the home and brought to other family members who cared for the student, you could see the change in behaviors and the learning that was possible. Another student that guided me towards my thesis question was one who was older and in a general education class, however the student was going through some intense mental health crisis. The student would roam the halls and would isolate himself so many teachers and support staff were unsure how to help and support this student's complex needs.

Thesis Question

All of this experience brought me to research the hard question of how do teachers keep their role as the teacher and not as the social worker, psychologist and teacher? Or do we combine our services to provide a comprehensive plan for students? How does trauma impact students, teachers and the school environment and what interventions have worked? These are hard questions to answer because there is not one solid answer. This thesis will explore further the impact of trauma in schools, what is known about students who are affected by traumatic events, how this impacts teachers and what interventions schools can try to be successful and supportive for all students.

CHAPTER II: Literature Review

Overview of the Research Process

The research for this study was formed using academic peer-reviewed articles. The articles were retrieved by using databases like ERIC and Academic Search Premier. Some articles were found by using the resources from articles found on the databases. Key words such as education, trauma, teaching, special education and training.

The information in each study was compared to help organize common themes in a way to examine trauma within the students we teach and how best to support them. There were many recurring themes relating to teaching students with trauma and trainings for teachers instructing students dealing with traumatic events. Studies by Blodgett & Lanigan, 2018; Eklund et al., 2018; and Day et al., 2017, explain the different adverse life experiences, screening abilities and trauma support we see in schools today. While teachers are supporting students going through trauma, classroom environment and support for teacher work is crucial for a meaningful work environment (Blitz et al., 2016; Brunzell et al., 2018; Anderson et al., 2015; Hoffman et al., 2015; Alisic, 2012; Cummings et al., 2017; Portilla et al., 2014). To maintain a positive teaching environment and supporting students in the best way, trainings about trauma-informed approaches help school administration and all staff working with students with ACEs (Blitz et al., 2016 and Anderson et al., 2012). An important theme that emerged from the research articles are the interventions, specifically successful interventions, used in schools to better support teachers and students with trauma (McConnico et al., 2016; Santiago et al., 2018; Mann, 2013; Walsh et al., 2014; Bierman et al., 2008; Taylor et al., 2017). These themes are discussed and examined further in the rest of the chapter.

Trauma in Schools

One of the main themes in the literature found in research is about students and traumatic experiences. School readiness is an important component to see if students are ready for the school environment. But what is school readiness? An article from Blair & Raver (2015) describes school readiness as:

being physically well nourished and rested, able to communicate wants and needs verbally, to be enthusiastic and curious in approaching new activities, to pay attention and follow directions, to not be disruptive, and to be sensitive to other children's feelings. (p.713-714)

Students who appear to be ready for school may show better academic success especially in the younger grades like kindergarten, first or second grade. Students who are experiencing trauma may not be showing typical school readiness components. The National Center for Mental Health Promotion and Youth Violence Prevention (2012) suggested, "that 26 percent of children in the United States will witness or experience a traumatic event before the age of 4" (as cited in Craig, 2016, p. 29). Each student goes through their own life experiences with varying levels of trauma. For example, one student may consider falling off their bike and breaking their arm traumatic while another student may be going through some emotional abuse.

In a research study done by Blodgett & Lanigan (2018), the authors researched trauma from life experiences which they call Adverse Childhood Experience (ACE). ACEs is most common in children and has been shown to have lifelong effects. The specific definition of an ACE is when the trauma the person is experiencing is during a prolonged period of time. From a random sampling of students in kindergarten through sixth grade, the authors found that ACE exposure is linked with academic success and behavioral concerns. Results from the study by Blodgett & Lanigan (2018) suggested when students ACE exposure is high, their academic struggles are higher. Teachers, however, should be aware that just under half of the students in this study have been exposed or experience an ACE. This finding can help teachers be more aware and sensitive to the experiences their students are going through (Blodgett & Lanigan, 2018). Further, schools can find ways in which all their students have access to natural supports within the school day. The more students are exposed to ACE the more they benefit from resilience-building and therefore can increase their academic success.

In a study done by Eklund, Rossen, Koriakin, Chafouleas & Resnick (2018), the authors looked specifically at how to screen students for ACE exposure. The first purpose of the study was to establish a database of screening measures people have used to identify students dealing with trauma. The measures used in the database could have measured exposure to trauma, symptoms from exposure to trauma or a combined measure. The second purpose of the study was to determine the effectiveness and accuracy of the measures found in the database. Articles were collected by completing an electronic search through online databases. Further inspection was completed by reviewing each articles reference section, skimmed to see if the article was relevant to the study and then, if relevant, the abstract was read to see if it should be included in the database (Eklund et al., 2018). Once the article was included, it was then further examined to meet the seven inclusive criteria for the study: articles had to look specifically at how to measure trauma versus other variables like anxiety or depression; articles had to include children, youth or adolescents as the sample or participants; articles had to be completed since 2000; articles had to be specifically identified as a screening measure; articles could have any type of rating scale or clinical interview format; articles had to show psychometric evidence in support of their hypothesis and articles were peer-reviewed and excluded theses or dissertations (Eklund et al.,

2018). Of the 2,100 articles reviewed, only 60 articles met all the seven inclusion criteria. Those 60 articles were then coded to sort important information each study contained. The articles were coded into four different categories: sample characteristics, reliability, validity and classification accuracy. From the 60 articles examined in detail, the authors found there were only 18 articles that truly met all the inclusion criteria for trauma screening measures. The importance of this study was to find screening methods that could be used for school populations. Some of the articles included in the study had a small sample size making it hard to know the future implications with larger school sample sizes. Some of the articles had good screening measures but were too long making it hard for school personnel to adopt the screening measure in a realistic school environment. Of the 18 articles used, 13 included student self-report or clinical report. There was no teacher or observer report which Eklund et al. (2018) noted as a significant limitation. Teacher reports of student progress are very important for supporting student learning and next steps. The authors of this study show there is limited research done on trauma screening measures and their reliability and validity. Further research could be done on this topic surrounding trauma screening measures and the transference of those measures into schools.

ACEs can happen at any age or continue to happen as children go through life. In a study done by Mann, Kristjansson, Sigfusdottir & Smith (2014), the authors looked at the differences in negative life events from middle school to high school and through college. More specifically, the authors wanted to see how vulnerability to negative life events changed as young people aged. Middle school tends to be an emotional time for young people with an emphasis on peer relationships and self-consciousness. This time also involved a lot of biological changes which may impact the brain and emotional reactions to life events. The participants of this study were 13-15 year old students in secondary school (grade eight through ten) and 17-19 year old

students in full-time junior college. The authors used a questionnaire that looked into three dependent variables: depressed mood, anxiety and anger. The independent variables for negative life events ranged from adverse events, stressful events, stressors, chronic events or traumas (Mann et al., 2014). The authors controlled for family structure, parental education and financial status. After completing the questionnaire and analyzing the results, the authors concluded that depression, anxiety and anger does increase as age increases, however the ability to predict the relationship between those emotions and negative life events decreases (Mann et al., 2014). The authors also concluded that most students experience negative life events (low, medium and high intensity) in the middle grades and are more vulnerable to depression, anxiety and anger. Students in the middle grades are also more likely to react or have anxiety, anger and depression with recent negative life events even if they are considered low intensity (Mann et al., 2014). The results of this study follow other research that suggests middle school aged students are more vulnerable to negative life events and the relating emotions. This study is not longitudinal so there is no way to see how these negative life events and emotions evolve as the specific participants age (Mann et al., 2014). Further research could be done longitudinally and dive deeper into gender differences among middle school aged students.

ACE exposure continues or increases with age just as Mann et al. (2014) showed in their research. ACE exposure is not limited to children in schools, people can be exposed to ACEs in many places. In a study by Day et al. (2017), the authors discussed the academic struggles for students educated in a residential facility. Students in residential facilities are already dealing with ACE exposure and have the opportunity to continue their education in a setting that fits them properly. The study found students self-reported the lack of support they felt from their teachers when it came to their education (Day et al., 2017). The students felt the teachers were

unaware of their academic needs such as after school help and better classroom management. Most students at the residential facility are receiving psychological services for addiction, social and emotional problems (Day et al., 2017). Because students in residential facilities tend to be more at risk for academic struggles, it is important for staff to be supportive of their success. Students can take classes at the residential facility if that best suits them or they can go to an offsite public school. This finding supports the need for teachers to be more aware of ACE exposure everywhere and the way this exposure affects any student's academic success.

Trauma and Teaching

Teaching students with ACE exposure can be hard and can also result in secondary trauma for teachers. Secondary trauma "refers to distress experienced by those providing professional care to, or otherwise engage with, people who have been primary victims of a trauma" (Grundlingh, Knight, Naker & Devries, 2017, p. 2). It is especially important that the caregiver has the correct supports to care for the person dealing with trauma otherwise secondary trauma can develop faster and last longer. In a study by Blitz, Anderson & Saastamoinen (2016), teachers self-reported the supports they needed to feel successful are, support from parents or guardians, support from administration and support from team members. The study found the dynamic between teacher's needs and the supports available are complex due to differing attitudes, ethnic tensions and microaggressions between groups. Some teachers felt defeated and nothing could ever work. Some teachers felt there was a distrust between the teacher and the parent if they were from different ethnic groups. Some teachers felt their concerns were being heard but not acted upon (Blitz et al., 2016). The authors suggested further research on ways to help teachers and students alike find ways to destress throughout the school day and build upon good communication.

Another study by Brunzell, Stokes and Waters (2018) found teachers who feel successful in the classroom also feel a sense of meaningful work. The study talked with teachers to figure out how they deal with ACE exposure students and secondary trauma. The main finding was when teachers reach their breaking point, it is because they feel unsupported by the school and cannot find a way to meet their students' complex needs (Brunzell et al., 2018). Meaningful work can have multiple definitions but in this case, it means having a sense of authenticity, selfefficacy, self-esteem, purpose, belongingness, transcendence, cultural and interpersonal sensemaking. Teachers want to feel like their work is meaningful to maintain a positive attitude and decrease burnout rates (Brunzell et al., 2018). The overall findings of the study found teacher's well-being and meaningful work come together when teachers feel supported and have the correct resources to uplift their students. This support may come from administration, other teachers and even classroom techniques like role-modeling good communication skills.

School environment was a theme that emerged throughout many different studies. One study by Anderson, Blitz & Saastamoinen (2015) noted that success in teaching students exposed to trauma related to the collaboration of school staff and a caring school culture based in shared leadership. The authors of this study focused on a school-university partnership that specialized in a trauma-informed school environment. Professional development opportunities for all staff members, especially all classroom staff other than the teacher, were discussed with administration. Administration noted often teachers felt prepared to deal with complex student needs but not everyone that worked with that particular student felt prepared. The authors in this study wanted to ensure all staff felt prepared to deal with trauma-affected students (Anderson et al., 2015). The findings from this study show that staff who are prepared and trained to help students in crisis, respond to the problem versus reacted to the problem. These findings are

supported by other findings from similar studies. This study by Anderson et al. (2015) dove deeper into the importance of a trauma-informed approach when responding to student behaviors. Many student behaviors tend to draw out more reactive responses from classroom staff. Schools would benefit from turning this reactive response into a social-emotional learning time for both students and staff. Another important finding was staff needed to feel supported by their supervisor whether that was the classroom teacher, principal or both (Anderson et al., 2015). An important outcome from this study was to share the influence of all staff training and supervisor support.

Trauma-informed teaching can help classroom staff respond in a more positive way to behavioral outbursts and building student-teacher relationships. The student-teacher relationship can be fundamental in helping students stay in school, change their behaviors and be successful (Hoffman et al., 2015). Student-teacher relationships rely on the student's attitude toward the teacher but also the teacher's attitude and preconceptions of their students. A study completed by Hoffman et al. (2015) focused on teacher attitudes before and after being exposed to Torey Hayden's Teacher Stories about social skills and relationship skills. These stories are specifically for teachers in special education with an emphasis on emotional and behavioral disorders. Torey Hayden writes fiction and non-fiction books about teaching students with social and emotional behavior disorders. Her non-fiction books are first person accounts about teaching experiences in special education (Hoffman et al., 2015). Because Hayden's stories are so popular and moving, the authors decided to look further into the effects of reading these books on attitudes about teaching special education. The authors based their study on a previous study done by Marlow & Disney in 2007. This study also followed the effects of Hayden's books on teacher attitudes but failed to expand on the changes to singular participant beliefs (Hoffman et al., 2015).

Participants in the study by Hoffman et al. (2015) were completing a pre-certification course while being employed as full-time teachers. Participants read five books from Hayden and used the information to discuss, write and dive deeper into the theories and practices of special education. To collect results, the authors created a survey based on demographic, open-ended questions and closed-ended questions. The main question the authors were looking at was the effect of reading Hayden's stories during undergraduate schooling on the educators' relationship skills. Follow-up studies were done to really examine the long-term changes the educators felt about their relationship skills. The results show educators do find Hayden's stories to be beneficial in preparing them to teach students in special education. The authors conclude with saying, "Participant comments reflecting the importance of positive relationships between teachers and students should prompt discussion among researchers and policy makers regarding the place of relationship skills in teacher education" (Hoffman et al., 2015, p. 82). This study by Hoffman et al., (2018) re-enforces the positive effects of introducing trauma-informed practices early on in teacher preparation programs.

In another study about student-teacher relationships, Hamre & Pianta (2001) examined the impact of student-teacher relationships starting in kindergarten, impact academic success from kindergarten through eighth grade. Early-childhood teachers shape students' school experience be regulating peer relationships, communication skills, coping skills and behavioral supports. This is the foundation for establishing secure attachment to school personnel. The participants in this study were 179 students from the kindergarten class of 1988-89. This sample was smaller than the original class because this sample only included students who stayed in the district through eighth grade. The final sample contained 91 boys and 88 girls with kindergarten teachers averaging 10.3 years of teaching experience (Hamre & Pianta, 2001). Data was collected from school records, math and language arts grades, standardized test scores, work habits and disciplinary records. Teachers also completed questionnaires in the spring of the kindergarten year. Final records were reviewed in the spring of the eighth-grade year with data only from the first semester of the year. The authors tested cognitive development (Stanford-Binet Intelligence Scale-Revised, Fourth Edition), used a teacher-child rating scale and a studentteacher relationship scale (Hamre & Pianta, 2001). The results revealed student's school success was mirrored by the positive student-teacher relationships that developed early on in kindergarten. The results showed an even closer correlation between those factors, especially when it came to future behavior, when the student was a boy (Hamre & Pianta, 2001). Every teacher teaches in their own way but Hamre & Pianta (2001) speculate good student-teacher relationships come from "the extent to which children can access the instructional and socialization resources of the classroom environment" (p.636).

Schools have not always had the important resources that school social workers, school counselors and school psychologists provide. Many times, while working with students who have dealt with trauma, the professional duties of the teacher, social worker and psychologist get meshed together. In a study done by Alisic (2012) she examined the teachers' perspective of working with students dealing with traumatic life events. Teacher's often need support and different resources to help support and teach their students. The author looked into the importance of school psychologist and social workers knowing the teachers' perspective of what their job is while dealing with a student in trauma, so that all parties can support the teacher and the student in the best way possible. When finding participants for this study, the author chose specific teachers that fit the categories being tested which were, gender, level of teaching experience, school background and school neighborhood. Data collection for this study was done

in interview form by a final-year students studying pedagogy. There was a primary interviewer and a secondary interviewer/observer who asked about teacher experiences, feelings, exchanges with colleagues, children and families and other information needs. The following themes arose from the participants and their answers: 1) the role of the teacher, 2) finding balance in answering all the different needs, 3) the need for more professional instruction on dealing with students' trauma and 4) the emotional repercussions of working with students dealing with trauma (Alisic, 2012). The first theme, role of the teachers, most teachers felt a shift in their role going from teaching to being a social worker or counselor for the students. There was a gray line where one profession started and another began. Some teachers felt this shift in a more positive way, seeing the trend in schooling was going towards more of a teacher/caregiver role. Other teachers felt this shift was too much and wanted to get back to the basics of what a teacher's role should be, to teach (Alisic, 2012). Along with finding a balance in their role, the second theme had teachers trying to balance the needs of the students. The teachers' questioned giving extra attention, the child's needs versus the group's needs, focusing on the trauma versus introducing normal life again and where to seek support for specialized need or referral (Alisic, 2012). The emotional burden of teaching students dealing with trauma was another theme and this one is important to address so teachers can avoid secondary trauma. The author found if teachers had a good support system from their colleagues, they felt less helpless when confronted with their students' challenging experiences. This also helped teachers feel like they could confide in their school for advice and support with their students. This study drew from specific participants in the study and the author recognizes this as a limitation. However, the author notes research from the teachers' perspective is limited and would like to see this study replicated and changed to find further results on this topic (Alisic, 2012). Understanding the perspective from those that

support students going through trauma can help the care given to the student going through trauma.

It can be important to address trauma symptoms as early as possible if teachers can recognize symptoms in their students. In a study done by Cummings, Addante, Swindell & Meadan (2017), the authors explored the tools and skills teachers need to address students' trauma needs in the best way possible. The authors specifically looked-for information regarding what early-childhood teachers should know about trauma, the emotional and behavior patterns of their students and how to support them in the classroom. The participants in the study were community-based service providers who had worked with children and their families exposed to traumatic events. The experience of these professionals ranged from four years to 43 years of working in different environments. The authors had four assumptions about the participants: they realized the impact of trauma, recognized the signs of trauma, responded by incorporating their trauma knowledge in the current environment and worked to prevent re-traumatization of their clients (Cummings et al., 2017). Participants that were selected for the study completed a questionnaire and semi-structured interview given by the authors over the phone. The questionnaire contained questions regarding the participants work and experience. The interview was comprised of 13 questions relating to participants definition of trauma and diving into further detail about work experiences relating to the research questions. Interviews and questionnaires were examined and coded to find common themes among the participants. The authors found four common themes in the data analysis done on participant's questionnaire and interview. The four themes were "(a) Realizing the Existence and Impact of Trauma among Young Children, (b) Recognizing Reactions to Trauma, (c) Responding to Trauma: Promotive Approaches and Strategies, and (d) Resisting Re-Traumatization: Environmental Consideration"

(Cummings et al., 2017, p. 2731). Since it can be hard to screen for trauma, the participants suggest teachers implement trauma informed approaches in their classroom to aid all students. The Pyramid Model is one that can be readily used and adapted to students and the classroom environment. Many participants mention how individual needs vary when it comes to traumatic experiences. Individual needs should be met and that can be hard in a classroom setting with one teacher and many students (Cummings et al., 2017). The author's overall findings show there are ways teachers can support their whole classroom in a trauma-informed way. The authors note the participants in this study are not teachers so there may be limitations on how achievable it is to implement trauma-informed practices in real life.

School readiness is important in predicting student achievements and student-teacher relationships play an important role. In a study done by Portilla, Ballard, Adler, Boyce & Obradovic (2014), the authors looked at student-teacher relationship quality and how that affects students' behaviors through kindergarten and into first grade. There are two main factors for school readiness the authors looked for in the study: self-regulation skills and school engagement. The main questions the authors looked at were how gender affects school function when entering kindergarten, if teacher-student relationships in kindergarten influence other important relationships throughout the years and to see if all of these factors are also present in the first grade year. This was a longitudinal study so the authors collected data over three years in 2004, 2005 and 2006. Participants were 338 kindergarten students from 29 classrooms in the Bay Area, California. Data collection was done during three points in the school year: kindergarten fall, kindergarten spring and first-grade spring (Portilla et al., 2014). Parents were asked if their child could participate and given a questionnaire regarding their demographics, family and child functioning. Teachers were also given a questionnaire about student functioning

after some time to get to know their students. To determine teacher-child relationships, the authors used the Student-Teacher Relationship Scale (shortened versions) which was completed by the teachers at three different times. To determine child-functioning in the areas of impulsivity/inattention, student engagement and academic competence, the authors used the MacArthur Health and Behavioral Questionnaire completed by parents and teachers at three different times (Portilla et al., 2014). The authors used a nested path analysis model to compute their results. The analysis showed students who show higher impulsivity and inattention at the beginning of the school year, have an increase of teacher conflict which worsens or persist through the rest of the school year and into the first-grade year. An important finding the authors saw was the benefits of teacher closeness did not spill over into other important student functioning domains. The authors say this is because this study looked at the transactional effects in multiple areas relating to teacher closeness and student functioning (Portilla et al., 2014). Overall, the authors found self-regulation skills and positive classroom environments have a huge effect on students, especially early in their academic career. Portilla et al. (2014) note the importance of continued teacher education through professional development opportunities and focusing on having a supportive classroom environment to help improve student readiness as soon as possible.

Trauma, Teaching and Training

Many teaching practices are based on research theories that have shown to help students become educated. To help teachers, staff and schools succeed in education and students with ACEs, there must be some research based practices to show how educators are being trained to teach students with ACEs and the success of those trainings. If teachers are unaware of the underlying factors in their students' behavior, they may be misinterpreting the situation and creating a different conflict. For example, teachers may think a student is misbehaving when they run out of the classroom but really, they are feeling unsafe in their environment and are looking for a different space to go that feels safe (Terrasi & Crain de Galarace, 2017). In a study done by Blitz et al., (2016) the training that was done for the teachers was based on a culturally responsive trauma-informed whole-school approach to education. As noted earlier, the authors looked into the teacher's perspective when dealing with students going through trauma. The authors mention the importance of personal and cultural bias that develops overtime. At the beginning of the research study, the authors created a training for staff members participating in the study. The presentation focused on the neurophysiological and behavioral impact of Trauma and Toxic Stress (TTS) (Blitz et al., 2016). After the training was complete, the participants completed surveys and unstructured interviews. From the data analysis, the authors of the study found there were many negative opinions from teachers about the training. The authors concluded this could have resulted from the consulting team not being able to establish trustworthy relationships within the research time frame. The consulting team was made up of African American presenters which may have triggered an unknown racial bias of the teachers. Blitz et al. (2016) explain the importance of teachers understanding their biases so that they may better understand their student and student's background. Another important factor in the negative attitudes from the training could have been due to the mandatory attendance from staff. The authors suggest school administration look at training as an opportunity allowing teachers to feel supported in participating. The final factors the authors note, could have been from the secondary trauma school staff have previously experienced. If staff felt their own student's needs were not met, there may have been more negative feelings towards the changes proposed in the training (Blitz et al., 2016). Secondary trauma may affect staff attitudes towards change and

whether or not the changes will be successful. The authors conclude this study can help further research regarding trauma-informed schools and how staff can be trained more meaningfully and without feeling like they are forced into attending trainings. The authors suggest the school staff and administration come together to find a good way to communicate about classroom struggles and in which ways the teachers and students can be supported.

Schools are starting to make the transition from being a classical learning environment based mainly on academic success to trauma informed school practices. This creates a more supportive learning environment for students, teachers and administration because the needs of students dealing with ACEs are met in an appropriate way. In a study done by Anderson et al. (2015) they say, "trauma-informed practices can help schools establish safer, more consistent learning environments" (p. 114). For students going through trauma, school may be the only consistent environment in their life at the moment. When teachers feel supported and informed about how to teach and deal with their students going through trauma, the school environment changes. The participants in the study were from a purposefully selected school where 25 of the staff members were selected to participate in the study. The study included four trainings participants took part in which were determined by a survey to assess their own needs for trauma-informed practices (Anderson et al., 2015). The four needs that emerged for trainings were neurohormonal effects of trauma and toxic stress on behavior and learning, positive behavioral strategies to use in the classroom, stress reduction and relaxation techniques and cognitive behavioral strategies to use for classroom intervention. The final step was for the participants to take a focus group and a post-workshop survey on what they learned, what they would like to learn more about and what they liked about the workshops. The authors found that overall, there was a positive feeling about the effects of the workshops. The teachers found they

appreciated knowing the experiences other teachers had gone through. This helped teachers relate to other teachers experiences and come together as a teaching team. Because the teachers felt the workshops were successful, they also offered suggestions on how to make trainings more successful for future groups. A few suggestions were to make trainings more consistent on days and times. For example, every third Tuesday of the month or every other Thursday from 2 p.m. to 5 p.m. Teachers also suggested creating reminders for when trainings were happening and planners should take into consideration if the trainings will be full days or half days. The participants also voiced the workshops contained great information but there was still a disconnect between the workshop practice and implementing the strategies in the real-world classroom. The authors suggest continued research on the how the actual practice of traumainformed strategies works in the classroom. Schools are shifting to a more trauma-informed approach to teaching because the needs of their students, academically and behaviorally, are continuously changing. There must be more targeted professional development strategies for teachers so they may be more prepared for a trauma-informed teaching approach (Anderson et al., 2015).

Trauma, Teaching and Interventions

Some research has been done on specific programs to help schools implement a traumainformed approach. In a study done by McConnico, Boynton-Jarrett, Bailey, & Nandi (2016) the Supportive Trauma Interventions for Educators (STRIVE) model was used in the Boston Public School system. The authors specifically looked at the effects on kindergarten, first and second grade classrooms at the Orchard Gardens Pilot School. The intention of the study was to train educators on the effects of trauma and how that impacts classroom behaviors and promoting a curriculum to helps students feel successful in their classroom environment (McConnico et al., 2016). This model was different from others because it began to focus on both the student and teacher needs to create a cohesive classroom versus pinpointing individual student needs. The authors noted a large factor in moving schools to a more trauma-informed approach was, "Helping staff understand and view behavior as communicating a need for a child rather than seeing the child's behavior as willful or just a 'behavior,' is one of the foundations of creating a trauma-sensitive school" (McConnico et al., 2016, p. 38). The participants in this study completed 10 hours of professional development focused on addressing student needs in the classroom. The trainings contained information about understanding how trauma affects our students but also provided strategies teachers can use in the classroom. There was also an emphasis on relationship building between teachers and students to create a positive and supportive school environment. After the trainings, the STRIVE model also provides schools with coaching and consulting practices. From previous research studies, the authors noted the effectiveness of coaching because teachers receive feedback in context of their classroom. When teaching strategies are suggested out of the classroom, teachers can have a harder time implementing them and seeing results than when in-class coaching is available (McConnico et al., 2016). To measure the results of the STRIVE model, the authors used observations and questionnaires prior to completing the trainings and after trainings and coaching. The results found in the study support the use of the STRIVE model to promote a trauma-informed approach to learning. The authors recognize their small sample size of only 12 teachers does not support the generalizability of the study but still shows significant results. It would be interesting to see this study replicated with a larger sample size across different schools. This study is just the start for schools implementing trauma-informed models.

Another model that has been studied by Santiago et al. (2018) was the Bounce Back model. The study done by Santiago et al. (2018) was a replication of a previous study done by Langley et al. (2015) using the Bounce Back model but with a different school district and geographical area. Santiago et al. (2018) used participants from an urban Illinois school district over three years. The majority of the students and parents that participated were from lowincome, Latino families with multiple traumatic life experiences. Classroom teachers and school social workers chose students on whether they would benefit from trauma-based interventions. Unlike in the initial study done by Langley et al. (2015), the authors in this study wanted to make it easier for schools to implement the Bounce Back intervention so the school social workers were in charge of completing the interventions with students. The school social workers were trained in a one-day session on the Bounce Back model. Consultation was always available for the school social workers if they needed help with implementing strategies or had questions. About once a month, the authors of the study and school social workers came together to discuss progress. The schools and students that participated in the study were split into two groups, immediate treatment or waitlist control, with some schools being in different groups each year due to the randomization procedures (Santiago et al., 2018). Those assigned to the immediate treatment group started the Bounce Back model within weeks of being assessed. Whereas the waitlist control group started three months after being selected for the intervention. Assessments on student progress was done at baseline, three months after baseline (after the immediate group finished Bounce Back interventions) and six months after baseline (after the waitlist control group finished Bounce Back interventions) (Santiago et al., 2018). For the Bounce Back model, it was important that parents participate as well. Parents needed to grant permission for their child to participate in the study and were also asked to also complete the assessments done at

baseline, three months and six months. Parents were also urged to participate in three sessions with to school social worker to understand the skills their child was learning with the Bounce Back model. To help facilitate parent participation, parent sessions could be done over the phone, in groups, in shorter sessions or combined into a previously planned meeting (Santiago et al. 2018). The authors results confirmed that the pilot study of the Bounce Back model done by Langley et al. (2015) was successful for students dealing with trauma. The signs of Post-Traumatic Stress Disorder (PTSD) shown in the student participants of this study decreased when given immediate interventions with the Bounce Back model. Some important aspects of this replication study done by Santiago et al. (2018) were they involved parents as much as possible in the Bounce Back model and they also had school social workers administer the Bounce Back interventions. Most school social workers had a previously established relationship with the students in the study, allowing there to be more support through the intervention. Thus, again, showing the importance of adult-student relationships in the school setting. School staff involved in the study were happy with the results shown by the students increased coping skills. However, they still expressed concerns regarding time, competing demands and parental involvement.

Some interventions focus on a more specific gender, race or demographic. In a study done by Mann (2013), the author looked at a program called Project Challenge which is a service organization focused on delinquent adolescents. This program has been around for about 12 years helping male and female adolescents with their coping skills. According to the Office of Juvenile Justice and Delinquency Prevention (OJJDP), "girls' delinquency is highly correlated with physical and sexual abuse, family fragmentation, school failure, untreated health problems, especially those related to mental and emotional health, and a convergence of risk factors during the middle school years" (Mann, 2013, p. 2). After some feedback about the program, Project Challenge changed to better support the specific needs of female adolescents discussed by the OJJDP. The study included female students from alternative middle schools in North Central Florida. Of all the students referred to by the school administration, about 95% of female students agreed to participate. Project Challenge included four phases that lasted two weeks followed by two months of post-intervention follow-up support (Mann, 2013). Prior to phase one of Project Challenge, team members were trained on strategies for working with the participants and project fidelity. Phase One was an assessment portion where participants were able to meet their team member and ask questions. Phase Two was a preparation portion where team members and participants started building relationships based around activities they would be participating in for Phase Three. Phase Two ended with participants journaling and discussing specific topics. Phase Three was a challenge trip lasting four-days surrounded by outdoor challenges and activities. This phase also included journaling assignments and group discussions for a more structured feel. Phase Four was a transference stage where participants learned how to transfer skills learned from Phase Three. Participants were able to discuss their experience and set personal goals for themselves (Mann, 2013). The results from Project Challenge show the participants did have an increase in self-esteem and identity. The follow-up portion of the study showed participants returned to baseline self-esteem and identity levels after two-weeks. Even though participants returned to baseline, interventions such as Project Challenge show the importance of education on experiences, observations and relationships. The author of the study suggests more research on the follow-up effects of Project Challenge. The initial findings support the intervention model but it is important to really examine the long-term effects of the study (Mann, 2013).

In a study done by Walsh et al. (2014) the authors suggest changing the focus of student support by addressing student needs and strengths, using a comprehensive approach being a core function in school while drawing from community resources. The program is called City Connects and it is an intervention established in Boston area schools. City Connects addressed student needs in the way Walsh et al. (2014) suggests by creating a tailored support program for individual students. There is a site coordinator in each school who is a licensed school counselor or social worker and they work with teachers and community resources to provide support for students. The site coordinator works with teachers to examine which students are the most vulnerable in the classroom and which supports they may need. If a student is more vulnerable, they will receive an individual student review by the site coordinator. The authors emphasized this is not the same as receiving a special education referral (Walsh et al., 2014). The participants were schools that were using City Connects interventions and a comparison group of schools that were not using City Connects but compared demographically to those that were. This was a longitudinal study so participants were in school starting in the 1999-2000 school year through the 2008-2009 school year. At the end of each school year, the authors were given the report cards of the participants to measure academic success. Other factors like demographics and enrollment were also included in the report cards. The overall findings in this study support academic success for students who are in City Connect intervention schools. The results also support the long-lasting effects of City Connect from elementary school through middle school and higher grades. Since City Connect is mainly in elementary schools, the academic success results found in middle school students is impressive. This shows the interventions provided by City Connect do have lasting results that can impact future academic achievement (Walsh et al., 2014). The authors results also support the importance of whole-school interventions versus

individual interventions. Like all studies, Walsh et al. (2014) had its limitations including the inability to completely choose control and tested groups. The authors had to work with the schools who had already implemented City Connects interventions and from there find control groups who had not used City Connect interventions. From that limitation alone, there were many different analyses that had to be done throughout the study. However, the authors would like to see future research on the effects of City Connects in different schools and how whole school intervention can affect academic achievement in middle school and even high school. There could also be further research on the effects of having a site coordinator for whole school interventions. In the City Connects intervention, having a site coordinator increased collaboration across administration, teachers, social workers and other school staff (Walsh et al., 2014).

Another intervention shown to help students improve school readiness is the Head Start program. This program helped students in preschool programs initiate their own learning with the positive support of their teachers. As this program developed and expanded, there were some emerging themes students were lacking in their school readiness and learning skills. Those themes were social and emotional readiness and language and literacy skills. After noticing these deficits, researchers developed the Head Start Research-based Developmentally Informed (REDI) program. This program would combine the skills needed to improve social and emotional readiness along with language and literacy skills while providing teachers with lessons, extensions and strategies for the classroom. In a study done by Bierman et al. (2008), the authors examined the effects of the Head Start REDI program on students social, emotional, language and literacy skills. Participants in this study came from 44 classrooms in Pennsylvania from both rural and city communities. The authors accounted for the differences in each classroom and area by stratifying groups based on location, student demographics and length of program which resulted in 14 classrooms in each group (control and experimental). Classrooms were studied over a two-year time period while teachers monitored student progress and assessed progress one year after the intervention. Parent interviews were conducted before, during and after the intervention by a trained interviewer (Bierman et al., 2008). Student interviews were conducted by trained interviewers three-weeks into the school year. Interviews were a pull-out format and continued for about a month into the school year. At the end of the year, students were separated into groups of three and pulled-out together to participate in a structured play setting. The students were given a new toy to play with and observers measured their social skills and interactions during that time. Observers were unaware of which group the students were in, control or experimental (Bierman et al., 2008). For social and emotional skills, teachers were introduced to the Preschool PATHS curriculum. This curriculum included 33 lessons with extensions teachers used to model, discuss and role-play proper social-emotional skills with students. Teachers were asked to complete one lesson and one extension every week while encouraging these social skills throughout the whole day (Bierman et al., 2008). Language and literacy skills were targeted by the Head Start REDI program using "an interactive reading program, a set of "Sound Games," and print center activities" (p. 1807). Because this study had teachers implementing the interventions, teachers attended professional development trainings to better understand the interventions and curriculums. There were weekly mentoring sessions available for teachers to support the implementation of the interventions (Bierman et al., 2008). It is important to note teachers used these interventions in addition to the regular Head Start education curriculum. Overall, the results showed a significant improvement in students social and emotional skills. From teacher and observer reports and specialized REDI curriculum,

students showed improved problem-solving skills and behavior management skills. Results showed aggressive tendencies decreased in teachers and parent reports even though it was not statistically significant (Bierman et al., 2008). In terms of language development with the REDI program, significant results were shown in students' vocabulary and communication skills. Communication skills were more significant in parent reports than with teacher or observer reports. Increased phonological awareness was found in students initially but further follow-up assessments should be done to see possible generalization (Bierman et al., 2008). The findings in the study by Bierman et al. (2008) support the integration of the Head Start REDI program into preschool programs. The REDI program explored the importance of explicit instruction while allowing students to guide their own learning like in a typical Head Start program. The authors would like to see further research on this program specifically in the ability for students to generalize their learning of social and emotional skills in other areas.

Successful Interventions

There are a few successful interventions that have been mentioned above. The first was the STRIVE Model done in a study by McConnico et al. (2016). This model used to look into trainings teachers complete and how to make them more successful for the teachers and students. Teachers completed trainings to help them feel better prepared for teaching students dealing with trauma. Prior to the trainings, teachers felt unprepared to help support their students in the classroom. After trainings, teachers felt better prepared but also satisfied with the trainings purpose and information. The STRIVE model findings supported the transition to traumainformed teaching and learning in schools.

The second successful intervention was the Bounce Back model done in a study by Santiago et al. (2018). This study helped school social workers complete an intervention program with students going through trauma. The authors looked at the difference between immediate intervention and delayed intervention for participating students. The results of the study showed increased coping skills for students in the immediate intervention group overtime. The school social workers who completed the intervention saw positive feedback from students and were also supported by the authors and other social workers completing the intervention. It is important to note that this model worked well but also used school personnel to make replication more achievable.

The third intervention that was successful was the Project Challenge in a study by Mann (2013) completed with female students from alternative middle schools. This program involved outside of school activities for participants to learn coping skills and improve their self-esteem. When participants showed higher self-esteem and identity levels they were less likely to engage in delinquent activities. The author of this study noted the benefits of future research to see the long-term effects of Project Challenge on female students' self-esteem and identity. This intervention was not done in a school but shows the benefits of increased self-esteem and identity for students dealing with ACEs.

A fourth intervention that was successful was the City Connects program in the Boston area schools from a study done by Walsh et al. (2014). The City Connects program addressed student needs by creating an individualized program with school supports and community supports. There was a site coordinator who was in the schools to collaborate with teachers and help with community resources. This intervention program demonstrated increased academic success for students in elementary school and future success in middle school and high school. In a report about the City Connects program it says, "After leaving the intervention and moving on to middle school, students from City Connects schools scored higher on statewide math and English language arts tests than comparison peers who were never enrolled in a City Connects school" (Manekin, 2016, p. 1). Another important factor in this intervention is the program utilized community resources along with school resources. This shows continued progress because if students leave the school they can still access their community support. It has also been successfully replicated in other states which shows the impact of the intervention (Manekin, 2016).

A final intervention examined in this chapter was the Head Start REDI program in a study done by Bierman et al. (2008). This intervention was added in addition to the Head Start programs already in place in Pennsylvania. The Head Start programs noticed some declining skills from the students going through the program in the areas of social and emotional learning and language and literacy skills. The REDI program offered teachers a set curriculum to use with lesson plans and extensions easily implemented in the classroom. The teachers also had mentors and trainings to assist along the way and help implements the lessons. Overall, the REDI program showed improvements in students' social-emotional skills and communication skills. This intervention shows the positive effects of interventions on social and emotional skills but also the usefulness of adding an intervention with the current curriculum.

In a study done by Taylor, Oberle, Durlak and Weissberg (2017) they examined the longterm effects of social and emotional interventions. The studies the authors examined all had follow-up data six months or later after the intervention. There are many studies that examine the effects of social and emotional interventions, however, the authors in this study wanted to look specifically at how school based social emotional interventions affect future well-being. Eightytwo interventions were studied and they all contained school-based interventions with students in kindergarten through 12th grade. Demographics in each study varied allowing the authors to look at how the interventions impacted different races, age groups and family background. Taylor et al. (2017) examined the interventions by analyzing positive social and emotional assets and positive and negative indicators of student well-being. From the analysis of the 82 interventions, the authors found five significant results from the review. The first finding was school-based social and emotional interventions where shown to have long lasting effects for academic success. The second finding showed an increase and positive attitudes, social skills and positive behaviors along with the decrease in continued emotional, social and behavioral problems. The third finding supported one of Taylor et al. (2017) hypotheses by demonstrating the positive effects of social and emotional interventions across different racial and socioeconomic groups. This finding does not mean future interventions can be identical. All people are different and interventions may still need to be tailored to individual people or groups. The fourth finding supports higher emotional skills post-intervention with continued growth in skills during followup months. The fifth finding, although small, supports a long-term increase in social relationships and academic outcomes (Taylor et al., 2017). The overall findings in this study support the implementation of social and emotional learning interventions in a school-based environment. There are limitations to the study done by Taylor et al. (2017), nevertheless, it shows the importance of school interventions to promote positive social skills and academic success overtime.

CHAPTER III: Discussion and Conclusion

Summary

This research was designed to look into positive trauma-informed interventions in schools and how that affects teachers' role in the classroom. The research looked at the impact trauma has on students in relation to student success and behaviors along with trainings and support needed for teachers. Successful interventions were examined to see what programs may work in real school environments to help support students with ACEs and support teaching staff to maintain positive learning environments for all students.

Before diving into trauma in schools and successful interventions, I felt it was important to explain how trauma can impact the brain. Experiencing ACEs as a child can change your brain chemistry and impact future adult life. Changes in chemistry affect emotions, decision making skills and impulse control (Mahajan, 2018). These changes in the developing brain then impact the emotions, decision making skills and impulse control children are showing in a school environment.

The first step in the literature review was to examine how traumatic events affect students and how trauma is defined in schools today. Studies were reviewed to see how ACEs are defined for students in school and how prevalent they can be (Blodgett & Lanigan, 2018). There is no specific way teachers and school administrators can screen for ACEs so studies were reviewed in Eklund et al. (2018) to find the best way to get students with ACEs the services they need. Some students with ACEs are in nontraditional settings such as a residential facility (Day et al., 2017) but many were in the traditional school setting.

The second step was to examine the teachers' perspective on working with students going through trauma or ACEs. Studies found in this area examined the potential for secondary trauma

on teachers. Secondary trauma can happen to teachers when there may be a lack of support or a lack of knowledge about how to best assist students with trauma (Blitz, Anderson & Saastamoinen, 2016). When working through trauma with students, it was important for teachers to feel their work was meaningful and worth the challenging times. Teachers also reported they were more receptive to professional development that was meaningful and could be easily replicated in the classroom (Brunzell et al., 2018). Professional development opportunities are important for all staff. Teachers reported they felt more willing to go and willing to replicate strategies when professional development opportunities were meaningful and flexible with their schedules. Many studies brought up the importance of student-teacher relationships. I have noticed the importance of this in my own work. There are certain students that work better and cooperate with certain personalities. Those teachers who have established a connection with students reflect more positively on negative behaviors that may occur in school. After examining the issues arising from traumatic events affecting students and teachers it was important to see what interventions have been used and if they are successful.

Many studies were reviewed to examine interventions used with students going through trauma. The main findings involved interventions where programs implemented in schools were successful for both students and teachers. For example, some programs moved the whole school to a more trauma-informed school. This involved supports for all students in the classroom versus just specific students in need. Teachers in these settings felt more supported by administration staff and could better assist all students in their academic success (Anderson et al., 2015). Another essential finding from successful interventions was the importance of teacher support. Teacher support came from administration, schools' counselors or social workers and parents. When teachers were supported by the school, there was a lower sense of failure and a higher sense of meaningful work (Brunzell et al., 2018).

Professional Application

As part of my research, I wanted to find successful ways in which schools and classroom teachers can support students who are or have, dealt with traumatic life experiences. Working with someone who has been through trauma can be very hard and can also have secondary effects for the caregiver or teacher. Secondary trauma can lead to stress, depression and burnout among many teachers when there is not enough support for the teacher and students (Blitz, Anderson & Saastamoinen, 2016). To avoid secondary trauma and more stress on students already going through trauma, it is important to be informed on how trauma can impact the brain, student learning and behavior.

If teachers and schools can incorporate a more trauma-informed approach to learning, all students may benefit. Strategies teachers can use in their classroom include, but are not limited to, coping strategies, relaxation strategies, outside resources like therapy or social work services and professional development opportunities to further teacher preparedness. From the strategies and successful interventions I have researched, the general consensus from teachers about what is most successful involved administrative support and good social/emotional interventions and strategies.

As a special education teacher, it can be hard to determine if your students' behavior is stemming from their disability or their life experience. It is necessary to remember students who have ACEs may not qualify for special education but may still need supports and differentiated learning. This means that every teacher should feel informed with the proper supports to teach all of their students. Professional development opportunities should be available and meaningful for all staff members. There should be opportunities for teaching staff but also teaching assistants and support staff like school counselors and school social workers. Teaching assistants provide great support for special education students and general education teachers. To work fully as a team for students with ACEs, it is important that all staff working with these students understand the necessary supports to make them successful. Because teaching assistants may have limited time before, during and after school, trainings must be carefully planned around school schedules to maintain significance for teaching assistant professional development.

Limitations

Much of the research I looked at involved personal reports on things like work environment, administrative support, student learning and behavior and the positives and negatives of professional development opportunities. Many authors used semi-structured interviews and surveys to determine the effectiveness of the intervention or research. Although this is a good way to collect data it is not as black and white as true quantitative data. Evidence supporting the studies outcomes were based heavily on teacher, student or administration opinions.

There are also limitations when it came to school demographic and sample size. There was a lot a variety when it came to which participants were in each study. Some schools were in urban, suburban and rural, some teachers had just a couple years of experience while others had many years, some schools had a more diverse student population while others had more singular populations. Schools have diverse populations so researchers may not get the exact participant population they are looking for in that particular study. As it can be hard to control from diversity, it can be hard to control for how many students go through ACEs in each school.

Some studies that were reviewed relied heavily on fidelity of the programs being implemented. For example, in Bierman et al. (2018), the authors could hope that the Head Start REDI program was being properly implemented in the classrooms. Trainings and coaching was provided by teachers but ultimately it was how the teacher presented the curriculum that influenced the outcome. Fidelity was also a limitation in studies where teachers were receiving training and implementing interventions in their classroom like in studies done by McConnico et al. (2016) and Santiago et al. (2018).

Future Research

Every study that was reviewed above mentioned the importance of replication and future research on this topic. In the study by Walsh et al. (2014) the authors note, "It will be important for future research to study the extent to which these findings generalize to other school districts" (p.732). Successful interventions should be examined and replicated to see if they are successful in other school districts and even in other states. Six successful interventions were reviewed above and could be replicated to test their ability to be generalized.

The other important factor to be considered when replicating the successful interventions, would be the ability for school's staff to implement the interventions and not the researchers. For example, the study done by Santiago et al. (2018) was a replication of a study done by Langley et al. (2015). In the study done by Langley et al. (2015), the researchers carried out the intervention with the students. In the replication done by Santiago et al. (2018), the authors trained and coached school staff so they could complete the intervention with the school participants. The authors in Santiago et al. (2018) note:

Therefore, the intervention was delivered by existing school-based clinicians who followed the protocols that exist for group mental health interventions and received training and implementation support at the level typical for the district when bringing on new interventions. Similar to the Langley et al. (2015) study, the approach that was taken in the current study viewed feasibility, acceptability, and sustainability as being of primary importance. (p.8)

Teachers in other qualitative studies noted the hardships of going to trainings and not seeing or being able to successfully implement the knowledge and strategies they gained from the training. In future research, authors should look at the difference between teachers implementing strategies and researchers implementing strategies. Teachers also spoke positively about researchers who continued to coach them through the implementation process.

Future research can also be done to look at the long-term effects of successful interventions on student success. If teachers can successfully implement strategies for supporting students with trauma, do these strategies continue to sustain the students' success in school? The main goal of teaching is to support student needs and make them successful in the future. If the interventions are just successful for a short time period, maybe those interventions need to be changed to prolong the effects for student success.

Conclusion

In conclusion, it is important to find sustainable supports and interventions for both our students and teachers dealing with trauma. It can be challenging for teachers to find the correct supports for their students if the teachers do not feel trained on working with students going through trauma. If teachers do not feel support by school administration it can lead to burnout and secondary trauma in the workplace. Teaching is such an important profession and we are always in need of more teachers so we do not want to burden our students further with teachers that are unsupported and burnt out.

Slowly interventions for students dealing with trauma are being researched and studied to determine their success. Schools are slowly moving toward a more trauma-informed approach for all student learning not just certain students. When teachers can change their focus from one or two specific students to all their students, we feel we are serving our classroom in the correct way. Understanding mental health, trauma, emotions and brain development has changed the practices teachers utilize in their classroom.

The purpose of this thesis was to examine the best way teachers can serve their students going through trauma and without wearing so many different hats. There is always more research to be done on how to implement the training strategies teachers learn and to prolong the effects of successful interventions. Teaching can be difficult and made more complicated with the problems our students are facing at home. We need schools to continue to be safe places for students to learn and the best way to do that is to support them with tools to carry them through the challenges life will put in their way. Teachers need continued support by administration, districts and trainings so we continue to find meaning in our work and be there for our students.

References

- Alisic, E. (2012). Teachers' perspectives on providing support to children after trauma: A qualitative study. *School Psychology Quarterly*, 27(1), 51-59. Retrieved from http://dx.doi.org.ezproxy.bethel.edu/10.1037/a0028590
- Anderson, E. M., Blitz, L. V., & Saastamoinen, M. (2015). Exploring a school-university model for professional development with classroom staff: Teaching trauma-informed approaches. *School Community Journal*, 25(2), 113-134.
- Barr, D. A. (2018). When trauma hinders learning. Phi Delta Kappan, 99(6), 39-44.
- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., ... Gill, S. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI Program. *Child Development*, *79*(6), 1802–1817. https://doi-org.ezproxy.bethel.edu/10.1111/j.1467-8624.2008.01227.x
- Black, D.W., & Grant, J.E. (1956) DSM-5 Guidebook: The essential companion to the diagnostic and statistical manual of mental disorders (5th ed.) Arlington, VA: American Psychiatric Publishing.
- Blair, C., & Raver, C. C. (2015). School readiness and self-regulation: A developmental psychobiological approach. *Annual Review Of Psychology*, 66(1), 711-731.
 doi:10.1146/annurev-psych-010814-015221
- 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.

- 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.
- 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.
- Cinotti, D. (2014). Competing professional identity models in school counseling: A historical perspective and commentary. *Professional Counselor*, *4*(5), 417–425. Retrieved from http://ezproxy.bethel.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eri c&AN=EJ1063198&site=ehost-live&scope=site
- Craig, S. E. (2016). The trauma-sensitive teacher. *Educational Leadership*, 74(1), 28-32.
- Crosby, S. D. (2015). An ecological perspective on emerging trauma-informed teaching practices. *Children & Schools*, *37*(4), 223-230. http://dx.doi.org.ezproxy.bethel.edu/10.1093/cs/cdv027
- Cummings, K., Addante, S., Swindell, J., & Meadan, H. (2017). Creating supportive environments for children who have had exposure to traumatic events. *Journal Of Child & Family Studies*, 26(10), 2728-2741. doi:10.1007/s10826-017-0774-9
 - Day, A.G., Baroni, B., Somers, C., Shier, J., Zammit, M., Crosby, S., ...Hong, J.S. (2017). Trauma and triggers: Students' perspectives on enhancing the classroom experiences at an alternative residential treatment-based school. *Children & Schools.*, *39*(4), 227-237.
 - Eklund, K., Rossen, E., Koriakin, T., Chafouleas, S. M., & Resnick, C. (2018). A systematic review of trauma screening measures for children and adolescents. *School Psychology Quarterly*, *33*(1), 30–43. https://doi-org.ezproxy.bethel.edu/10.1037/spq0000244

- Grundlingh, H., Knight, L., Naker, D., & Devries, K. (2017). Secondary distress in violence researchers: A randomised trial of the effectiveness of group debriefings. *BMC Psychiatry*, 171-14. doi:10.1186/s12888-017-1327-x
- Gysbers, N., & Henderson, P. (2001). Comprehensive guidance and counseling programs: A rich history and a bright future. *Professional School Counseling*, *4*(4), 246-256. Retrieved from http://www.jstor.org.ezproxy.bethel.edu/stable/42732263
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625. Retrieved from

http://ezproxy.bethel.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=aph &AN=5552051&site=ehost-live&scope=site

- Hoffman, E. M., Marlowe, M. J., Scharf, K. H., Disney, G. H., Macer, A., Poling, D., & Queen, A. (2015). Using Torey Hayden's Teacher Stories to teach relationship skills in special education teacher preparation. *Teacher Education Quarterly*, *42*(2), 65-85. Retrieved from https://eric.ed.gov/?id=EJ1090417
- Mahajan, M. (2018). Neurobiology of childhood trauma and its implications for therapy. *Indian Journal of Health & Wellbeing*, 9(6), 849–853. Retrieved from http://ezproxy.bethel.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=aph &AN=133584107&site=ehost-live&scope=site
- Manekin, S. (2016). City Connects: Redesigning student support for academic success. *The Abell Report. Volume 29* (3), p. 1-13

https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=ED570922

- Mann, M. J. (2013). Helping middle school girls at risk for school failure recover their confidence and achieve school success: An experimental study. *RMLE Online: Research In Middle Level Education*, 36(9).
- Mann, M. J., Kristjansson, A. L., Sigfusdottir, I. D., & Smith, M. L. (2014). The impact of negative life events on young adolescents: Comparing the relative vulnerability of middle level, high school, and college-age students. *RMLE Online: Research In Middle Level Education*, 38(2).
 Retrieved from:

https://eric.ed.gov/contentdelivery/servlet/ERICServlet?accno=EJ1044346

- McConnico, N., Boynton-Jarrett, R., Bailey, C., & Nandi, M. (2016). A framework for traumasensitive schools: Infusing trauma-informed practices into early childhood education systems.
 Zero to three, *36*(5), 36-44. Retrieved from https://www.zerotothree.org/resources/series/journalarchive
- Portilla, X. A., Ballard, P. J., Adler, N. E., Boyce, W. T., & Obradović, J. (2014). An integrative view of school functioning: Transactions between self-regulation, school engagement, and teacher-child relationship quality. *Child Development*, 85(5), 1915–1931. https://doiorg.ezproxy.bethel.edu/10.1111/cdev.12259
- Santiago, C. D., Raviv, T., Ros, A. M., Brewer, S. K., Distel, L. L., Torres, S. A., & ... Langley, A. K. (2018). Implementing the Bounce Back Trauma Intervention in urban elementary schools: A real-world replication trial. *School Psychology Quarterly*, 33(1), 1-9.
- Sherman, M. C. (2016). The School Social Worker: A marginalized commodity within the school ecosystem. *Children & Schools*, 38(3), 147–151. Retrieved from http://ezproxy.bethel.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eri c&AN=EJ1105807&site=ehost-live&scope=site

- Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. *Child Development*, 88(4), 1156–1171. Retrieved from http://ezproxy.bethel.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=eri c&AN=EJ1147161&site=ehost-live&scope=site
- Terrasi, S., & Crain de Galarce, P. (2017). Trauma and learning in America's classrooms. *Phi Delta Kappan*, *98*(6), 35-41. doi:10.1177/0031721717696476
 - Walsh, M. E., Madaus, G. F., Raczek, A. E., Dearing, E., Foley, C., An, C., ... Beaton, A. (2014). A new model for student support in high-poverty urban elementary schools: Effects on elementary and middle school academic outcomes. *American Educational Research Journal*, *51*(4), 704–737. Retrieved from http://www.jstor.org.ezproxy.bethel.edu/stable/24546697