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## Understanding Trauma to Create Effective Trauma Informed Schools

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**Understanding Trauma to Create Effective Trauma Informed Schools**

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Honors Thesis

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### **Abstract**

Exposure to early trauma can negatively affect a child's learning, behavior, and social emotional well being. Trauma in children can change executive functions in the brain and other neurobiological developmental changes can alter their success rate academically and socially. With the changes in the brain, it can have prolonged effects such as diminishing of brain nerve cells, hormone levels, immune systems, and epigenetic changes. Without proper interventions, these changes can lead to a higher risk of developing health conditions and mental illnesses. Through research presented in the article, is it vital for early interventions to prevent the furthering effects of adverse childhood experiences. Schools play an important role in a child's life, creating and implementing trauma sensitive classrooms and interventions can promote success for the students. The purpose of this paper is to present evidence on the changes that can occur in a child's brain following trauma, and how schools can promote educational, social and emotional wellbeing of students who have experienced trauma.

*Keywords:* Trauma, Education, Trauma-Informed Care

### **Understanding Trauma to Create Effective Trauma Informed Schools**

According to the ‘ National Child Traumatic Stress Network’ one in four children will experience a traumatic event before 16. Trauma is an ‘emotional response to a terrible event’, according to the *American Psychological Association (2015)*. There are four main categories of trauma, chronic, acute, complex and secondary trauma. *Acute trauma* results from experiencing an overwhelming event, such as assault, abuse, natural disasters. *Acute trauma* can also be an experience that threatens an individuals ‘health or safety’ (*Chronic Vs. Acute Trauma*, n.d.). *Complex trauma* is prolonged traumatic events over an extended period of time such as abuse, war, neglect, bullying and violence. *Complex trauma* can start early in childhood, ‘an exposure to multiple traumatic events- often invasive and interpersonal nature’ (ncts.org),. *Secondary trauma* is trauma that was experienced through others. *Secondary trauma* can be identified in therapists who work sexual assault victims or anyone who works with individual who works with a trauma exposed individual and interferes with their life etc (*How to Identify and Address Secondary Trauma*, 2019). *Chronic trauma* is repeated traumatic experiences to an individual throughout any period of time; the symptoms of this trauma can affect an individual later in life (*Chronic Vs. Acute Trauma*, n.d.) Experiencing trauma can have immediate and long term effects, interfering with development of attachment, biological and cognitive functioning, behavioral controls and self identity (The National Child Traumatic Stress Network, n.d.).

*Childhood trauma* is specified as trauma experienced from ages 0-6. Childhood trauma can be the result from child physical abuse, domestic violence, sexual abuse, natural disasters. Childhood trauma is also adverse childhood experiences which are related to physical or sexual abuse, violence, emotional neglect, witnessing abuse which can affect people under the age of

18. Not every child who experiences trauma will develop persisting symptoms (IcJ & Ugwu, 2019). Trauma can be difficult to identify in children, and identifying trauma in children can vary dependent on the trauma experienced and the age of trauma experiences. Younger children who experience trauma can show it as screaming or crying more than usual, nightmares, weight loss. Those who are older can display symptoms such as being anxious or fearful, feelings of guilt, difficulty paying attention, depressive behaviors, drug abuse, difficulty interacting and functioning with others. If a child experiences trauma, it can interfere with their daily functions (De Bellis & B, 2014).

Experiencing early trauma can damage the brain's functionality, altering vital functions (Flannery, 2016). When a child experiences repeated fear and anxiety it can impede the structure and development of the brain. The sympathetic nervous system which is directly related to the flight or fight responses, this is where cortisol is released; signals are sent to the brain that tell us when we are in danger or anxious. When the body is in flight or fight mode constantly. Trauma can also affect the immune system, the thymus involution can be shortened if the body is in a constant state of stress which lessens immunity and increases inflammation in the body. Also, repetitive activation of stress hormones in a child's brain can reduce neural connections which impede the brain's cognitive abilities (Flannery, 2016). Continuous trauma can also weaken neural pathways which can decrease coping abilities as they age. Trauma also affects epigenetics, increasing likelihood for depression, alcoholic and drug abuse, diseases and body functions. These changes in the brain increase likelihood of not developing brain capacities in the prefrontal cortex to regulate emotions. Early trauma affects the brain functionalities which make the child

more susceptible as they age for psychological and physical challenges. Evermore, making it more vital to understand trauma in children and implementing interventions to limit these effects.

According to *Trauma Awareness Schools*, a trauma informed school is defined as “In a trauma-informed school, the adults in the school community are prepared to recognize and respond to those who have been impacted by traumatic stress. Those adults include administrators, teachers, staff, and parents. In addition, students are provided with clear expectations and communication strategies to guide them through stressful situations. The goal is to not only provide tools to cope with extreme situations but to create an underlying culture of respect and support” (*What Is a Trauma-Informed School?*, n.d.). Trauma informed approaches promote a balance of education importance and also mental health and well being importance. The policies, implementation and focal points are grounded in understanding trauma and the impact to promote a better environment at school. With a growing number of children facing trauma/adverse childhood experiences (ACE), childhood trauma is labelled as ‘Americans hidden health crisis (ACEs Connection, 2016). Almost 35 million children have grown up suffering violence, neglect and other forms of trauma, harming their emotional, psychological and biological development” (ACES Connection, 2016); it is more than ever important to have trauma informed schools.

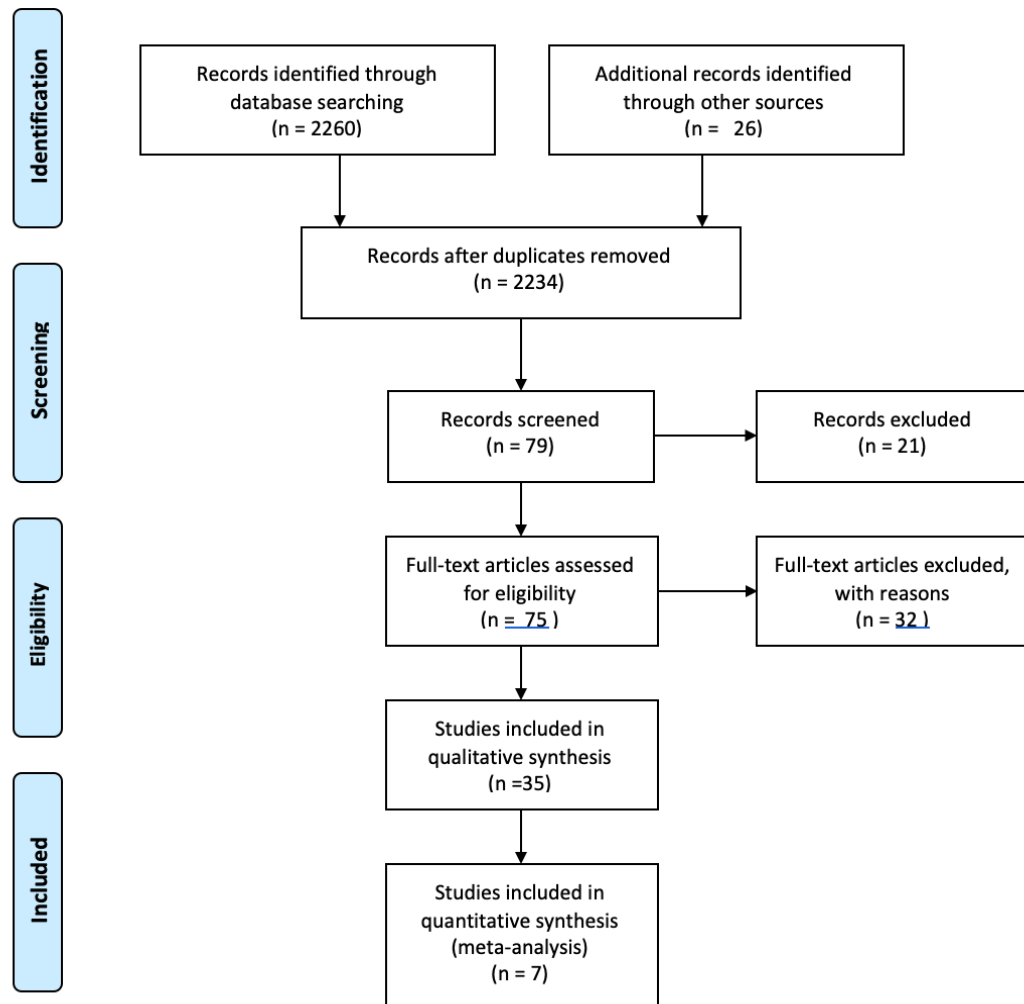
The purpose of this paper is to create more awareness around childhood trauma and adverse childhood experiences with a deeper understanding of effects of trauma. Along with that, to also gain more knowledge on how trauma informed schools are beneficial to students and staff but also how to create effective trauma informed care.

## **Methods**

The research around this paper was designed to answer: How does Trauma affect students who experienced trauma? What can schools do to help those students? While researching this paper, the main focus was on articles and studies that were no older than ten years old, focus was on five years or less. The conducted research focused on a multitude of aspects such as, background on trauma, the neurological changes and well being and school informed trauma approaches. The author focused on finding research and information from scientific based organizations, psychology studies and sites through academic based websites. Some of these academic journals were from the American Psychological Association, International Journal of Arts and Humanities and National Education Association. The studies found had to be related to assessing the effects of trauma informed approaches within the educational system, the benefits of the approach but also faultiness. Studies should have also measured student behaviors, academic performances, socioemotional functioning abilities and behaviors. Finding studies on effective trauma informed schools, the teachers and also students perspectives on being a part of the intervention were also sought after. Some of the key phrases and words used while researching included ‘education and trauma’, ‘trauma informed care’, ‘trauma and learning’. The phrases used above while doing research were used in Ebscohost, Google Scholar and psychological and education journals.



### PRISMA 2009 Flow Diagram



## Results

Exposure to trauma can disrupt brain development which in result can have adverse effects on social, academic and physical wellbeing. A Systematic Review and Analyses were conducted by a Harvard Psychologist to examine how exposure to adversity in childhood predict health outcomes later on in life. (Barr, D.A 2018). The meta-analysis was done with 80 studies,



with more than 100,000 participants. The study found that children who experienced threat related trauma, were more likely to develop earlier and displayed signs of faster aging cellular level. There was also a second analysis conducted with 25 studies and over 3,000 participants that focused early on adversity affects the brain development. It was concluded that different trauma/adversity affected the cortical thickness which is related to signs of aging. The cortical thickness will thin when people age. Individuals who experienced violent trauma had thinning with the prefrontal ventromedial cortex which affects the social and emotional processing functions. There can also be frontoparietal changes with deprivation trauma, which hinders the sensory and cognitive processing capabilities. The study concluded with research finding a need for early interventions to help the disparities that may come with experiencing trauma at a young age. A Trauma-Informed System approach is an Evidence Based Practice, a school in Massachusetts implemented a trauma informed approach, suspensions declined 83% and expulsions dropped 40% the following year of it being implemented (McInerney, 2014 ).

Schools can play an important part of a child's healing journey with experiencing trauma. On a global scale, there was a study (Strøm, I. F., Schultz, J. H., Wentzel-Larsen, T., & Dyb, G. 2016) on the psychological impact of school aged survivors of a 2011 terrorist attack in Oslo and Utøya, Norway. The terrorist attack is deemed as an acute single event, roughly 74.5% of students lost someone. The methodology of the study included a longitudinal study over three years, focusing on truancy, high school / national grades before and school supports. The study population was 325 persons, but primarily focused on the 1994 cohorts, who attended first year of high school prior to the attack, and had the second and third years after the attack. The cohort is based on the first years of high school which was 2011-2014 (they were born in 1994) and

included 64 students. The dependent variable in the study was academic performances, using grade point averages. These included all subjects, oral and written exams. The independent variable was the academic performances assessed by the respondents. These were given in three options, worse (1), unchanged (2) or better (3). School support was assessed through responded questions of a questionnaire. The study was heavily focused on statistics, linear regression to compare the survivors' grades with national grades. It was concluded that the students grades were lower a year after the attack, but they improved the third year of school. Truancy also increased after the event as well. A limitation of the study was it only followed three years of students who completed high school, but the findings were objective and found a wide range of results. The other important findings concluded that providing a school support and maintaining school attendance can be vital for the students recovery.

Trauma sensitive schools not only benefit the student who has experienced the trauma but also for the students around them and also the teachers. Schools can either be a safe place for these students, or it can also unwillingly be hindering their trauma and healing (Ginwright, 2018). Trauma can be misread, it can come across behavioral problems, inability to concentrate, laziness, impulse control issues, aggressive behaviors etc. A child experiencing trauma can have deficits sitting still, trouble learning and with behaviors. Traumatic behaviors seen in kids usually come from violent trauma exposures. A trauma sensitive school can help all students and faculty, by making the environment more supportive, stable and nurtured. Through this, it can help them succeed academically and socially. With proper training, faculty can have a better understanding on how trauma affects an individual with school, behaviors, socially, mentally. Creating a trauma

sensitive school, there are protocols in supporting the students, families and approaches to working with the children.

Understanding how trauma affects a child is one of the first steps in creating an effective trauma informed school. The National Child Traumatic Stress Network, has a framework to create and implement trauma informed schools. Trauma informed approach starts with the 4 'R's (nctsn.org) . A school that implements this approach takes in account the importance of emotional, social, learning, disciplinary actions, classroom management in the classroom.

**Trauma-informed approaches within any system aim to adhere to the "4 Rs":**

- **Realizing** the widespread impact of trauma and pathways to recovery
- **Recognizing** traumas signs and symptoms
- **Responding** by integrating knowledge about trauma into all facets of the system
- **Resisting** re-traumatization of trauma-impacted individuals by decreasing the occurrence of unnecessary triggers (i.e., trauma and loss reminders) and by implementing trauma-informed policies, procedures, and practices.<sup>9</sup>

The guideline is used for schools to implement the practice into the school educational system, and will be dependent on the intervention tiers. There are three tiers that are used as a framework for implementation of the intervention (nctsn.org). The tiers are a component of the 'Tiered Systems of Support' which are vital to identify students with

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**Tier 1**


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**Safe Environments and Universally Healthy Students /  
Creating and Supporting a Trauma-Informed School Community**

Schools transform on a number of levels to create and support safe environments that promote healthy and successful students and staff. This foundational work is Tier I of the MTSS pyramid and necessary to support strategies across the entire pyramid.

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**Tier 2**


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**Early Intervention/Identifying Students and Staff At-Risk**

Schools identify and respond to students and staff who are at-risk or have been exposed to trauma and/or loss in ways that meet their unique exposures, experiences, developmental, and personal needs.

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**Tier 3**


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**Intensive Support**

Schools provide support to those students whose behaviors and experiences necessitate intensive interventions and aim to meet their unique exposures, experiences, developmental, and personal needs.

learning and emotional needs, these tiers use school, community culture and family collaboration. Each tier is a strategy to include when implementing the trauma informed school.

There are many educational resources for educators, administrators to examine to start the process of implementing this approach in the school system. A study done researching Trauma Informed Practices over twenty years found important recurring categories (Thomas, 2019). The three main categories found, the first one being , ‘Building Knowledge, Understanding the Natural and Impact of Trauma’. The component focused on providing educators training that may not get during professional development, having training on neurobiology and mental health to have a deeper understanding on the impact of trauma on the students. Understanding the ‘why’ the student is acting they way they are, this being a foundational aspect. The second category from the same study had emphasis on ‘Shifting Perspectives and Building Emotionally Healthy School Cultures’ , the component focuses on instruction and discipline in a classroom. Using trauma focused knowledge on being empathetic when a student displays behaviors that can be problematic. Changing the mindset in the classroom and regarding a students behavior, using a ‘trauma lens’ when working with difficult

students and maintaining a compassionate and understanding rapport and learning environment during interventions (Thomas, 2019).

When creating an effective trauma informed school, it is crucial to have self care for educators. In the *American Educator* Summer Article, burnout of educators is prevented by having training on self care, the importance of taking care of yourself, ways to have self care and having another accountable for having a self care plan (Jennings, 2019,15). Also, individuals who work with students who are exposed to trauma, can experience secondary traumatic stress. This is from learning about the trauma exposure, and ‘limited ability to change their situations’ (Thomas et al., 2019, 427) . As read, teachers play an important role in a students recovery from trauma. In a 2012 study by Alisic, she examined teachers' perspectives in a qualitative design study consisting of interviews. The study consisted of twenty one teachers from 13 various schools, there was a saturation of data after 17 interviews. The interviews focused on teachers' experiences with working with children who have experienced trauma, strategies, personal feelings and school protocols. The results varied with the participants, major findings were that the teachers did struggle with supporting children, balancing teaching and also being there for individual students. An additional finding was teachers expressing incompetence of being able to help a student who experienced trauma, and having an ‘emotional burden working with traumatized children’. The study concluded with a need for more quantitative studies to be done, findings showed that school psychologists could use teachers' strengths and weaknesses to give advice and training in working with children who have experienced trauma.

**TABLE 1**  
**Trauma-Related Resources for Educators**

Content Area	Resource	Resource Link
Building knowledge and understanding on the nature and impacts of trauma	Child trauma toolkit for educators from the National Child Traumatic Stress Network	<a href="http://www.nctsn.org/sites/default/files/assets/pdfs/Child_Trauma_Toolkit_Final.pdf">http://www.nctsn.org/sites/default/files/assets/pdfs/Child_Trauma_Toolkit_Final.pdf</a>
	Trauma-informed care resources for educators from the Washington Education Association	<a href="https://www.washingtonea.org/pd/other-educator-resources/trauma-informed-resources/">https://www.washingtonea.org/pd/other-educator-resources/trauma-informed-resources/</a>
	Trauma-informed schools learning network for girls of color from the National Black Women's Justice Institute and the Center on Poverty and Inequality, Georgetown Law	<a href="http://schools4girlsofcolor.org/">http://schools4girlsofcolor.org/</a>
Shifting perspectives and building emotionally healthy school cultures	Compassionate schools: The heart of learning and teaching from the Washington Superintendent of Public Instruction	<a href="http://www.k12.wa.us/CompassionateSchools/HeartofLearning.aspx">http://www.k12.wa.us/CompassionateSchools/HeartofLearning.aspx</a>
	Helping Traumatized Children Learn 1 and 2 from the Massachusetts Advocates for Children and Harvard Law School	<a href="https://massadvocates.org/tlpi/">https://massadvocates.org/tlpi/</a>
	Trauma-responsive educational practices project	<a href="http://www.trepeducator.org/">http://www.trepeducator.org/</a>
Self-care for educators	Self-care for educators from the National Child Traumatic Stress Network	<a href="https://www.nctsn.org/resources/self-care-educators">https://www.nctsn.org/resources/self-care-educators</a>
	Secondary traumatic stress from the Treatment and Services Adaptation Center: Resiliency, Hope, and Wellness in Schools	<a href="https://traumaawareschools.org/secondarystress">https://traumaawareschools.org/secondarystress</a>
	Secondary traumatic stress and self-care packet from the National Center on Safe Supportive Learning Environments	<a href="https://safesupportivelearning.ed.gov/sites/default/files/Building_TSS_Handout_3secondary_trauma.pdf">https://safesupportivelearning.ed.gov/sites/default/files/Building_TSS_Handout_3secondary_trauma.pdf</a>

While trauma informed approaches are beneficial, teachers need to have proper training to be the best educator they can be and how to properly take care of their students and their

mental health. In table 1, there are free resources for Educators that are related to trauma and the three main categories ( Thomas et al.)

In a qualitative study and review of trauma informed programs in schools encompassed a snowball method sampling school licensed social workers. The purpose of the research was to understand how trauma can be addressed in varying levels within educational systems. Data was collected through interviews, using data reduction method analysis. The interview focused on elements of trauma informed programs, challenges and benefits, and how each system; students, faculty/parents and admin/community impacted the programs. Major themes that were concluded from the interviews is the importance of trauma education, building relationships for greater intervention between each of the systems (Gray, 2017). Labelling trauma was found as a challenge with the possibility of it being stigmatized or those of color diagnosed at a higher rate. Another challenge found was the issue around funding, more support from district and administration can help increase funding for trauma interventions and social workers. A limitation from the study was only two social workers were able to participate in the study, which means it did not strongly represent a large generalized population. It was concluded that creating a trauma informed program in the school can have a positive effect on teachers, guardians, students and the administration. The data was collected through a ‘semi structured’ interview, using literature review questions along with personal questions based on experience. These interviews were transcribed and coded by identifying common themes throughout the interview. The transcripts of the interviews were reviewed three additional times to confirm accuracy. A limitation to the research was the qualitative data analysis was not done through triangulation or computer assisted data analysis which would make the study susceptible to more

human error. The results of the study were put into five different categories with sub themes. The categories consisted of the importance of trauma interventions, school support and importance of trauma informed care to prevent secondary trauma in staff. One of the important findings in the study is that, children who have experienced trauma can struggle regulating emotions, this is because of the brain chemistry changing to respond quickly to potential danger even if a harmless stimulus is truly presented. The hippocampus is damaged where stress hormones affect de-escalation behaviors in the kids. The student can also have difficulty with relationships; which can result from the inability to regulate emotions and reactive reactions to typical events. The developmental disruption; a regression of behaviors that make children act and seem younger than actual age can be a result from halted development of the brain. This can minimize the child's microsystems because behaviors are not seen as appropriate and may not be accepted by peers. Trauma intervention is vital to understanding and examining behavior triggers and helps students get interventions needed for success.

### **Discussion**

Trauma and Adverse Experiences can prevent normal growth in the brain in a child, compromising the development and structures of the brain. The changes in the brain occur from overdevelopment of Cortisol in the Amygdala, which impacts the brain's flight or fight responses (Perry, 2016). The brain structures that regulate memory and behaviors can decrease in size as well. Not only this, but experiencing trauma at a young age can also negatively impact social, emotional, physical, cognitive and biological developments (*American Psychological Association*). Children react differently to trauma than adults who have experienced traumatic



events. The reactions and coping can vary with developmental levels and age, exposure to trauma, life experiences and functioning(Perry, 2016).

Creating a trauma sensitive learning environment in a classroom can provide a feeling of safety, reduction of sensory overload as well. Some of the key aspects of a trauma informed school system from *the National Traumatic Stress Network* include addressing and treating traumatic stress, teaching trauma education, understanding and addressing staff self care and secondary traumatic stress. Also, evaluating and revising school discipline and practices. Creating this school and classroom environment can also be beneficial on student success and education achievements. Trauma can impact a child's academic skills and classroom behaviors. It can also inhibit the skills to effectively communicate with peers. Children who also experience trauma can have difficulties with motivation and attentiveness with classes. There are a multitude of changes that trauma can have on a young individual, thus needing intervention, services and educational help for them to be successful.

The special education process for determining if a student needs special education services for adverse childhood experiences or trauma can be difficult. The student might have a referral to be evaluated for a disability, IEP meetings are conducted for evaluations which require parental consent. A Trauma Informed Evaluation should be considered, being mindful of triggers, experiences altering student performance and using child's strengths during evaluations. Under protection of the IDEA (Individuals with Disabilities Act) , which legally ensures that all students receive free and appropriate education within the public education systems. Diagnosing students with Trauma or Adverse Child Experiences is not currently under the IDEA ( U.S Department of Education, 2017). A student can be qualified under IDEA as having an Emotional

Disturbance which would allow special education services. This can make it difficult for special education teachers ( as well as the IEP team) because qualifying a student under the Emotional Disturbance or Other Health Impaired category may not fall with all of the eligibility needed to qualify for these services. If the student does, all IEP regulations and protocols should be fulfilled. If ineligibility occurs, the student can be considered for a 504 plan instead. A 504 plan is for students who do not meet the criteria for special education services but need accommodations. Through the IDEA, these students still receive free and appropriate public education. The implication of trauma not being on the classification of a disability under IDEA can lead to children who need the extra services not getting the help they need in the schools. If there was research done on current IEP for students in schools, analyzing their diagnoses if they were trauma based or under the category of emotional disturbances. This research can demonstrate whether students who have Trauma or Emotional Disturbances are being helped effectively under IDEA or having a subcategory for Trauma informed care. With more understanding of the differences between Emotional Disturbances and trauma, the approaches should be different if need be so they are tailored to each student and the specific needs and be supported within the schools.

The limitations of having a student who has trauma, and because of that, subsequently learning/behavioral/emotional difficulties creating an IEP/504 Plan can be difficult. To try to have a student be helped under IDEA, the special education team, parents/guardians need to decide what is the best disability category to place the child under (*Creating Trauma-Informed Individualized Education Programs*, November 2018). If the student is approved for the special education services, ensure that the student has trauma informed goals and practices. The

differences between a common IEP and a trauma informed IEP is that there is a heightened focus on skill building skills rather than minimizing unwanted behaviors (*Creating Trauma-Informed Individualized Education Programs*, November 2018). While there is not a specific category to put a child with trauma under, creating a trauma-informed IEP can be beneficial and create a positive impact on their social, behavioral and learning abilities.

### References

- ACEs Connection: A Community-of-Practice Social Network . (2016). Childhood trauma: America's hidden health crisis. Retrieved from <https://www.acesconnection.com/g/los-angeles-aces-connection/clip/childhood-trauma-america-s-hidden-health-crisis>
- Alisic, E. (n.d.). Teachers' Perspectives on Providing Support to Children After Trauma: A Qualitative Study. *School Psychology Quarterly*, 27(1), 51-59. American Psychological Association. 10.1037/a0028590
- Anderson, E. M., & Saastamoinen, M. (n.d.). Exploring a School–University Model for Professional Development With Classroom Staff: Teaching Trauma-Informed Approaches. *School Community Journal*, 25(2), 112-134. <https://www.adi.org/journal/2015fw/AndersonEtAlFall2015.pdf>
- Barr, D. A. (2018, February 26). *When trauma hinders learning*. kappanonline.org. Retrieved October 15, 2020, from <http://kappanonline.org/barr-trauma-hinders-learning/>
- Berg, Amanda E.. (2017). Trauma in schools: Identifying and working with students who have experienced trauma. Retrieved from Sophia, the St. Catherine University repository website: [https://sophia.stkate.edu/msw\\_papers/714](https://sophia.stkate.edu/msw_papers/714)
- Chronic vs. Acute Trauma*. (n.d.). <https://skywoodrecovery.com>. Retrieved 2021, from <https://skywoodrecovery.com/chronic-versus-acute-trauma/#:~:text=Acute%20trauma%20is%20often%20associated,individual's%20physical%20or%20emotional>
- Creating trauma-informed individualized education programs*. (November, 2018). APA.org. <https://www.apa.org/pi/families/resources/newsletter/2018/11/trauma-teaching>

- Dorado, J. S., Martinez, M., McArthur, L. E., & Leibovitz, T. (2016, February 3). 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*, 163-176. DOI 10.1007/s12310-016-9177-0
- De Bellis, M. D., & B, A. A. (2014, April). The Biological Effects of Childhood Trauma. *Child Adolescent Psychiatry Clinics of North America*, 23(2), 185-222.  
<https://doi.org/10.1016/j.chc.2014.01.002>
- Flannery, M. E. (2016, 05 17). *How Trauma is Changing Children's Brains*. National Education Association.  
<https://www.nea.org/advocating-for-change/new-from-nea/how-trauma-changing-childrens-brains>
- Frieze, S. (2015). How Trauma Affects Student Learning and Behaviour. *BU Journal of Graduate Studies in Education*, 7(2), 34.
- Ginwright, S. (2018, May 31). *The Future of Healing: Shifting From Trauma Informed Care to Healing Centered Engagement*. Retrieved 2020, from <https://ginwright.medium.com/the-future-of-healing-shifting-from-trauma-informed-care-to-healing-centered-engagement-634f557ce69c>
- Gray, Lilli. (2017). Analysis of Implementing Trauma Informed Programs in Grade Schools. Retrieved from Sophia, the St. Catherine University repository website:  
[https://sophia.stkate.edu/msw\\_papers/745](https://sophia.stkate.edu/msw_papers/745)

*How to Identify and Address Secondary Trauma.* (2019, February 5).

<https://www.proskauer.com/>.

<https://www.proskauer.com/blog/how-to-identify-and-address-secondary-trauma#:~:text=Secondary%20trauma%20is%20when%20the,lawyer's%20professional%20or%20personal%20life.&text=Examples%20of%20secondary%20trauma%20have,who%20support%20sexual%20assault%20survi>

Hirst, E. M. (2019, July 02). Trauma, Resilience, and the Impact on Learning. *Americanbar.org*.

<https://www.americanbar.org/groups/litigation/committees/childrens-rights/articles/2019/summer2019-trauma-resilience-and-the-impact-on-learning/>

Icjt, A., & Ugwu, C. (2019, April 17). Impact of Trauma On Neurodevelopment and Learning.

*Archives in Neurology and Neuroscience*, 4. [researchgate.org](https://www.researchgate.org/).

10.33552/ANN.2019.03.000557

Jennings, P. A. (2019, Summer). Teaching in a Trauma-Sensitive Classroom What Educators Can

Do to Support Students. *American Educator*.

<https://files.eric.ed.gov/fulltext/EJ1218755.pdf>

McInerney, M., & McKlindon, A. (n.d.). *Unlocking the Door to Learning: Trauma-Informed*

*Classrooms & Transformational Schools*. Education Law Center. Retrieved 2021, from

<https://www.elc-pa.org/wp-content/uploads/2015/06/Trauma-Informed-in-Schools-Classrooms-FINAL-December2014-2.pdf>

McLaughlin, K. (2020, August 3). *Study: Experiencing Childhood Trauma Makes Body and*

*Brain Age Faster*. American Psychological Association.

<https://www.apa.org/news/press/releases/2020/08/experiencing-childhood-trauma>

The National Child Traumatic Stress Network. (n.d.). *Essential Elements of a Trauma-Informed School System*. The National Child Traumatic Stress Network.

<https://www.nctsn.org/trauma-informed-care/trauma-informed-systems/schools/essential-elements>

116th Congress. (n.d.). *H.R. 4146 - Trauma-Informed Schools Act of 2019*. Congress.gov.

<https://www.congress.gov/bill/116th-congress/house-bill/4146?q=%7B%22search%22%3A%5B%22HR+20%22%5D%7D&s=1&r=1>

Perry, B. D. (2016, December 13). *The Brain Science Behind Student Trauma*. www.edweek.org. Retrieved November 10, 2020, from

<https://www.edweek.org/leadership/opinion-the-brain-science-behind-student-trauma/2016/12>

Rossen, E. (2018, November). Creating trauma-informed individualized education programs. *American Psychological Association*, (CYF News).

<https://www.apa.org/pi/families/resources/newsletter/2018/11/trauma-teaching>

Stratford, B., Cook, E., & Hanneke, R. (2020, March 26). A Scoping Review of School-Based Efforts to Support Students Who Have Experienced Trauma. *School Mental Health*, 12,

442-477. <https://doi.org/10.1007/s12310-020-09368-9>

Student perspectives on how trauma experiences manifest in the classroom: Engaging court-involved youth in the development of a trauma-informed teaching curriculum. (2014, Spring). *Science Direct*, 38, 58-65.

<https://doi.org/10.1016/j.childyouth.2014.01.013>

Strøm, I. F., Schultz, J. H., Wentzel-Larsen, T., & Dyb, G. (2016). School performance

after experiencing trauma: a longitudinal study of school functioning in survivors of the Utøya shootings in 2011. *European journal of psychotraumatology*, 7, 31359.

<https://doi.org/10.3402/ejpt.v7.31359>

Thomas, S. M., Crosby, S., & Vanderhaar, J. (2019, May 22). Trauma-Informed Practices in Schools Across Two Decades: An Interdisciplinary Review of Research. *Sage Journals*, 43(1), 422-452. 10.3102/0091732X18821123

U.S Department of Education. (2017, May 2). *Sec. 300.8 (c) (4)*. Individuals with Disabilities Education Act. <https://sites.ed.gov/idea/regs/b/a/300.8/c/4>

Walsh, C. (2018, February). Supporting Traumatized Adolescents in Schools A Review of Literature. *International Journal of Arts and Humanities*, 4(1).

<http://ijah.cgrd.org/images/Vol4No1/1.pdf>