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Teacher Perspectives on Student Behavior and ACEs in Elementary Education

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Teacher Perspectives on Student Behavior and ACEs in Elementary Education

By

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A culminating thesis submitted to the faculty of Dominican University of
California in partial fulfillment of the requirements for the degree of Master of
Science in Education

Dominican University of California

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Abstract

Since 1998, substantial evidence has demonstrated rates of prevalence for different types of adverse or potentially traumatizing experiences that can happen during childhood, commonly referred to as adverse childhood experiences (ACEs). In response, many studies have demonstrated the benefits of trauma-informed practices in mental health. Despite supporting evidence, policymakers have been slow to implement these practices in schools. Teachers are on the front lines of this issue. They are in a position to be most effective in supporting children and most impacted by student behavior yet their voice is notably absent from the literature. The purpose of this study is to find out how common teachers perceive ACEs to be, both nationally and among their students, and how they perceive student behavior, what behaviors they see, what they attribute those behaviors to and what they think would support students with challenging behaviors. I developed a survey and then distributed digitally at three schools in three districts in the Bay Area and received 41 responses. I then conducted seven qualitative interviews with teachers at the three schools. The interviews revealed teachers' eagerness to support their students, lack of related training, eagerness to receive training on trauma-informed practices. Several teachers had enthusiastically incorporated training they have received on related subjects, such as mindfulness, into their practice. My findings suggest that if teachers were to receive ongoing training on trauma-informed practices and understood just how many kids are impacted, they would enthusiastically adopt these practices into their teaching.

Keywords: ACEs, Elementary Education, Trauma-Informed, teacher perceptions, student behavior

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List of Abbreviations

ACE-Adverse Childhood Experience

ADHD-Attention Deficit Disorder

APA-American Psychological Association

BCE-Before Common Era (formerly and less inclusively, BC-Before Christ)

CDC-Centers for Disease Control

CFS-Child and Family Services. The State of California formerly used the name CPS (Child Protective Services) for this agency. Many other states still use CPS.

COPD-Chronic Obstructive Pulmonary Disease. An umbrella term used to describe progressive lung diseases including emphysema, chronic bronchitis, and refractory (non-reversible) asthma.

CUM-Cumulative Record. Pronounced /kyūm/. It is a file that contains all of a student's official information such as grades, attendance, standardized test results, and official discipline documentation. A CUM file typically follows a student from year to year and school to school.

DSM-Diagnostic and Statistical Manual of Mental Disorders. The preeminent authoritative taxonomic and diagnostic tool published by the American Psychiatric Association.

GLAD-Guided Language Acquisition Design-A program designed to support students who are English Language Learners. It is used in many schools in the Bay Area.

IDEA-Individuals with Disabilities Education Act. A law passed in 1975 but under its current name since 1990, which states students with a disability must be provided with Free Appropriate Public Education (FAPE).

IEP-Individualized Education Program

MMHC-Massachusetts Mental Health Center

NAASO-National Association for the Study of Obesity

P.E.-Physical Education

PMRC-Parents Music Resources Center

PTSD-Post Traumatic Stress Disorder

STI-Sexually Transmitted Infection

VA-Department of Veteran's Affairs

Chapter 1: Introduction

Less than .07% of U.S. public school students have a disability that affects their mobility (U.S. Dept. of Education, 2018, p. 36 and 38).¹ Yet every single school in the U.S. must have ramps and be accessible. This is because, as a society, we recognized that all children are entitled to receive an education. A child does not qualify to receive special education services unless their disability adversely affects their educational performance. If they can't walk into the school or classroom, they can't access an education—hence ramps.

In contrast, approximately 60% of adults in the U.S. report experiences in their childhoods that can lead to psychological trauma (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards & Marks, 1998). Every year we learn more and more about how adverse childhood experiences or ACEs, as they have been called since 1998, impact people's lives. What began as a study of more than 17,000 people in San Diego examining the relationship between childhood experiences and adult health outcomes is now its own vast area of study. Subsequent research has linked ACEs with everything from ADHD and elementary academic performance to lower job satisfaction and lifelong adverse health outcomes, including early death.

As we have learned more about the impact of ACEs we have also learned about the benefits of trauma-informed practices in various fields within human services. Trauma-

¹ The report does not provide this figure directly but states that 8.9% of students ages 6-21 are served by IDEA Part B (p. 36) meaning they receive special education services and .7% of those qualify under Orthopedic Impairment (p.38), which covers any physical impairment that affects a child's educational performance. Not all orthopedic impairments impact a child's ambulatory mobility. Therefore, if .7% (students who qualify under Orthopedic Impairment) of 8.9% (students who receive special education services) is .0742%, then less than .07% of public school students have a disability that impacts their ambulatory mobility.

informed practices are system-wide protocols that range from simple explicit recognition that anyone can have experienced and be impacted by trauma to universal screening and treatment of trauma. developed by behavioral health practitioners and found to improve treatment outcomes and overall safety for patients and clinical staff as well as non-clinical staff e.g. security or food service workers. They were quickly adapted and found to be beneficial in virtually any human services setting, including primary education. Yet very few schools have implemented these practices to support children, many of whom, statistically speaking have had potentially traumatic experiences.

These two theoretical or conceptual frameworks, a trauma-informed framework and the study of ACEs, set the foundation on which my own research rests. Trauma-informed care and practices are in turn rooted in psychological theory. A notable example is Bronfenbrenner's Ecological Systems Theory, which states that widening and interrelated external social systems e.g. family, school, culture, affect individuals' development. Another example is Bowlby's Attachment Theory, which states that secure, uninterrupted emotional attachment to at least one primary caregiver during early childhood is critical to healthy human development. The study of ACEs has been somewhat "evidence first, theoretical support later." It straddles multiple disciplines (medical/biological, psychological, socioeconomic) and many of the biological and psychological theoretical frameworks that support it are based on advances that have occurred since the initial 1998 study (Nurius, Logan-Greene & Green, 2012).

The existing literature contains volumes about trauma-informed practices in mental health contexts and the many ways ACEs impacts people lives but includes almost nothing about standards for trauma-informed practices in schools or what teachers have

to say about them. There was astonishingly little about what teachers think of student behavior or about their experiences related to student trauma. Gathering data on teacher perspectives is critical for assessing the effectiveness of past professional development training, and for determining need for future training. If we are to move efficiently toward effective trauma-informed education we must know what teachers know.

Having identified this substantial gap in the literature I set about identifying the vital the questions. What do teachers think about ACEs and trauma-informed practices in schools? Do they think they are too difficult to implement? Do they not recognize the need? What are the barriers to the widespread implementation of trauma-informed practices in schools? If I could answer these questions, perhaps I could contribute to removing those obstacles and the development of an effective plan to set these practices in place. If I, as a new teacher, was overwhelmed with my students' traumas and the effect I saw them having on children's academics, behavior, and welfare, then surely more experienced teachers must be beyond frustrated at the lack of movement toward addressing the root issue. As it turns out, several issues had skewed my perception. First, as a learning center teacher, I was teaching classes of 8 to 14 children, not 25-35 children. They shared their experiences with me in part because the low teacher/student ratio afforded me the opportunity to listen. Secondly, I have a strong, personal interest in trauma, which exposed me to information and perspectives that are outside of general knowledge. Lastly, my first and only professional experience as a teacher was in a school which was piloting a trauma-informed program. When I started speaking with teachers at other schools almost none of them had even heard of ACEs or trauma-informed practices.

However, just because teachers have never heard the terms, doesn't mean they aren't familiar with the effects of ACEs and childhood trauma. I decided to find out how teachers' perceptions of the prevalence of ACEs matched up with current statistical data and how that might impact their perception of ACEs in their own classrooms. How many teachers understood the relationship between ACEs and behavior? I have occasionally witnessed teachers taking student behavior personally just as I have seen teachers demonstrate heroic patience with a child that they know has experienced difficulty. How many of each kind are out there? And to what degree might an understanding of the effects of ACEs on a child's behavior affect how a teacher responds to a student struggling to meet behavioral expectations in school. One thing I observed universally was teachers' strong desire to support their students and the tremendous time and effort they put into providing that support.

I contacted three principals in three cities in the Bay Area and asked them if I could send out a survey to their teachers and solicit interview volunteers. I previously worked for two of the principals and was introduced to the third by a close friend and colleague but did not know any of the participants prior to the study. The schools are very different from one another. One is a public school in a very affluent and quiet city. Its staff and students are predominantly white. I creatively named it Affluent Public Elementary in my study to preserve the anonymity of the participants and the community. The second school, Private Urban Elementary, is a private school in an urban setting that serves an affluent and predominantly white demographic. The third school, Urban Public Elementary, is a public elementary school in an urban setting that serves a community which is both diverse and economically disadvantaged. Three teachers each from Affluent

Public Elementary and Urban Public Elementary and one from private Urban Elementary agreed to be interviewed. A total of 41 teachers completed a 26 question online survey, including three short answer questions regarding student behavior. The survey asks about eight different ACEs, sexual abuse, parental divorce, exposure to domestic violence, having lived with someone with drug or alcohol problems, having lived with someone with severe mental health issues (i.e. suicide or severe depression), has a parent or guardian who became incarcerated, experienced repeated food and housing insecurity, and has been a victim to or witnessed community violence.

The teachers I surveyed had surprisingly accurate estimates of national rates of prevalence for many ACEs. Their estimates of the same ACEs among their own students largely reflected what I knew about the demographics they serve. For example, children whose families live in a very affluent neighborhood are less likely to experience food and housing insecurity than children who live in a community with a high rate of poverty. Teachers at both affluent schools consistently had considerably lower estimates of almost all of the ACEs in the survey. Teachers at the school in a low socioeconomic setting often had higher estimates for their students than for the national average. Sexual abuse was one ACE that teachers at all three schools underestimated the national rate of prevalence. Most of the teachers at all three schools estimated that none of the children in their classes have experienced sexual abuse. Sadly, these estimates are not in agreement with decades of statistical data that place the average rate of prevalence for childhood sexual trauma at around 20% (Felitti, Anda, Nordenberg, Williamson, Spitz, Edwards & Marks, 1998).

Another illuminating finding was that teacher estimates of ACEs in their classrooms directly corresponded to their own history of ACEs. The more ACEs they

experienced, the more they recognized in their students. The more ACEs they had experienced, the higher they estimated the occurrence of ACEs among their students.

As I reviewed the short answer survey results and conducted my interviews, certain repeated words and phrases stood out in each site that were specific to each group. A round of follow up questions confirmed that these words and phrases reflected the language used in training the principal at each prioritized. This suggests to me that teacher training are effective when they are ongoing and when teachers know they are endorsed by the administration. What this in turn suggests is that if principals and administrators prioritize trauma-informed training, teachers will internalize it as these teachers did with the training they had already received. An important aspect of trauma-informed practices is that the people implementing them do not need to identify or diagnose trauma in anyone. They are in alignment with many programs and philosophies already utilized in many schools such as mindfulness, Zones of Regulation, Responsive Classroom, and even some aspects of English Language Learner models like GLAD (Guided Language Acquisition Development). Because of the hours spent every day and role they play in students' lives, teachers are in a better position than anyone to make a difference in the lives of children who are impacted by ACEs.

These findings constitute a small piece of the work that needs to be done to address the gap in the literature. Nevertheless, the implications have the potential to push a major shift in the way our schools support all students. If teacher leaders push for prioritizing trauma-informed training, principals are likely to provide it. If principals prioritize it, teachers are likely to internalize it. Effectively supporting children who experience ACEs could not only increase their academic performance and standardized test scores (as

social-emotional curricula have already been shown to do), but increase graduation rates, decrease drug and alcohol abuse in young adults, reduce depression and other mental health issues, and reduce rates of incarceration, COPD, and cancer. That may sound far-fetched but all of those issues have been shown to be significantly related to ACEs. Resilience has been shown to significantly mitigate their effects (Bethell, Newacheck, Hawes, & Halfon, 2014). Though ACEs affect people across all demographics they are shown to disproportionately affect people of lower socioeconomic status and people of color regardless of their socioeconomic status. Addressing ACEs addresses issues related to equity and social justice as well. Schools are the best places to address ACEs and childhood trauma because if these issues are addressed early many of the effects they have can be avoided or minimized. Waiting until children grow up to address issues rooted in their childhoods does not make sense. Minimizing the impact of ACEs by building resilience through trauma-informed practices in schools increases these children potential immeasurably. We have data demonstrating the need (Blodgett & Lanigan, 2018; Burke, Hellman, Scott, Weems, & Carrion, 2011) and we have data showing that trauma-informed practices are effective in other settings (Fallot & Harris, 2002; Burke, Hellman, Scott, Weems, & Carrion, 2011). There is no reason not to act aside from our own discomfort in facing the truth of what many children experience.

Chapter 2: Literature Review

Our understanding of the role of trauma in human experience emerged from the shadows within the last 50 years—though we have been faced with its effects for longer than we have been human. In this chapter, I will briefly describe the evolutionary and biological processes involved in psychological trauma and then show how trauma theory evolved from our long histories of both war and sexual victimization of women, culminating in the intersection of the Vietnam War and the Women’s Movement of the 1970s. The work of many clinicians and practitioners operating independently of one another in the 1980s and 90s began to suggest the prevalence of certain adverse experiences in the childhood histories of their patients. In 1998, what became known as The ACE’s Study, demonstrated unequivocally that these experiences were commonplace among the general population and that they were linked to a host of health issues later in life. Finally, trauma theory and a new understanding of the scope of adverse childhood experiences led to the development of trauma-informed practices and the growing consensus that systems that serve humans benefit from the adoption of these practices.

The Biology of Trauma

In his 2018 book, *Behave: The Biology of Humans at Our Best and Worst*, neuroendocrinologist Robert M. Sapolsky, describes, among other things, the neurobiology of human behavior. Our species shares evolutionary adaptations related to danger and our response to it with our primate cousins, and with the animal kingdom in general. Trauma response has its roots deep in our “reptilian brain” or brain stem, which regulates essential, involuntary functions such as breathing, hunger, and sleep. When animals, including humans, are exposed to some real or imagined threat, it is the

brainstem that first springs into action. Our unique intelligence and the relationship between our highly developed neocortex (where higher order cognition takes place), our limbic system (or “mammalian brain” which governs our emotions), and our brain stem, are responsible for our trauma response to various experiences. Originally evolved to keep us safe from the elements, predators, and even each other, the brain stem’s emergency response system can be triggered by threatening feelings (limbic system) or thoughts (neocortex). Once activated, it has no way to differentiate between a charging elephant and a big test in school. It increases the heart rate, concentrates the body’s blood in the head and torso and prepares the body to fight, flee or freeze. Once we realize we are safe the emergency response system disengages and we regain the use of our impressive human cognitive abilities. When our emergency response system engages too often or too severely and we are unable to secure our safety or believe we are safe, it becomes a liability. The very mechanisms evolved to keep us safe become maladaptive and destructive, straining the cardiovascular system, inhibiting our memory and cognition and promoting behaviors that strain our relationships or isolate us socially (Sapolsky, 2018). Some conspicuous examples of experiences that could cause this reaction are fighting a war or sexual assault. However, being habitually unable to depend on those meant to keep you safe due to drug or alcohol abuse or mental illness can have a similar effect on the system.

Renowned psychologist and researcher Bessel Van der Kolk writes, “Traumatization occurs when both internal and external resources are inadequate to cope with external threat” (1989, para 8). The DSM V defines it as “actual or threatened death, serious injury, or sexual violence” (American Psychiatric Association, 2013, p. 271). The

Substance Abuse and Mental Health Services Administration says, “Individual trauma results from an event, series of events, or set of circumstances experienced by an individual as physically or emotionally harmful or life-threatening with lasting adverse effects on the individual’s functioning and mental, physical, social, emotional, or spiritual well-being” (Substance Abuse and Mental Health Services Administration, n.d., para 1). As can be seen above, the definition of trauma varies from source to source. Some authors make distinctions between trauma in the individual and the experience that precipitated it while others do not. Van der Kolk appears to be speaking to the essence of trauma while the Substance Abuse and Mental Health Services Administration may have a more clinical, diagnostic approach. Whatever definition they use, traumatic responses have been documented and written about for thousands of years.

The History of Trauma

Soldiers and trauma. The first known example of a description of trauma is from an Assyrian medical text from 1300-900 BCE.² “If his mentation is altered, [...] (and) forgetfulness(?) (and) his words hinder each other in his mouth, a roaming ghost afflicts him. (If) [...], he will get well” (Abdul-Hamid & Hughes, 2014, p. 556). The impaired or altered cognition, memory loss, stuttering, selective mutism, disorganized speech, and hallucinations described in the ancient text above can all be symptoms of post traumatic stress disorder or PTSD. (Disorganized speech and hallucinations can also be symptoms of psychotic disorders which is how PTSD was sometimes incorrectly diagnosed as such before the American Psychological Association recognized it as a diagnosis (Van der Kolk,

² The Assyrian Empire, was a Mesopotamian kingdom and empire of the ancient Near East and the Levant, in what is now parts of modern day Iraq, Syria, Turkey and Iran (Encyclopaedia Britannica, 2019).

2014)). Herodotus, a Greek historian and author of *The Histories*, sometimes eurocentrically referred to as the father of history, and Thucydides, his much more pedantic contemporary and author of *The History of the Peloponnesian War*, both include descriptions of the effects of war on the minds of soldiers. Their work represents the earliest to describe these symptoms in the West (Morley, 2017).

Trauma is as much a part of war as death. Whether it was called Soldiers Heart, Shell Shock or Battle Fatigue, tales of war inevitably include tales of trauma. Sophocles, the great tragedian and contemporary of these early historians, wrote at length on the horrors of war. In his play, *Ajax*, Sophocles explores the mind of a soldier who has seen and killed too much, resulting in the hero's suicide. In *Ajax*, the soldier's violent madness is explained away with divine intervention from a goddess who supported the opposing side (Sophocles, 2011). In real life, attempts to explain or understand soldiers' symptoms seldom lasted much longer than the wars themselves. The task of integrating damaged young men back into the societies that sent them to war fell to the young men themselves and their families.

Women and trauma. Fewer examples can be found in ancient texts which document trauma and women. While ancient writers describe both trauma symptoms in soldiers and the events that caused them, discussion of sexual assault of women is limited to how it impacts men and lacks of any mention of how it might affect victims. The *Histories* mention rape but only describes the restitution paid or refused by a victim's father. Centuries earlier, Middle Assyrian legal code states that if a man rapes a virgin woman, the victim's father is legally entitled to rape the rapist's wife in retribution (Walcott, 1978). Nowhere in these works, or Hammurabi's Code, or the work of

Thucydides, is the effect sexual assault can have on a person's mental or psychological state documented as was the case with combat (Walcott, 1978). When mental health symptoms related to women do arise in ancient texts, they are attributed either to the placement of the uterus or a lack of sex and childbearing. Early Greeks attributed a wide array of states and symptoms (display of heightened emotions, anxiety, fainting, heightened sexual drive, absence of sexual drive) to a "wandering uterus." In fact, the term "hysteria" comes from the ancient Greek word for uterus (Didi-Huberman, 2005).

Jean-Martin Charcot was an early neurologist and influential teacher of Sigmund Freud among others. His work established hysteria as an official medical diagnosis in 1890 (Didi-Huberman, 2005). "Hysterical Neurosis" remained in the DSM until the 1980 release of the DSM-III (Tasca, Rapetti, Carta, & Fadda, 2012). I find it notable that the same edition of the DSM that introduced PTSD was the first to eliminate hysteria. Charcot became very well known for his work with a young woman named Louise Augustine Gleizes, whom he transferred from the Paris sanitarium Salpêtrière into his care. The public demonstrations of her treatment contributed to his notoriety. Charcot made a public display of inducing episodes in Gleizes of what he called hysteria, using hypnosis or "genital manipulation" and then photographing her response (Didi-Huberman, 2005). Gleizes was 15 years old when she entered the Salpêtrière and still a teenager when Charcot began his work with her. Gleizes had been repeatedly sexually assaulted and severely beaten from her childhood into her early adulthood (Walusinski, Poirier & Déchy, 2013). In his writing, Charcot attributed hysteria to an internal injury to the nervous system. Although there is some variation in the literature, Lucy Barker states in, *Toujours la chose génitale": Charcot, Freud, and the etiology of hysteria in the late 19th*

century, “There is no evidence that Charcot believed that hysteria was sexual in origin” (Barker, 2015, p. 9). When Gleizes eventually refused to continue participating in Charcot’s demonstrations she was involuntarily returned to the Salpêtrière (Walinuski, 2014).³

Like his teacher, Freud treated “hysteria” in late nineteenth century women and, like Charcot, he found that in case after case, the symptomatic women reported childhood sexual abuse. Unlike Charcot, he attributed the symptoms he saw to those experiences in a theory he developed on the subject. Soon after he published it, Freud publicly disavowed his theory, inconsistently stating that the accounts of abuse were invented by his patients (Bloom, 1997). Whether Freud truly believed that his female patients’ accounts were expressions of sexual fantasy or if he simply found it inconvenient to take the position that so many men were sexually abusing children is a separate issue, but one relevant to my research. Psychiatrist and pioneer in understanding trauma, Sandra Bloom posits that sociopolitical factors led him to deny his patients’ experiences and revise his theory. She quotes Dr. Judith Herman: “The exploitive social context in which sexual relations actually occurred became utterly invisible” (Bloom, 1997, p. 17). The unwillingness of Freud, Charcot and others to concede that “exploitive social context” is echoed in Bloom own confession upon awakening to the reality of the prevalence and impact of child abuse: “I did not want to know this information” (Bloom, 1997, p. 7). Herman, a preeminent authority on trauma and incest, observed that this aversive mechanism in her own review of the history of trauma. She identified a “culture of societal neglect in which the victim is rendered invisible and discredited, a horrifying tendency that seems to have continued

³ On a brighter note, shortly after her re-commitment to the Salpêtrière, Gleizes escaped by dressing in men’s clothes and never returned to the asylum (Didi-Huberman, 2005).

into American society today” (Dell’Omo, 2016, para 3). At the very birth of the field of psychology, an issue central to understanding human maladaptive behavior was swept under the rug.

Psychology Recognizes Trauma

Vietnam War veterans and trauma. Two factors converged in the 1970s and 1980s that forced the field of mental health to look seriously at psychological trauma and its roots in childhood. One was the Vietnam War and the other was the women’s movement. Trauma and its impact would be revisited after every war. Whether they called it “soldier’s heart” or “shell shock” or “battle fatigue”, doctors could not avoid the effects of the trials of war on young men (Friedman, 2017). Indeed, after each American war since psychology became a scientific discipline, practitioners and researchers made hard-earned but quickly forgotten progress. As soon as doctors assigned a name to the trauma symptoms soldiers exhibited, society put the whole ugly business behind them until the next war. In the 1920s, in the wake of World War I, the U.S Military enlisted psychiatrist, Abram Kardiner to study soldiers suffering with psychological symptoms (Stein, 2015). The resulting book, *The Traumatic Neuroses of War*, prompted no significant action on the part of the military. Prior to the political unrest of the Vietnam era, soldiers’ symptoms and any discussion of them took place in an isolated segment of society made up of soldiers and military doctors and personnel.

The Vietnam War spanned 19 years leaving no shortage of damaged young men and many of them struggled to reintegrate into society after returning home. Unlike those who fought in World War I and II, Vietnam veterans returned home to a society in that

was at times hostile rather than welcoming. In the late 1970s, Bessel Van der Kolk was a staff psychologist at the Department of Veterans Affairs (VA) where he observed patients suffering from hallucinations—soldiers reliving the horrors of war. They were the same symptoms he had seen a few years before as a young intern spending the night shift at Harvard University’s Massachusetts Mental Health Center (MMHC). There, too he had observed night terrors and hallucinations of the patients. They were misdiagnosed as psychotic. These symptoms were, in fact, criteria for psychosis but the diagnosis did not fit in the cases. He realized that they were actually flashback episodes of real memories, often of childhood abuse. He was dismissed by his superiors at the MMHC but at the VA he was free to pursue other options (Van der Kolk, 2014). He sought out literature on war trauma but found no books on the subject with the notable exception of *The Traumatic Neuroses of War* (Van der Kolk & Najavits, 2013). Kardiner viewed the symptomology of the patients as based in the body, that the physiological systems were malfunctioning due to the severity of the traumatic event. Interestingly, recent work on trauma has returned to an emphasis on the body—this time on somatics and integrating somatic therapies in the treatment of trauma (Levine & Frederick, 1997).

Van der Kolk was not the only practitioner seeking treatment for troubled veterans. In 1971, a Detroit shop owner shot and killed a decorated Vietnam War veteran who attempted to rob his store. The following year New York psychiatrist Chaim Shatan wrote an essay titled *Post Vietnam Syndrome*, which was published in the New York Times. It was a response to the shooting death and the general state of Vietnam veterans in the U.S. (Stein, 2015). The essay earned him some notoriety and the attention of veterans’ rights group, Vietnam Veterans Against the War, as well as anti-war activist and fellow

psychiatrist, Robert Lifton. Lifton had been lobbying for years and had testified before Congress for action concerning funding for veterans' mental health services. Together they wrote diagnostic criteria for and named PTSD or Post Traumatic Stress Disorder, a name which was a less stigmatizing for veterans than others in consideration. The American Psychological Association (APA) adopted PTSD into the 3rd Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM III) in 1980 (Stein, 2015). With funding earmarked by Congress and drowning in need, Van der Kolk, still working with the VA, sought funding for a study of traumatic memory and PTSD. Their response was: "It has never been demonstrated that the diagnosis PTSD is relevant to the mission of the VA" (Van der Kolk & Najavits, 2013, p. 516).

Van der Kolk left the VA and returned to Harvard's MMHC, this time as a licensed psychiatrist. Having spent the previous several years listening to soldiers process atrocities of war, he found that he "listened with a very different ear when depressed or anxious patients told me stories of molestation and family violence." I interpret this to mean that had become somewhat desensitized and thus better able to hear his patients. He writes: "I was particularly struck by how many female patients spoke of being sexually abused as children" (Van der Kolk, 2014, p.20). According to Vander Kolk, the standard textbook at the time stated that one in every million women experienced incest. He found that statistic improbable since he was treating 47 of them at the time. His struggle to find support and resources recalls Bloom and Herman's statements regarding the human aversion to facing the reality of child abuse.

The reality is that a disproportionate number of the Vietnam War veterans who developed PTSD also had a history of childhood trauma. One study found that 26% of

those who had developed combat-related PTSD had experienced child abuse compared with 7% who did not have PTSD symptoms (Bremner, Southwick, Johnson, Yehuda & Charney, 1993). They also had a significant history of traumatic events between childhood and serving in the military. Throughout the 80s and 90s, Bessel Van der Kolk and many other clinicians began to recognize that virtually every population receiving mental health services had incredibly high rates of childhood trauma. He writes, “For every soldier who serves in a war zone, there are ten children who are endangered in their own homes (2014, p.21).

Civilians and trauma. In addition to the controversy surrounding the Vietnam War and the uncertainty of what to do with veterans returning home with PTSD, the 1970s were marked by the dramatic increase in prominence of women’s issues in the American cultural landscape. The decade was characterized by social activism and increased awareness of social issues in general, but the momentum of women’s movement gave increased focus to the issue of sexual assault. In 1974 two therapists, both women, authored a paper calling for clinicians to “be alert to indications of the possibility of rape having occurred even when the patient never mentions such an attack” (Burgess, & Holmstrom, 1974, p.981). This statement implicitly acknowledges the probability that women seeking treatment in a clinical setting have experienced sexual assault. It also identifies a universal standard of care that would today be referred to as “trauma-informed,” though the term had not yet been coined.

Sandra Bloom’s Sanctuary Model emerges in the early 1980s and expands on Burgess and Holmstrom’s premise. Instead of looking for indications of past trauma in clients, Bloom calls for those in mental health to design treatment, and in fact to design

entire programs, with the presumption that patients are impacted by past trauma. Bloom's journey to developing the Sanctuary Model was a difficult one. She writes that she and her cohort in her psychiatric residency in the late 70s were well versed in family dynamics. They knew that difficult events in childhood often led to maladjustment in adulthood and that child abuse was real but believed that severe abuse, especially incest and sexual abuse, were exceedingly rare. She even admits to believing that dissociation⁴ and other extreme symptoms of trauma were often contrived plays for attention on the part of patients (Bloom, 1997, p. 4). Bloom was well into a successful career when she began treating a young woman who falsely accused a young man of rape. The patient insisted she had memory of the incident but it was reasonably determined in court, that the assault could not have happened. Understandably, she sought treatment. Unbeknownst to either Bloom or the young woman, she was suffering from Multiple Personality Disorder (now called Dissociative Identity Disorder). The patient's condition, and its precipitating trauma, revealed itself when her alter⁵, a version of herself at the age the abuse occurred, became the dominant identity and she was hospitalized. When Bloom arrived at the hospital, she was assessing a person she did not know. Over several weeks, the alter revealed the brutal physical, sexual and emotional abuse the client had suffered at the hands of her deceased father. She had not invented the memory of rape years earlier but fused an older traumatic memory into her experience with the young man she had accused. Bloom writes that she never looked for a history of sexual abuse despite signs that were obvious in hindsight. She concludes that her own innate aversion to the notion

⁴ Dissociation is a continuum of states of detachment from one's emotions, thoughts, memories, awareness of their surroundings, their actions and even their identity. It is associated with a range of psychiatric disorders, notably, PTSD.

⁵ An alter is a separate personality or identity, distinct from the individual's primary identity present in Dissociative Identity Disorder, formerly known as Multiple Personality Disorder

of someone, especially a father, raping a little girl, especially one with whom she had a personal, professional relationship, had prevented her from considering the possibility. In *Creating Sanctuary*, Bloom writes: “Since that time I have not been puzzled by why the psychiatric profession has turned its back repeatedly on the realization of victimization. It’s too painful to bear” (1997, p. 7). Over the next few years, with an increased awareness of the signs of history of childhood sexual abuse, Bloom began to recognize that her client’s experiences represented the tip of the iceberg of childhood sexual trauma, and childhood trauma in general. In light of that understanding, she developed Sanctuary Model with colleagues Joseph Foderaro and Ruth Ann Ryan. The Sanctuary Model is intended for residential and outpatient mental health facilities and is a precursor to trauma-informed care. It is rooted in the acknowledgment that a significant portion of people seeking treatment for mental health and drug abuse issues have a history of childhood trauma and that the trauma is often repeated into adulthood. It recognizes that individuals with a history of trauma have specific needs and are often triggered or retraumatized in traditional therapeutic environments (Bloom, 1997).

In the decade that followed, a substantial body of literature emerged as study after study confirmed the significant relationship between childhood trauma and a host of physical and psychiatric symptoms: Notable examples include: Childhood trauma in adult hypochondriac patients (Barsky, Wool, Barnett & Clearly, 1994); Incest and current behavior of chronically hospitalized psychotic women (Beck & Van der Kolk, 1987); Long term clinical correlates of childhood sexual victimization (Briere, 1988); Panic-phobic patients and developmental trauma (Giron & Mellman, 1995); Childhood sexual abuse in women with bulimia (Bullock, Sullivan & Rorty, 1989); Sexual and physical abuse

histories and psychiatric symptoms among male psychiatric outpatients (Swett, Surrey & Cohen, 1990). Some of these names, including Van der Kolk's, are repeated throughout the literature of this era, supporting the fact that many researchers, clinicians, and practitioners contributed to the development of trauma theory, whether they worked independently or in partnership.

The ACEs Study

Even while the aforementioned practitioners went about their work in the sphere of clinical psychology another kind of practitioner was about to stumble upon the similar conclusions regarding the prevalence of childhood trauma, this time in the field of medicine. In 1985 Dr. Vincent Felitti was five years into an obesity clinic in San Diego. This clinic was designed for people who were one hundred to several hundred pounds overweight. Having spent years carefully crafting the program to maximize patient success, Felitti became deeply frustrated. Just as patients experienced significant success, they abandoned the program to the order of 50% attrition. He and his team reviewed patient charts searching for information that might lead them to improve the clinic. The review of the charts reveals that the patients were not gaining weight over time as Felitti assumed. If a person were consistently eating a surplus of calories, then logically, they should continue getting heavier. But these individuals reached a certain level of obesity and stayed at that weight. If they lost weight, they regained the same number of pounds without exception. Felitti recalled the patients and interviewed them. He asked how much they weighed at various milestones throughout their lives. He asked one of his interviewees how much she weighed the first time she was sexually active, she answered forty pounds and burst into tears. She disclosed that her father began molesting her as a

young child. After a few similar stories emerged, Felitti asked his team to take over the interviews to see if he was somehow influencing the results but they returned with similar responses. Felitti said that most of the several hundred people his team interviewed were survivors of childhood sexual trauma or were women who had been (Stevens, 2012, para 17).⁶ Felitti reported his findings to the North American Association for the Study of Obesity (NAASO) in 1990. The obesity experts offered no reaction to his presentation with one exception. Felitti said, “He told me I was naïve to believe my patients, that it was commonly understood by those more familiar with such matters that these patient statements were fabrications to provide a cover explanation for failed lives!” (Stevens, 2012, para 30).

Felitti continued to believe his patients. U.S. Centers for Disease Control and Prevention (CDC) epidemiologist, Dr. David Williamson also attended the NAASO conference and believed Felitti. He introduced him to Dr. Robert Anda and with the help of additional researchers, they set about designing a study large enough to eliminate doubt that people were telling the truth about their experiences. Instead of a narrow subset population like those in Felitti’s obesity clinic the team, led by Felitti and Anda, surveyed more than 17,000 people from the general population via Kaiser Permanente in San Diego. Only patients scheduling a standardized medical examination were eligible. It is notable that the participants obtained health coverage through an HMO and were presumably either gainfully employed with an employer-sponsored plan or a spouse or family member of an employee. The team narrowed the focus of the study to the following

⁶ Material is sourced from Stevens’ blog which was Originally part of a three part series by Stevens for the Huffington Post. The information is currently only available on the blog and is sourced from the author’s interviews with the researchers and CDC publications.

adverse childhood experiences (ACEs): three main types of abuse (sexual, verbal, and physical), five types of family dysfunction, and two types of neglect, (physical and emotional). Researchers next developed a ten question questionnaire and distributed it to 26,000 patients who had had a routine physical in 1995 or 1996. Of those, 17,421 people responded.

The results of the study were published in a report entitled, *Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults*, in 1998. Commonly referred to as “The ACEs Study”, the findings demonstrated that 52% of 17,421 participants had experienced at least one ACE. Out of this population, 87% of those in the ‘at least one ACE’ group had experienced 2 or more ACEs. Just over 6% of the total number of participants had experienced 4 or more ACEs. The study also demonstrated that individuals with four or more ACEs were much more likely than those with no ACEs to have diabetes, chronic bronchitis or emphysema, skeletal fractures, hepatitis and other STIs, and poor self-rated health. They were significantly more likely to smoke, use illicit IV drugs, abuse alcohol, have a history of more than 50 sexual partners, have a history of suicide attempts, and have severe obesity than participants without a history of ACEs. A staggering 22% of the total number of respondents reported experiencing childhood sexual abuse. If the population of the study represents a representative sample of the total population that would mean that more than 1 in 5 people have experienced childhood sexual abuse. This sample, however, included only people who had jobs with health insurance (and covered family members) and who get a yearly physical (as opposed to those who only seek care to treat a specific problem); the actual rate of prevalence may be even higher. With a sample size of over 17,000 people,

those in the field of psychology and medicine who read or even heard of the study would no longer be able to dismiss the role of childhood trauma in human services.

The subject of ACEs has become its own area of study since 1998. Felitti, Anda, and other members of that first research team have since conducted many more studies, totaling more than 60 papers, investigating the questions raised by the original ACEs study. In 2002 they looked further into the relationship between ACEs and adult alcohol abuse. The researchers found that each successive ACEs in a person's history, correlated with a higher and higher risk of alcohol abuse. The rate of increase in risk rose regardless of a history of parental alcoholism (Dube, Anda, Felitti, Edwards & Croft, 2002). In 2005, a study examined the relationship between childhood residential mobility, ACEs, and health risks in adolescence and adulthood. They surveyed more than 8000 people and found a very strong correlation between the number of times a child moves and how many ACEs they have experienced. Each move over four times correlated with a higher number of ACEs. Eight moves indicated a significant association with childhood abuse and neglect, teen pregnancy and adolescent and adult alcoholism. (Dong, Anda, Felitti, Williamson, Dube, Brown & Giles, 2005) This finding is also very significant in a discussion about trauma-informed practices in schools as students who move frequently can easily be overlooked.

Trauma-Informed Care/Trauma-Informed Practices.

Just as Felitti's team was publishing the ACEs Study, a clinician working in women's mental health named Maxine Harris published a manual for clinicians treating trauma through structured group intervention (Harris, 1998). She designed the

intervention to treat trauma but integrated treatment for drug and alcohol abuse or other co-occurring mental health conditions. The approach was a departure from conventional treatments because emphasized trauma over drug abuse or other issues. Harris identified trauma as an overarching issue. In 2001 Maxine Harris and Roger FalLOT co-authored a paper titled *Envisioning a Trauma-Informed Service System: A Vital Paradigm Shift*.⁷ Instead of promoting a specific treatment intervention, the paper proposed a complete redesign of a non-profit mental health and substance abuse treatment agency in Washington, DC, with trauma as the guiding principle. Like Harris' 1998 work, *Envisioning a Trauma-Informed Service System* views trauma as the primary condition and substance abuse or mental health conditions like depression and anxiety as sequelae or conditions that result from an earlier disease. In most cases, treating trauma simultaneously also addresses the co-occurring condition while avoiding retraumatizing or revictimizing clients. FalLOT and Harris outline what they have determined to be the requirements for creating a trauma-informed system of care: 1) commitment to change on the part of the institution's administration 2) universal screening for trauma history 3) training and education about trauma for all staff, not just clinicians 4) hiring practices that seek out individuals already familiar with trauma dynamics 5) review of existing policies and procedures to remove or replace any that are found to be potentially hurtful or harmful to trauma survivors. By establishing codified guidelines for others to follow, they created a framework that has spread from psychiatric treatment facilities (FalLOT and Harris, 2001) to homeless services (FalLOT, McHugo, Harris & Xie, 2001) to juvenile court

⁷ This paper is cited more than any other in articles and papers addressing Trauma-informed practices. Interestingly, none of the four articles I read by teams that include FalLOT or Harris cite the ACEs study or Bloom's Sanctuary study despite existing within the same framework. This may speak to the fractured nature of trauma related studies and the fact that fields related to human services have been so slow to adopt a cohesive approach.

systems (Van den Wall Blake, 2013) to residential juvenile treatment centers (Day, Somers, Baroni, West, Sanders & Peterson, 2015) to state-operated child advocacy centers (Kenny & Thompson, 2017). In each case, service providers improved outcomes for clients and reduced potential for harm. In the case of Kenny & Thompson, researchers expanded the framework to include a comprehensive assessment of the trauma-informed training provided to staff and how it was perceived.

ACEs and Education

By the early 2000s, clinical practitioners and researchers had sufficient evidence of the startling rates of prevalence of childhood abuse or other ACEs among those receiving treatment for mental health and substance abuse problems to warrant universal trauma-informed practices in human health services. Twenty years later, it still has not. Finally, there is a small but growing push to look honestly at how ACEs impact our children, while they are still children. Progress toward building a system that acknowledges the prevalence of ACEs is slow and uneven, even among those designed to treat the most impacted populations.

Children in the foster care system are one of the most vulnerable populations that exist. Their very placement in the system is evidence of multiple ACEs, if not diagnosable trauma. A 2016 paper urgently calling for trauma-informed care for youth in foster care cites decades of research, much of it predating the ACEs Study. The author points out that even though "childhood trauma has been associated with serious and persistent long-term physical, psychological, and substance abuse issues, it is rarely viewed as a central issue in health treatment" (Fratto, 2015, p.445).

Most of the research examining the effects of ACEs on academic and other school-related issues, has occurred in the last few years, almost two decades after the ACEs study explicitly called for intensive prevention and response strategies aimed at children and families (Felitti, et al, 1998). A 2016 paper examined the relationship between ACEs and students repeating the ninth grade, a strong predictor of dropout, found that 69% had a history of 2 or more ACEs. That particular study is limited by a sample size of 13 students (Iachini, Petiwala, & DeHart, 2016). Despite the significance of the dropout rate in education, no one has yet attempted a more comprehensive study of ACEs and students repeating the 9th grade or dropping out of high school. A 2018 study looking at the association between ACEs and school success in elementary school found that, among a sample of more than 2,000 children, higher ACE exposure correlated with greater rates of academic failure in one or more subjects, problems with attendance, and teacher-reported behavior problems (Blodgett & Lanigan, 2018).

In addition to establishing a relationship between ACEs and academic difficulties and challenges in academic settings, several recent papers have linked ACEs and ADHD diagnosis. One such paper analyzed data from a separate study conducted by the Fragile Families and Child Wellbeing Study, an ongoing longitudinal study run by Princeton University, Columbia University and the University of Michigan (fragilefamilies.princeton.edu, 2019). Researchers looked at data from 1,572 children born between 1998 and 2000 to single mothers. They had access to postpartum interview data and subsequent interviews with the mothers as the children reached ages 1, 3, 5, and 9. Even considering that mothers whose children have been exposed to ACEs may be less inclined to self-report, the data demonstrated a strong association between ACEs in both

early and middle childhood and ADHD diagnosis by age 9 (Jimenez, Wade, Schwartz-Soicher, Lin, & Reichman, 2016). Another study on ADHD and ACEs isolated three specific ACEs: exposure to domestic violence, childhood physical abuse and childhood sexual abuse. It investigated their relationship to ADHD diagnosis using data from almost 15,000 men and almost 13,000 women. The data showed that 41% of men with ADHD diagnoses also experienced childhood physical abuse while 31% of men without ADHD did. The discrepancy was even larger among the women: 44% with ADHD experienced childhood physical abuse while 21% of women without ADHD did. Among men with ADHD 11% experienced childhood sexual abuse compared to 6% of those without. Those numbers jumped to 34% and 14% for the women. A notable gender difference in the findings was that women exposed to domestic violence as children were much more likely than their male counterparts to receive an ADHD diagnosis. Twenty-three percent of women with ADHD witnessed domestic violence compared to 9% of those without. There were less than two percentage points difference among men with and without ADHD (<7% and >9% with a greater number of men who witnessed domestic violence also having ADHD). Prior to completing the study, the authors asked whether the stresses of raising a child with ADHD could contribute to increased physical abuse. The fact that sexual abuse was the ACE most closely associated with ADHD diagnosis appears to contradict that premise as it is highly improbable that parental stress would lead to sexual abuse of a child. A parent who might otherwise refrain from hitting or yelling at their child may lash out verbally or even physically under enough pressure but it is less likely that stress would a parent to sexually abuse their child unless they were already predisposed to do so (Fuller-Thomson & Lewes, 2015). A second study by Fuller-Thomson found that

individuals with histories of abuse were seven times more likely to have an ADHD diagnosis than those without a history of abuse (Fuller-Thomson, Mehta, & Valeo, 2014).

Collectively, these studies demonstrate the effects ACEs have on education how ACEs affect education but very few studies to date have explored trauma-informed practices in schools. One exception is a 2016 study comparing a trauma-informed school providing intervention to court-involved youth and another school serving a population with high rates of trauma but not without being court-involved and without a trauma-informed model. Students at the trauma-informed school reported better relationships with staff than students at the traditional school as well as a reduction in trauma symptoms (Blitz & Saastamoinen, 2016).

Teacher Perceptions of ACEs, Their Impact on Education and Trauma-Informed Practices in School

Teachers are on the front lines in schools with regard to student trauma. They are best positioned to identify it, they are best positioned to implement trauma-informed practices in schools, and they are more likely to be confronted with the behavioral effects of trauma on a day to day basis than any other profession. And yet there is an almost complete absence of studies investigating their views on these issues or the degree to which they are even aware of student trauma. The need for an increased exchange of knowledge about childhood trauma between teachers and researchers is highlighted in a 2010 paper investigating teacher beliefs about what the authors call “maltreatment effects” on student learning and behavior. The authors argue that, “teachers represent less than one-fifth of all annual maltreatment reports made despite the fact that teachers

differ from other mandatory reporters in that they are more likely to have the opportunity to observe behavioral changes when maltreatment occurs” (Martin, Cromer & Freyd, 2010, p.245). The discrepancy between their opportunity to observe evidence of maltreatment and the rate at which they report it, indicates that current training for teachers on the signs of abuse, maltreatment or trauma are grossly inadequate

There is virtually no baseline for teachers’ perception of the rates of prevalence of different ACEs or how they connect ACEs and student behavior. One of the very few that even comes close is a study from 1993 that surveyed teachers in Chicago public schools on the topic of student discipline and classroom management. When asked why they thought some children misbehaved, “violence in the media” was a top contender along with divorced parents and drug and alcohol abuse (Greenlee & Ogletree, 1993). Tipper Gore’s campaign against violence in the media and music was a heavily debated issue in the period leading up to this study (U.S. Senate, 1985). This correlation may be explained by a well-documented phenomenon known as the illusory truth effect, which affirms that people are more likely to judge repeated statements as true than new ones (Unkelback & Rom, 2017). If the teachers in the study attributed undesirable student behavior to violence in the media because of repeated messages in the media suggesting it, then repetition of other messages should be similarly integrated. In fact, repetition in ongoing sessions is one of the most integral aspects of effective teacher training (Yoon, Duncan, Lee, Scarloss & Shapley, 2007). What if relevant information about ACEs were revisited to the degree that some media messaging or school and district messaging is? What would teachers attribute student behavior to then?

Data on teacher perspectives about childhood trauma is invaluable in assessing not only the effectiveness of past professional development training but also in determining need for future training. Yet researchers do not often ask teachers for their perspectives about childhood trauma, and when they do, they often do not ask the right questions. For example, a 1987 study on teacher perceptions of student social behavior asked teachers to assess the behavior of over 400 children, some of whom had been labeled “behaviorally disordered” and some who had been labeled “behaviorally normal.” Researchers used social performance scale to find out which group teachers thought exhibited more antisocial behavior and which exhibited more prosocial behavior (Center, & Wascomb, 1987). The children in the “behaviorally disordered” group had to already be placed in a special education program for “emotionally conflicted students” to qualify. Not surprisingly, the teachers perceived the “behaviorally disordered” group as exhibiting more antisocial behavior. Terms such as ‘trauma’, ‘stress’, ‘abuse’, or ‘toxic stress’ were not included anywhere in the survey or the paper. This study, along with the 1993 study cited above that named violence in the media as the most significant influence on student behavior (Greenlee & Ogletree, 1993). The results of these studies indicate that some teachers may not have had meaningful awareness of the prevalence of childhood trauma or its impact on behavior during the late 80s and early 90s.

In 2007, almost a decade after the publication of the ACEs Study, another study was conducted to gather data about teachers’ perspectives on student behavior. The researcher asked 199 Physical Education teachers, a group with one of the highest teacher-to-student ratios in primary education if they thought that “student misbehaviors” ranging from mild to severe were attributed to “out of school” factors,

“student” factors, “teacher factors” or “school factors.” “Out of school” factors might include ACEs but trauma, abuse, stress, or toxic stress were not specifically mentioned in the survey (Hodges Kulinna, 2007). While it does begin to address the question of “What do teachers think about ACEs and student behavior?” it does not provide enough data to be meaningful. Additionally, while one might argue that a lack of representation of gym teachers in the literature constitutes a gap worth addressing, the experience of a P.E. teacher (much larger class sizes, teaching different students each period and from day to day) limits the application of the data.

The existing literature does not indicate what training teachers are commonly receiving or the degree to which they retain or integrate knowledge from the training into their pedagogy. It does not tell us what they know about what researchers have learned regarding ACEs over the last 20 years. Nor do we know much about how school and district administrators select topics for professional development. Perhaps most significantly, we do not have any research-supported data on specific trauma-informed practices and programs or how they might work best in schools. The gap in the research is wide—too wide for a single study to bridge. What my study *can* provide is an indication of where to go next. If all the participants are familiar with the rates of prevalence of all the ACEs, targeting training on rates of prevalence would not be effective. If only a few participants see a relationship between their students’ experiences and their behavior, that would provide a possible direction for professional development. One of the most exciting aspects of qualitative research is that the data can reveal themes and knowledge as complex and unpredictable as the human beings that generate it. Van der Kolk, Bloom, and Felitti didn’t pioneer their fields by thinking prescriptively. Each of them responded

to situations outside of themselves with courage, compassion, and intellectual curiosity, pulling on a thread that led to profound trauma and inspiring resilience.

Chapter 3: Methods

Introduction

Trauma and resilience have been an interest of mine for many years. When I started teaching, I quickly discovered that I was working with a population with a high rate of trauma. In my second year, my school began piloting a program designed to promote trauma-informed practices among teachers and I became part of the program's leadership team for two years. Given some of my students' experiences, trauma was the lens through which I saw student behavior even before I spent a year reviewing the literature on ACEs and childhood trauma. When I read about how many children are impacted by ACEs and how trauma-informed practices support them, I became an enthusiastic convert. All of these factors shifted my perception of what is general knowledge on this issue toward what is actually specialized information. Because of this, my initial research questions related to teacher's views on the trauma-informed training they had received, which aspects of it they thought were effective or not effective, if any components were difficult to implement and why. Answers to those questions could certainly improve how trauma-informed training is implemented and guide strategies to make it more effective. However, before I had begun in earnest, I had my first unofficial finding: most teachers do not know what trauma-informed practices or ACEs are.

The body of literature on trauma, ACEs, and their impact on humans, from childhood through adulthood, is clear. First, humans are as likely to have some exposure to adverse childhood experiences as not. ACEs studies demonstrating have been conducted in every state in the U.S. and only three have populations that are more than

60% ACE free. In every nation about which I was able to find studies examining ACEs, researchers found that they 1) are prevalent and 2) correlate with adverse health outcomes when they occur cumulatively (Almuneef, Qayad, Aleissa, & Albuhairan, 2014; Damodaran, & Paul, 2018; Musa, Peek-Asa, Jovanović, & Selimović, 2018; Soares, Howe, Matijasevich, Wehrmeister, Menezes & Gonçalves, 2016).⁸ Secondly, the range of maladaptive behaviors, and mental and physical health problems that can develop run a continuum from periodic mild depression or anxiety to premature death. Thirdly, rates of prevalence of both ACEs and related adverse outcomes warrant the universal adoption of trauma-informed principles in any system that treats or supports adults dealing with issues such as domestic violence, mental illness, homelessness, and drug and alcohol abuse. Lastly, the same statistics demand universal screening for ACEs in schools and the implementation of trauma-informed principles in public education.

No one is better positioned to mitigate the effects of ACEs than teachers due to their ability to monitor students over time for behavioral changes and the supportive nature of their role in children's lives, among other reasons. Despite that, they cannot be expected to innately have the complex psychological knowledge and skillsets required to do that. They need training to effectively implement trauma-informed principles as a universal measure in their classrooms. Teachers cannot and should not be trained to diagnose or treat trauma, they already wear enough hats in the classroom. They can, however, be given the basic knowledge and tools to provide safe space and trauma-informed support for their students. In order to design an effective and efficient training program, administrators and experts need to know what teachers know. What individual

⁸ The studies listed in the sample I provided above were conducted in Riyadh, Saudi Arabia; Kerala, India; Zenica, Bosnia and Herzegovina; and Pelotas, Brazil, respectively.

and collective strengths do they have? How can those strengths be utilized? What are some areas that need more support? We need to know how teachers understand their role regarding childhood trauma and how they perceive its relationship to student behavior and achievement in the present moment if we are to support their development. With that baseline in mind, this study seeks to answer the following questions. Do teachers have accurate assessments of the national rates of prevalence of different ACEs? How do those estimates compare to their estimates of ACEs in their own classrooms? What connection, if any, do teachers perceive between ACEs and student behavior? Only teachers can say what their views are and, astonishingly, no one has asked them. The degree of success or failure in the implementation of trauma-informed systems in schools lies with how well we are able to support teachers, and that requires ongoing two-way communication. This study is a first step to that end.

Description and Rationale for Research Approach

Two worldviews are represented in my research: constructivist and transformative. The study supports a constructivist view because I am seeking an understanding of teacher perspective and because it relies on participants' views and includes the use of open-ended, teacher-generated responses. It is rooted in the belief that significant, usable knowledge about ACEs and trauma (or any subject) is constructed through interaction between the individual's experience and their social interaction with the world (Bazeley, 2013). The fact that adverse childhood experiences influence outcomes throughout people's lifetimes existed before 1998 and the ACEs study. Nevertheless, it did not carry meaning for us until we recognized it. That discovery occurred through individuals sharing their stories; practitioners, listening and relating

them—whole systems of people reacting as patterns in those stories emerged and were applied. The fields of medicine, psychology, and education, each contributed a body of knowledge to this framework. Some contributed a narrative of adversity that began in childhood and did not end with the conclusion of the studies in which they participated. My contribution and the contributions of the teachers participating in my research is, hopefully, to expand the early foundation for a trauma-informed public school system. Maybe others will use it to construct even more related knowledge.

The dominant philosophical worldview that shapes my approach to research, as well as my views on my research topic, is transformative. A transformative worldview places central importance on the study of lives and experiences of diverse groups that have traditionally been marginalized particularly the strategies that can be used to resist, challenge, and subvert the constraints placed on them by forces of oppression (Creswell, 2014, p. 10). It contains an action agenda for reform that may change lives of the participants, the institutions in which individuals work or live, and the researcher's life and it speaks to important social issues such as empowerment, inequality, oppression, domination, suppression, and alienation (Creswell, 2014, p.9). I can think of no subject more relevant to those issues than ACEs. They disproportionately impact economically, culturally, and ethnically diverse communities. The factors and supports that mitigate the worst effects of ACEs are often inaccessible to the communities most impacted by them. Regardless of their socioeconomic or cultural background, every child impacted by the experiences delineated under the ACEs umbrella is subject to destructive, oppressive forces that are outside of their control. Because ACEs disproportionately impact diverse communities, trauma-informed practices, the “action agenda” of my research, have the

power to disproportionately benefit those communities, reducing the influence of iniquity that characterized U.S. society.

Like individuals interact inside of systems to build knowledge and all three interact to build change. The knowledge represented by the body of research constructed by individuals working in psychology and medicine with individuals who experienced ACEs has already transformed the field of psychology. It is in the process of transforming the field of medicine and it just beginning to transform the education system. When these systems respond with structural supports like trauma-informed practices, the painful experiences that fueled all that expansion in knowledge also drive transformation in ordinary people's lives. Lessons learned from the broken childhoods of hundreds of thousands of individuals, become the salve that gives a young person struggling today, the healing support they need to change course. For good or ill, nothing has the transformative power of trauma. That sentiment and the unique privilege of supporting people in transformation are the driving force behind this research project.

Lastly, educational research typically focuses on student learning, teaching methods, teacher training, and classroom dynamics within a very narrow range of factors. This approach to research frames education in a way that suggests that the typical student is one that has two supportive parents with sufficient emotional and material resources. It does not serve the 2.9 million children who have a parent who incarcerated or the 24 million living with a single parent the 29 million living in low-income homes (Reilly, 2014; Livingston, 2018; Koball & Jiang, 2018). Nor does it serve the many children impacted by ACEs in the affluent communities, isolated by the false belief that they are the only one. My wish is that this research will contribute to a paradigm shift toward recognition, not

just of the role ACEs play in academic learning, but the role trauma-informed schools could play in transforming society by promoting resilience and empathy in the adults of tomorrow. This requires a political will and collaboration between political figures, administrators, teachers, and non-credentialed staff to design, fund and implement. This study could lead to increased emphasis on trauma-informed training for teachers and staff at the specific sites where its participants teach. The call for trauma-informed systems has been reverberating for almost 20 years. At its furthest aspiration, this study is part of a wave that leads to recognition of the role of trauma in human behavior so that one day, skill building around resilience carries similar importance to literacy. All of these factors support a transformative worldview.

This study explores a gap in the existing research. For this reason, I am using an inductive, non-experimental approach. Instead of manipulating variables to test a predetermined hypothesis, I collected data and reviewed it to see what patterns or concepts emerged, then reviewed it again using the codes that had emerged to determine if there was sufficient evidence to support each pattern or concept. This study also utilizes a mixed methods approach to research. I collected both quantitative data in the form of multiple choice survey questions and qualitative data in the form of short answer survey questions and in-depth interviews with teachers at my sites. Because the survey yields both qualitative and quantitative data (short answer and multiple choice responses) my design is also convergent parallel mixed methods.

After collecting data separately via survey and interview I applied inductive analysis on each data source independently, then combined codes from all sources to analyze them together (Bazeley, 2013).

Research Design

Research sites. I conducted research at three separate sites. The first is a public elementary school in an affluent community in an affluent county. For the purposes of this study and confidentiality, I named it “Affluent Public Elementary” The student demographic information for this school and the following 2 schools is also available in Table 1 below. It is 0.2% African American, 0.7% American Indian or Alaska Native, 6.1% Asian, 0.3% Filipino, 10.7% Latino, 0.3% Pacific Islander, 71.6% White, and 10% “Two or More Races.” 6.6% of students are English Language Learners and 7.5% receive free or reduced cost school lunch. All student demographic data was collected from the California Department of Education’s website’s profile for this school. The teacher demographic is approximately 7.7% Asian, 7.7% Latino, and 56.4% White with 28.2% of teachers not identified. Teachers at this school are 89.7% Female. Teacher demographic data was collected from the school’s website. The site was selected both because of convenience factors, as I have a professional relationship with the principal, and because it differs from the other sites because of demographic data and because it is public.

The second school site is a private, foreign language immersion school in an affluent urban setting. I named it “Private Urban Elementary.” Its demographic data is similar to the first site: 1% African American, 1% Native American or Alaska Native, 7% Asian, 5% Latino, 14% Pacific Islander, 68% White, and 4% “Two or More Races.” Again, all student demographic data was collected from the California Department of Education’s website’s profile for this school. No demographic data is available for the staff at this school. It was selected because it differs from the other two schools and because a friend and colleague recommended my project to the principal.

The third school site is a public elementary school in an industrial/residential urban setting. I have named this school “Urban Public Elementary.” The demographic information for this school is 5.2% African American, 0.2% American Indian or Alaska Native, 2.0% Asian, 88.5% Latino, 0.2% Pacific Islander, 1.6% White, and 0.7% “Two or More Races.” 80.5% of students are English Language Learners and 96.4% receive Free/Reduced Lunch. Once more, all demographic data for this school was collected from its profile on the California Department of Education’s website. No demographic data is available for the staff at this school. It was selected for the diversity of its students relative to the other two schools and because I have a professional relationship with the principal.

Table 1 Student Demographic Data at Research Sites

	Affluent Public Elementary	Private Urban Elementary.	Urban Public Elementary
Racial Demographic Information			
African American	0.2%	1%	5.2%
American Indian or Alaska Native	0.7%	1%	0.2%
Asian	6.1%	7%	2.0%
Filipino	0.3%		
Latino	10.7%	5%	88.5%
Pacific Islander	0.3%	14%	0.2%
White	71.6%	68%	1.6%
2 or more races	10%	4%	0.7%
Nonracial demographic information			
English Language Learners	6.6%		80.5%
Free or Reduced Cost School Lunch	7.5%		96.4%

Sampling Procedure.

I first met with each principal independently to get their approval and establish expectations. On the day of each staff meeting, I emailed the SurveyMonkey link to the survey and a letter of introduction to each of the principals. They, in turn, forwarded my email to their staffs rather than providing me with the district email addresses of all the teachers. At each staff meeting, I briefly presented my research topic, careful to avoid any language that might influence teacher responses and requested that they complete the survey. I also invited any teachers who were interested to volunteer to be interviewed by

writing their name and phone number on a signup sheet that I passed around the room. I collected the signup sheet after the meetings. The principal at Urban Public Elementary set aside 6 minutes of meeting time during which teachers could complete the survey.

My goal was to interview nine teachers, three from each site.

Participants. Forty-one teachers working at the three school sites are participants in this study. The first school site at which I recruited participants was Affluent Public Elementary. Out of 36 possible respondents, I received 15 responses which is a 42% response rate. Nine teachers wrote their information on the signup sheet and I was able to successfully schedule interviews with three of them, which was my goal. Private Urban Elementary, the second school site I visited, yielded a 36% response rate. It was the lowest response rate of the three schools and included only 8 responses. Eleven teachers wrote their information on the signup sheet but I was only able to successfully schedule one of them due to scheduling conflicts within the window of time for data collection. Urban Public Elementary was the last school at which I presented. Seventeen out of 21 possible respondents completed the survey. I attribute this 85% response rate to the principal's independent decision to set aside time during the meeting for teachers to complete the survey. Because it was the third round of data collection, I was able to tell her the average number of minutes teachers used to complete it when she asked. (It is one of many helpful features of SurveyMonkey.) That was the number of minutes she set aside. Another beneficial change in protocol during this final round was the addition of a column to the signup sheet asking for teachers' best times to meet. I was able to quickly and conveniently schedule three interviews (See Table 2 on page 43).

Table 2 Respondents from each site.

Affluent Public Elementary	Private Urban Elementary	Urban Public Elementary
36 possible respondents	22 possible respondents	21 possible respondents
25 classroom teachers 10 specialists	22 teachers	18 classroom teachers 3 specialists
15 responses	8 responses	17 responses
42% response rate	36% response rate	85% response rate

Methods.

My research is mixed methods comprised of a survey and qualitative interviews. The survey in this study serves two functions. The first relates to ACEs and their rates of prevalence by means of multiple choice questions (see Appendix B for a complete copy of the survey). I used the questions to assess the accuracy of teachers' perceptions of the national rates of prevalence of 8 ACEs and to collect their estimates of those ACEs among their students. The second function is to collect data on student behavior: three open-ended short answer questions asked: What student behaviors do you see? Why do you think these behaviors occur? And, what do you think would help reduce the behaviors? Each of these relates directly to my research questions. Do teachers have accurate assessments of the national rates of prevalence of different ACEs? How do those estimates compare to their estimates of ACEs in their own classrooms? What connection, if any, do teachers perceive between ACEs and student behavior? The multiple choice questions explicitly ask teachers to identify the correct rate of prevalence for eight ACEs and then to

select which number most closely matches their estimate of each ACE's prevalence in their own classrooms.

There are a few other questions on the survey. I asked teachers how many students they had in their classes so I could match the number of students they estimated in their own classroom to the percentage rate representing the national average. I asked teachers how many students in their classes have significant behavioral challenges in order to compare that figure to the number of students they estimate to have a history of ACEs. Lastly, I asked them how many years' experience they have teaching to see how that might impact their other responses. The survey results are anonymous to encourage honest responses and completion of the survey. Data is cross-sectional, offering a snapshot of the population at the given moment. Ideally, the same teachers would give different answers if given the same survey at another time given further training. Survey data is single stage. The survey was developed using SurveyMonkey, a cloud-based online survey tool. A link to the survey was forwarded to participants from their principals.

The purpose of the qualitative interviews and their relationship to the research questions is more complex than that of the survey questions. Each data source fills in a small piece of a much greater picture. I posed the same baseline questions to each participant but their responses guided my follow-up questions (see Appendix C for a list of interview questions.) For example, I asked every interviewee what their students who struggled behaviorally had in common but only one teacher's response about students not being challenged academically (on top of a few other comments) prompted me to ask if her school had provided training related to that concept.

The seven interviews lasted between 25 and 70 minutes each. Most took place in teachers' classrooms but one took place in a teacher's car and another in her home. As they talked about their interactions with students some teachers related details from their own lives. After several teachers disclosed their own history of ACEs, an interesting pattern started to emerge, which I will discuss in the next chapter. In this case, I found that I did not have sufficient data to adequately support the emergent theme. I followed up with each interviewee and asked two to three questions including if they were willing to disclose the number of ACEs they experienced. To minimize inconveniencing the interviewees, I limited follow up interviews to a few questions over the phone and took about five minutes. Data collected during interviews expanded the scope of my study by introducing themes as well as supporting my research question related to teacher perspectives on student behavior in cases where teachers talked about student behavior.

Interviews were recorded using the voice memo app on my iPhone and then partially transcribed using an app called Transcribe. I then completed the transcripts manually. I used pseudonyms for interviewees in my notes and did not present details of their interviews in a single narrative in the following chapter to ensure confidentiality.

Research Positionality

As I mentioned above, I have a personal interest in trauma. Like almost half of all Americans, I have ACEs in my background as do most of my friends and close acquaintances. I have observed both tragic outcomes and inspiring resilience in the children and the adults in my life. My experience in recent years seems to have had at least two effects. First, I recognize the signs of trauma more readily than I used to and

second, people who have had difficult experiences share them with me more readily than they used to. As an intervention teacher working with small groups, students have come to me frequently and told me about challenging experiences. As a result of hearing about them and noticing patterns between their experiences and academic and behavioral difficulties, I have come to believe that ACEs are the single biggest impediment to my students' success and happiness. Some teachers do not agree with me. I feel I must point out that those teachers have not conducted literature reviews on the subject. My review of the literature has strengthened my belief. At the same time, I recognize that this is an emotionally charged issue for me and that my emotions represent a bias. I rely on the structure of my research to minimize any potential effect of my biases. Awareness of my biases should enable me to increase the reliability of my findings. I hold the following beliefs:

1. Trauma is as or more prevalent than many other needs that are addressed in schools.
2. Trauma impacts learning and behavior which in turn affects the whole school system.
3. All schools should become trauma-informed systems and making that change could transform the face of the nation in 10 years.

It is also important to note that I am a white woman of a privileged background. So are many of the teachers who are my participants. The degree of privilege of the children they teach varies between and within sites. Research tells us that the rates of prevalence of many (but not all) ACEs are weighted toward individuals living closer to

poverty, and individuals of color regardless of their socioeconomic status. I have attempted to maintain awareness of all these factors for the duration of this study.

Data Analysis

I prepared for analysis by establishing an organizational structure to clearly separate and easily compare data from each site as it came in. The survey questions remained unchanged but survey data came in three waves as I presented at each school. Interviews followed. Data were analyzed using open coding as teachers at each site completed the survey and then again after all survey data was complete. I analyzed data from all three sites together as well as doing a side-by-side comparison with data from each site. As I have described above, the survey had a quantitative component comprised of eight multiple choice questions asking what the national rates of prevalence are for eight ACEs and eight multiple choice questions asking for teachers' estimates of those same eight ACEs among their students. The survey's qualitative portion comprised of three short answer questions related to teacher perception about student behavior. Teachers described behavior they commonly see, attributed reasons for the behaviors, and suggested training and supports that would help the students who exhibit the behaviors.

Analysis of the 16 multiple choice questions involved recording which answer the majority of teachers at that site chose and if the remaining teachers chose answers that reflected higher or lower rates of prevalence (side-by-side comparison). There were multiple choice questions asking how many years of experience each teacher had, how many students they had in their class and how many students in their class exhibited

challenging behaviors. I used the number of students in each class to convert the number of students they estimated have experienced various ACEs into a percentage so I could easily compare that number to the percentage of children who experience each ACE nationally. I was able to analyze data from each site independently by narrowing the results by the dates each site had access to the survey.

I hand-coded the qualitative survey data, first identifying interesting terms, phrases, and topics, and abbreviating them into codes (open coding). After this first round of inductive analysis, I transferred teacher responses in an online word processor so I could more easily and accurately determine which were the most frequent and how many times each key term was used by teachers in each site for each question (focused coding).

Interview data followed. After a preliminary round of hand-coding I used a process of theoretical memoing to generate more codes. I applied a similar process to the interview data that I applied to the short answer survey data—I used a word processor tool to check how often of various codes occurred, including the codes that emerged from the survey data. Once I established the primary concepts, I used concept mapping to organize it and further explore relationships between them.

Validity and reliability.

Validity. Threats to the validity of my quantitative research include 1) Any relevant training that occurs during the window of my research. 2) Insufficient response. I addressed both issues by offering incentives to staff to complete the survey and to do it within a small window of time.

I took specific additional measures to ensure validity. I carefully reviewed my transcripts to make sure they did not contain obvious errors that would compromise my data and analysis. I also used peer debriefing throughout the process to enhance validity. By incorporating mixed methods in my research (pulling data from two different sources: surveys and interviews) and identifying convergent themes, I was able to utilize triangulation to further increase validity.

Other threats to the validity of my qualitative research include my own bias and potential negative or discrepant information. As I mentioned above maintaining awareness of my biases throughout the process enhances the validity of my research. Threat due to discrepant information is possible if reports are released that reflect changes in the rates of prevalence of one or more ACEs between the time I begin my research and the time I analyze the data.

Reliability.

My study is exploratory and not designed to be repeated, therefore reliability presents a certain degree of challenge. However, my efforts to reflexively evaluate elements of my study and my positionality to it throughout the research process increase the reliability of the study. For example, I wrote extensively about my positionality before beginning my research and carefully monitored my expression during interviews to avoid leading interviewees responses with my facial reactions. Similarly, I was careful to avoid mentioning trauma when I presented my topic to teachers before they completed the survey so that their short answer responses were not affected.

Chapter 4: Findings

Note: While two of the teachers I interviewed were men, I will only use female pronouns when discussing their responses to ensure confidentiality.

Introduction

As I look back at the figures that contributed to the body of research that has brought trauma, ACEs and trauma-informed practices, I notice that each of them had a firm foundation in their field but was driven by experience, not pedagogy or the hegemony of the day. Early in his career, Bessel Van der Kolk was surrounded by superiors and one can assume contemporaries that were satisfied with the existing diagnosis-satisfied with the Freudian interpretations that denied patients' disclosures. He was not satisfied with the status quo because his experience informed his perception. Without his specialized education he would not, likely, have been able to perceive the themes emerging from his patients' stories. Sandra Bloom was satisfied with her successful practice and the accepted notion that patients commonly, feigned fugue states or delirium for attention until her experience proved to her that what she had been taught was wrong. When the scales fell from her eyes, she didn't reject psychiatry but incorporated what she learned into it and had a profound impact on her field as a result.

Like Bloom and Van der Kolk, the teachers who participated in this study demonstrated that they see the world through the dual lenses of what they have been taught and what they have experienced. This is not the only theme that emerged from the data but one of the most interesting.

Before I define and interpret the study's main themes and evidence, I must address some of the challenges that arose concerning the terms used here. As I alluded to in Chapter One and Chapter Two, the language used to discuss trauma and ACEs is problematic. Trauma has multiple complex definitions inside of psychology and is used several ways outside of psychology. People use the word to describe severe bodily harm, to describe an event that may have caused psychological harm, or to describe the harm caused by the event. ACEs is a very specific term that describes specific experiences and not the effects of those experiences. Any ACE can result in trauma but no ACE is certain to result in trauma. It is a very challenging term in this context because very few teachers involved in this study are familiar with the term "ACE." I avoided using it in the survey and rarely used it in the interviews except to ask if the participant knew what it meant. I used phrases like "very difficult experiences" instead. When participants used the word "trauma" in interviews, I did as well. However, if the participant discussed an experience that is an ACE, I will refer to it as an ACE in this chapter.

I identified evidence in support of the following themes: first, I found that teachers attribute student behavior to reasons that are in alignment with the professional development sponsored by their school or district. Second, I found that teachers' personal experiences impact on the degree to which they recognize ACEs in their classrooms and the factors to which they attribute student behavior. Third, teachers rely on three main avenues to identify students with ACEs. All of them rely heavily on relationships with parents and colleagues and none of them lead to teacher estimates of ACEs that approach the national rates of prevalence. Lastly, the majority of teachers who completed the survey incorrectly estimated the national rates of prevalence for all but two ACEs and their

estimates of the rates of prevalence among their students were lower than their estimates for the national averages in most cases. There were notable exceptions among the responses from teachers at Urban Public Elementary.

Teacher's Views in Alignment with School Sanctioned Professional Development

In their interviews, teachers at Affluent Public Elementary reported that recent training have emphasized the Zones of Regulation. As one teacher explained, “We have lots of social-emotional training in the Zones, you know, the Zones of Regulation.” The Zones of Regulation is a curriculum meant to increase students’ emotional awareness and their ability to regulate their emotions. It outlines four different zones each with a corresponding color and was originally utilized most often with children with autism spectrum disorder. Its current application is more mainstream and it is commonly used in elementary schools. Leah Kuypers, the educator who developed the program, is a former occupational therapist and autism resource specialist (Kuypers, 2018,). Two elements of the program frequently mentioned by teachers are students taking breaks to regulate their emotions and applications for students with disabilities. Teachers at this school have also received training in mindfulness practices. They used language from these training in both surveys and interviews.

Of the 15 respondents, 9 responses to the short answer question “What are the primary reasons why some students have behavioral issues?” included “regulation,” “brain wiring,” references to ADHD, and learning disabilities (see Table 3 on p.53). The next most common response related to issues related to home and parents (7 responses).

When asked, “What tools/training/resources do you think would be most helpful to support students who are struggling behaviorally?”, 7 respondents used keywords related to Zones of Regulation and mindfulness, 6 respondents suggested counseling, which was the next most common response. In contrast, 17 respondents at Urban Public Elementary produced zero references to Zones of Regulation. Teachers there included topics related to regulation or mindfulness only four times. Only one respondent mentioned ADHD and one teacher at Urban Private Elementary included mindfulness in her answer.

Table 3 Survey question number 2 “What are the primary reasons why some students have behavioral issues?”

	Affluent Public	Private Urban	Urban Public
Work not hard enough	1 (7%)	1 (13%)	3 (18%)
Work too easy/boring	0	1(13%)	4 (24%)
ADHD	3 (20%)	0	1 (6%)
Attention	3 (20%)	2 (25%)	1 (6%)
Attention seeking	1 (7%)	1(13%)	4 (24%)
Bullying	0	0	1 (6%)
Chemical imbalance, disability, Body Chemistry, Brain Wiring	4 (27%)	1(13%)	1 (6%)
Diet/not eating enough	1 (7%)	0	2 (12%)
Home	6(40%)	1(13%)	8 (47%)
Impulse Control	2 (13%)	1(13%)	0
Interest	1 (7%)	1(13%)	2 (12%)
Parent	2 (13%)	1(13%)	1 (6%)
Regulated, dysregulated regulation, self-regulation	3 (20%)	0	1 (6%)
R ₂ to teacher	2 (13%)	0	1 (6%)
sleep/staying up too late	0	0	2 (12%)
social/peer	2 (13%)	1(13%)	3 (18%)
Trauma	0	1(13%)	6 (35%)

The first teacher interviewed at Affluent Public Elementary made 4 references to students needing breaks, 7 references to their emotional regulation, and 3 to the Zones. She was enthusiastic about Kuypers’ program. “We’ve really done a lot of social-emotional professional development in the Zones and they are speaking to those kids. I got it and it

works.” At another point in the interview, she made a comment demonstrating that she had integrated the concepts into her teaching practice. “...These kids can't learn when they're in the yellow zone or red zone,” meaning, if a student was agitated or overly excited, she must first help them to regulate their emotions before they could attend to their academic work. Interestingly, this is also a key concept in trauma-informed teaching. When a student's fight or flight response is activated, as can happen more often in individuals who have a history of trauma, the parts of the brain that are responsible for reasoning (the neocortex) are made inaccessible in favor of the instinctive, autonomic functions of the brainstem (Sapolsky, 2018). They are often incapable of meeting behavioral expectations involving reason and good judgement until the primitive part of their brain is convinced that they are safe. The second teacher made only one reference to student breaks and did not refer to the other topics. The third teacher made only one reference to the Zones of Regulation. She teaches students that might be considered beyond the age range Zones of Regulation targets, though the program does not list an upper age limit (Kuypers, 2018).

None of the teachers interviewed at Urban Public Elementary used any of the language related to The Zones of Regulation or mindfulness used by the staff at Affluent Public Elementary. (I searched for the words “zone”, “regulation”, “break”, as in “a pause or rest from work”, “mindful”, and “mindfulness” in the interview transcripts. I asked the teachers that I interviewed from this school if they received any training in The Zones of Regulation and they have not. Teachers at Urban Public Elementary had their own buzz words they repeated throughout their interviews and surveys. Their principal has promoted an educational philosophy originated by Barbara Blackburn in several books

beginning with Rigor is Not a Four Letter Word (Blackburn, 2008). These teachers talked about “academic rigor”, especially in relation to student behavior. The term, as they used it, comes from Blackburn: “Rigor is creating an environment in which each student is expected to learn at high levels, and each is supported so he or she can learn at high levels, and each student demonstrates learning at high levels” (Blackburn, 2008). The first teacher interviewed referenced academic or instructional rigor three times. “This idea that really rigorous instruction could also help offset students in terms of their engagement in content in particular.” The second made 18 references to academic rigor or related words and the third referenced academic rigor three times. Teachers at Affluent Public Elementary made zero references to academic rigor or related terms. I was unfamiliar with Blackburn’s work prior to these interviews. These teachers were as enthusiastic about academic rigor as Affluent Public Elementary teachers were about the Zones of Regulation. By the second interview, I heard enough references to academic rigor to warrant asking if there had been recent training emphasizing it as a strategy to reduce problematic behavior in classrooms.

“Have you had training recently that pushed academic rigor?”

“Yes.”

“And have you seen results with students from it?”

“Yes. As I teach more rigorously...I have several children in here who are kindergarten readers, but they still will perform better [since implementing academic rigor].”

When I asked what her students who struggle with behavior had in common one teacher said, “I also think another link between (and this is always even in fancy schools): Boredom. Students who are performing well academically tend to act out the most because they're not challenged enough.” The idea that students who are bored academically will have problems with behavior is linked to rigor in the literature (Blackburn, 2008).

This concept appeared in survey responses at Urban Public Elementary as well as interviews. Of 17 respondents, 7 used terms that relate to academic rigor. When asked what they thought contributed to behaviors they see in the classroom one teacher wrote: “...school being too challenging or not engaging enough.” Another wrote, “work is too hard/easy.” When asked what might address behavioral issues one teacher wrote: “more engaging academics.”

Not one teacher from Affluent Public Elementary suggested academic rigor or more engaging academics as a reason or a solution to behavioral issues. None of the teachers at Urban Private Elementary who completed my survey wrote anything related to academic rigor, academic or instruction being not engaging or challenging enough in any of their responses. An insufficient number of teachers (eight) responded for the data to suggest what professional development is sponsored at that site. Only one respondent used a keyword related to the professional development topics at either of the other two schools. That teacher suggested training in mindfulness tools would help address behavior.

Teachers Personal Experiences Impact How They See ACEs in Schools.

Two sub-themes emerged in my interview with teachers. 1) Of the seven teachers I interviewed, five are parents themselves. Each of those five said that becoming parents shifted how they viewed their students' parents. They blamed parents less and were generally less critical of issues related to home than they were before they had children. 2) Teachers with personal experience with trauma or therapy had higher estimates of the number of students in their classrooms who have experienced ACEs or included at least some trauma-informed practices in their classrooms.

I will discuss my findings for each school site separately below. Table 4 (p. 58) shows the results in a side by side comparison. It is important to note that students at Urban Public Elementary are more likely to have a history of ACEs than students at Affluent Public Elementary due to socioeconomic and sociopolitical factors. The teachers at Urban Elementary seemed to be more aware of the role of trauma in their lives. There is no way to estimate precisely how much more likely Urban Elementary's students are to have a history of ACEs or trauma because, while their demographic is highly represented in the literature, generally, I was unable to find any data on ACEs and white, affluent populations in the U.S. Therefore, relative to their population, there was a perfect correlation between teacher ACEs and teacher estimates of student trauma. In this very small sample, teacher history of vicarious trauma did not seem to be a significant factor. Vicarious trauma is the documented phenomenon wherein an individual experiences trauma symptoms after regular or prolonged contact with another person or persons experiencing firsthand trauma. It is common among nurses, first responders, social

workers, war journalists, teachers and anyone who works with trauma survivors
(American Counseling Association, n.d.).

Table 4 Teacher ACEs and Teacher estimates of trauma-impacted students.

Affluent Public Elementary		Urban Public Elementary	
Teacher's # of ACEs	Estimate of trauma-impacted students	Teacher's # of ACEs	Estimate of trauma-impacted students
0 ACEs Some therapy Professional exposure to trauma	10%	0 ACEs No therapy No known vicarious trauma	50%
1-2 ACEs Limited Therapy No Vicarious Trauma	15-20%	1-2 ACEs Long term therapy Vicarious trauma	80%
2-4 ACEs Long term therapy No known vicarious trauma	30%	Severe Trauma Therapy Some vicarious trauma	90%

Another theme that emerged was teachers use of the word “trauma” and its relationship to their exposure to student trauma. Given factors regarding socioeconomic status and ethnicity, students at Urban Public Elementary are statistically more likely to have been exposed to trauma than students at Affluent Public Elementary or Private Urban Elementary. Teachers at Urban Public Elementary demonstrated an increased awareness of trauma by using the term significantly more times in both surveys and interviews (See Table 5 on p.59). Thirty-five percent of them cited trauma as a primary reason for behavioral issues (See Table 3 on p. 53).

Table 5 Number of Times the Word 'Trauma' Was Used at Each Site

Affluent Public Elementary	Urban Public Elementary	Private Urban Elementary
interviews		
7	30	3
6	25	
8	9	
Surveys		
1	9	1
22 total	73 total	4 total

Affluent Public Elementary.

I began my data collection at Affluent Public Elementary. The first teacher interviewed said something I found very interesting when I asked how she thought other teachers viewed student behavior. I'll paraphrase to ensure her anonymity. She said that it bothers her when she hears some teachers make judgmental comments about students' parents. "You know- 'the apple doesn't fall far from the tree'- 'the parents are a mess'- 'the kids are going to be a mess.'" She said that while she did not believe that her own children's teachers thought those things of her, it became a sensitive issue for her when her children exhibited less than desirable behavior.

I asked another teacher what if anything had shifted in the way she viewed students' challenging experiences:

I think I had that 'young teacher syndrome' where it's all the parents' fault and everything is kind of black and white and how could this not be the most important thing to you and your family...So I think that really has shifted just like, [knowing] how complicated family is and little kids' lives and then also coupled with that, that all the school stuff isn't really the most important thing.

Her response does not explicitly answer the question but it does suggest that having her own children made her look less critically at a child's home because they identify with parents more. I asked the next teacher I interviewed if she thought that having children makes teachers look less critically at home. "Oh my gosh, yes!" she responded. She said that a parent/teacher's hesitation to look critically at home could lead to a glossing over of issues they don't want to see. "We need to look closely." She immediately brought up times when she felt "lazy" as a parent and expressed feelings of guilt linking the two ideas explicitly in the following comment: "I don't know I feel like *everything* traces back to home. That's just my very pragmatic thought. And now that I have my own kids, I'm like 'Ahhh.'" She alluded to some challenges she had faced with her children and how things can fall between the cracks in the chaos of a busy home with two working parents and active children.

The teacher at this school with the highest exposure to vicarious trauma, which she was exposed to teaching in a different setting, utilized more trauma-informed practices in her classroom including a journal system so that students could communicate things to her that they did not want to say out loud and get responses from her without feeling exposed. She also established protocols for identifying students with ACEs each year that went far above and beyond the standard practices at any of the three schools. At the beginning of each year, she reviews her class list with a counselor to identify students that might need extra support and then follows up with the previous year's teacher to get their perception. She also held routine lunches for students, where they discuss media messaging, body image, and friendship issues. She recognized that Affluent Public Elementary served a community with lower rates of ACEs but also noted that while the

“trauma was so in your face” in the community she previously taught in, that did not mean that it did not exist in the one she currently serves. “What we have in [this affluent town] is very quiet. People like to sweep things under the rug and put on a good face and nothing's wrong, you know? And that's so dangerous because it just trickles up later in life.”

Surprisingly, when asked how many of her students may have a history of trauma, she answered two and both cases were confirmed leaving no suspected unconfirmed cases. Only when asked again (admittedly with incredulity) emphasizing “suspected” did she take another moment and mention one more student. She self-reported an ACE score of zero and had no exposure to therapy. (A person’s ACE score is the total number of ACEs they have experienced, usually out of 10 possible ACEs.) She does have professional exposure to vicarious trauma, which we had already discussed at length.

Another teacher self-reported one ACE, her parents’ divorce as a child and some exposure to therapy, mostly limited to childhood. She said that four of her students saw the counselor and “that sounds about right”, meaning the only children she suspected were the ones who saw the counselor. She had one student in her class that she suspected may have “something” in her history. “I don't actually know what happens at home but I'm just super happy not to be there. I wish she wasn't there either.” She clarified that she did not suspect a “child safety” issue but did not seek to find out more.

She told me another story that demonstrates the power of sharing personal experience. A student was experiencing something very challenging in her home life that closely resembled the experience of a close relative of the teacher. In a quiet moment, she

decided to reveal something about her experience. The teacher was able to share in a very appropriate and matter-of-fact way that a close family member experienced something very similar. When I asked how the student responded the teacher said, “She was really surprised, actually. I think she just kind of liked hearing that. You know? Kind of happy.” That kind of connection lets a child know that they are not alone in their experience. It provides them with an opportunity to be seen by someone as important as a teacher and not be judged. All of the children she identified as having issues were the ones already identified, either by having been selected to receive counseling services or qualifying to receive special education services. She seemed satisfied with that (“That sounds about right.”) until this somewhat contradictory statement: “I still don't pretend to know that there aren't kids in here who have suffered or suffering and I'm just...you know... they know enough to kind of figure it out for the school day.” She did not have measures in place to explicitly support those students but did have a sense of what must exist beyond her awareness.

I think that in terms of training and knowledge from outside, from not your own life, I think that we [teachers] are all kind of lacking. I also think that by and large they're [teachers] all big-hearted and hopefully know that there's a lot that we don't know and then also I'm sure, although I don't know for sure, but I'm sure that there are people living with trauma, teachers living with trauma, who have a much better sense of how that might look and how that might feel for their students. They're probably people that I just don't even appreciate for that, that are probably doing just by their nature wonderful things for their kids.

Another teacher reported having a loud boisterous classroom. She also has personal experience with a child with sensory issues. She used her classroom funds to provide assistive technology that all students have access to when they need them. The only other universal or trauma-informed measure she had in place was related to the Zones of Regulation training she had received. Like all teachers, her knowledge is limited to her own experience and what she has been trained in. Struggles with a particularly challenging student have led her to pursue more training in crisis prevention which her school and district have the funds to provide. When asked how many students in her classroom she suspected may have had hard or potentially traumatizing experiences she said she had one student who had confirmed issues but that there were six more she often wondered about. She has an ACE score of three to four and many years of therapy. She emphasized the value of therapy in both her and her children's lives. A person's ACE score is the number of adverse childhood experiences they have in their history out of 10 possible experiences.

At Affluent Public Elementary, the teachers with the highest ACE scores had the highest estimates of children with ACEs in their classrooms. The teachers with the most professional experience with trauma had the most trauma-informed classrooms.

Urban Public Elementary. The trends I noticed at affluent Public Elementary continued at Urban Public Elementary with one notable difference. All the estimates of student trauma or ACEs were significantly higher. One intervention teacher (not a regular classroom teacher) estimated the percentage of students in the entire school who have experienced trauma or elevated ACEs at 80%. Like most of the teachers I interviewed, she is a mother. When asked if she thought becoming a parent impacted how she viewed

families she responded: “Slightly. I have more empathy towards capacity on the parents’ part. I don’t think everything starts at home.” Unlike Affluent Public Elementary many of the students at this school have experienced food and housing insecurity and community violence. This teacher had 1-2 ACEs in her history and some experience with therapy but the vicarious trauma she experienced serving her school community has had an impact as well. She cited “lack of control [to change students’ conditions] and “inability to mitigate the issues affecting them” as challenges. She said that “learning to work within my sphere of influence” has taken time. She is a 12-year veteran teacher and has served this community at two different schools during that time. When asked what she enjoyed about her work she had this to say:

I love our students and our families... it's really interesting to see them grow up over the years and get to know the families and their stories and I really love the sense of community that we have at our school both within our staff culture, but also especially in the greater community with our families and then the combination of our staff working with our families and getting to know them really well and living in [this city] over the last 12 years.

Those relationships have been critical in identifying students with ACEs or potential trauma which I will discuss below. She used the words “trauma” or derivations of it more than 30 times in her interview. When asked what her students with behavioral challenges had in common her immediate response was, “I definitely think there's probably some kind of trauma. And instability.”

Another teacher at this site did not disclose the number of ACEs in her background but did share that she had at least one major traumatic experience in her childhood. I will

not describe it here to protect her anonymity except to say that it was extreme and shared by her community. She did disclose that she has had therapy. She estimated that 90% of her students have experienced trauma. “I guess there's two or three who maybe have *not* experienced trauma.... I have more students who have experienced trauma here than in any other community I've worked in.” She used Restorative Justice practices in her classroom, as well as an interactive journal (a GLAD strategy that is trauma-informed, as well as being beneficial to English Language Learners) and has homework club four mornings a week all of which provide students with the opportunity to be seen, heard, and receive support.

The third teacher interviewed at Urban Public Elementary estimated that 50% of her class may be impacted by trauma. “I think a high percentage. 50%. Yeah, different types of trauma within their family or their story about coming here to this country or violence or family and incarcerated family or homelessness [sic].” While 50% of general education students is a high estimate, much higher than any teacher interviewed at Affluent Public Elementary, it is still significantly lower than the other two teachers interviewed at her school. This teacher also reported that she had no adverse experiences in her own childhood and no history of therapy. Interestingly, the teacher with the lowest estimate of trauma-impacted students at Urban Public Elementary was also the least enthusiastic of any teacher interviewed about receiving trauma-informed training. She said he was interested but with a caveat: “I think it's very interesting. The thing is there's so many things offered after school it's very hard to prioritize...with our limited time....”

While the estimates of ACEs or students who may be impacted by trauma are much higher at Urban Public Elementary than Affluent Public Elementary, the number of CFS

(Children and Family Services, often referred to by the agency's former name CPS, Child Protective Services) made by the teachers interviewed was comparable (see table 6).

Table 6 Number of CFS/CPS reports made in years teaching

Urban Public Elementary	Affluent Public Elementary
0 in 2 years of teaching in the US	3 in 11
3-4 in 12 years	2 in 15 years
3-4 in 24 years	1-3 in 23 years

The Means by Which Teachers Become Aware of Student ACEs.

There are three ways the teachers I interviewed found out about student ACEs. The most common was through colleagues, mostly other teachers and counselors, or administrators. The second was directly from the parent. The third was via student writing. None of the schools had open, transparent protocols that teachers were aware of but several mentioned that they would often receive a visit from the administrator or counselor at the beginning of the year. (Urban Public Elementary did have an internal document that contains relevant or sensitive information not found in the CUM or cumulative record file but only one of the teachers at that school mentioned it.) I feel I must point out that I do not believe any of these schools are negligent because they do not have systems in place to make sure every teacher is aware of all their students' histories. As the conversation around ACEs moves into the mainstream and hopefully, as trauma-informed practices in schools become less of an exception and more of a rule, issues of confidentiality will have to be addressed. As one teacher said, "I think there's a certain

level of privacy that obviously needs to be maintained.” However, that is not the focus of this study and so that is all I will say about it.

Some of the teachers I interviewed at both schools seemed to be comfortable in a passive role in identifying children who may have turbulent backgrounds in their classes. “Usually somebody like a previous teacher or the administration or one of the support staff will let me know,” one teacher said. When I asked her what types of experiences she would expect to be notified of, she said, “Oh you know, death of a parent, something like that.” There was a wide range of viewpoints among teachers of their scope on this issue. Another teacher said, “Usually in the beginning of the year, I go and meet with a counselor which isn't standard practice” She said she also followed up with the previous grade's teachers each fall as well. I asked her how many other teachers at the school did that. “I don't think everyone. Probably a handful.”

Relationships with colleagues were vital to obtaining more than the most basic information. One teacher had a close friendship with her school's counselor and she believed it had an impact on what she found out—not because the counselor disclosed more to her on the basis of their relationship but due to the quantity of time they spent together. Teachers who had closer relationships with other teachers or counselors had more access to information, often for the reason the teachers stated above. If a second grade teacher and a fifth grade teacher enjoy a close personal or professional relationship, their conversation may move to a student they share. Teachers brainstorm together about challenging students. Too often, the issues they had in second grade have not gone away by fifth.

Like most schools, both Affluent Public Elementary and Urban Public Elementary have protocols in place to identify students who are having academic or behavioral issues. They routinely hold SSTs (Student Study Team Meetings) to discuss progress with parents, teachers, the principal, and other relevant team members. One teacher's experience has been that most of the ACEs she has become aware of were disclosed in SST meetings over the years. "It varies from family to family in terms of how much they volunteer but usually parents are pretty transparent about what [has happened]," she said. This made her relationships with colleagues vital as well because, as a teacher of older students, she often relied on them to pass elucidating information along:

I think the relationship building as a fifth grade teacher is really important. Most of our students have been here since kindergarten. There's usually a few that show up later, like third or fourth but not fifth. I think the relationship building and knowing the families really makes a difference in just knowing the stories that come up [over time].

When teachers learn about a student's history from a colleague, the information is always second hand. This means that in most cases, the relationships between families and teachers or other key team members like a principal or counselor can be the biggest determining factor in learning about students' experiences. One teacher shared this difference between the community around her current school, which serves a mostly white, mostly affluent population and a community she served in the past, which was predominantly an economically disadvantaged, community of color (Note: I want to

emphasize the difference between these two terms. I have, on occasion heard educators use “students of color” or “community of color” as a euphemism for disadvantaged.):

Well, when I was in [urban setting] the trauma was so “in your face.” These kids were *not* hiding it. Or even if they were hiding it, you do a little sleuthing and it's like, oh my god, of course...Your dad's in a gang and you got broken into last night and.... whatever. So many levels of that. It was very apparent. And I think what we have now in [this affluent community] is very quiet. People like to sweep things under the rug and put on a good face and nothing's wrong, you know, and that's so dangerous because it trickles up later in life.

If her assessment is correct, local culture impacts what families are willing to reveal about their children's histories. Though teachers at Affluent Public Elementary mentioned cases where families disclosed ACEs, none of them mentioned parents as consistent sources of that information. They all named the principal and counselor as the person who most often discloses sensitive information about students. One of the teachers at Urban Public Elementary had a very different experience. She made this statement about a trend she noticed among her students who struggle with behavior.

“They seem to have absent or destructive fathers.”

“How do you find out about that?”

“Communication with families. I'm just thinking [about] the kids in this room. All of them who have problems, behavioral problems have missing or harmful fathers.”

Interestingly, this teacher had not noticed the correlation until she said it during the interview after my prompt. She interrupted the next question I asked. “I never thought

about that and now it's really bugging me!” and rattled off a half a dozen more cases in her class. Not all of her knowledge came from the families. “...The other one, I don't really know about the father, but I can't get any information about the father, the mother won't tell me.” She knew the father was absent from the home from something the student had told her.

More than 80% of students at Urban Public Elementary are English language learners and the majority of families are Spanish speaking (California Department of Education, 2018). At least two of the teachers I interviewed there do not speak fluent Spanish. One used a colleague as a translator for predominantly one way communication via text and the other relies heavily on Google Translate. Despite the language barrier, she communicates with families regularly:

This is my third conference with the family. I text families every week at least twice a week. I talk to them on the phone even with my horrible Spanish. I pull up Google Translate so that I have exactly what I'm going to say in front of me and I have a Spanish-speaking person next to me to guide me as I speak to them.

That kind of regular communication requires a willingness from both the teacher and the parents. Not every parent wants to hear from teachers that regularly or wants to share intimate details of their life. As another teacher told me and I have often seen at my own school site, some parents only wish to disclose sensitive information once and to an administrator. The teacher recalled a story of a parent who went to the principal to disclose that her child was being exposed to domestic violence and to seek help with the ongoing crisis. In that case the police were called and the parent received the support she needed.

All the teachers interviewed cited student disclosures least often, if at all. There are several possible reasons for this. Perhaps students don't tell their teachers about their adverse experiences because they normalize their own experience and assume lots of people have experiences like theirs. Perhaps they assume they are the only person who has these experiences and are ashamed of their perceived difference. Perhaps the fast pace of most classrooms and overworked teachers don't leave room for children to speak up. Perhaps it differs from child to child. I asked teachers to name the behaviors they see in students that make them wonder if a child is ok at home and they gave many interesting answers. "Friendship is always an issue- friendship issues." "The management of their homework and seeing if they're getting support." "Sexually provocative behavior." "Not able to lift their shoulders and head...Like literally sitting like this in class [slumped over on the desk]" One teacher made this powerful observation: "There's this grumpiness about them.... It's like Pig Pen but it's not dirt, it's sadness. That just kind of pervades their being."

Despite naming all those behaviors that can make a teacher wonder, all the teachers shared cases that they did not see coming. "I have a student this year and her guardian is very forthcoming with the trauma that she's experienced which has been a bit shocking...I would never know." Children can be skilled at hiding. Of the teachers I interviewed, the ones who shared stories about students making disclosures had systems in place for students to have quiet time with them and be heard. One teacher was already familiar with her student's situation when she made her disclosure:

She was testing markers or something or we were cleaning out the cage and she told me...She was like "you know what? Can I tell you something?" I was like "yeah"

she was like “My mom has problems.” And I was like “Oh yeah? You know a lot of adults have problems. Kids have problems, too.”

The student went on to offer some of the details of her life and the teacher was able to share appropriately and hold space for her. She had special jobs for students to do, often during recess when the bulk of the class is outside. That student was able to share and connect with her teacher. Other students simply get the one-on-one attention they crave. Having routines in place increases the possibility students can connect with their teacher. Two of the teachers I interviewed from different schools also had systems in place to communicate with students, not one-on-one but without the entire class present. One offered homework club to students in the mornings and both made themselves available during some lunch periods. One had a biweekly structured lunch for girls during which, they discussed predetermined topics like body image and friendship issues.

Older students who are proficient in writing have another way to connect. Sometimes it is not clear if the communication is intentional. One teacher said, “Characters they are developing [in their stories]...Sometimes kids can express things without saying it.” Another said students make disclosures every year during a poetry unit. Two teachers shared their experience with students using journal writing to share their experience:

A lot of it is also communication *with* the kids...Just knowing my kids. Their interactive journals and what they write...One of the boys I've mentioned— I know about his father's alcoholism through his writing.

Another teacher told me about how she uses writing to support a student in her class who has had some extreme experiences:

She's holding it together. I have a journal with her. Kids that don't want to talk about things—I do a silent journal where if you need help, you write it in the journal, you put on my desk and I'll write you back. And we never have to talk about it. But I'm still trying to get to you.

Both of those teachers seemed to have exceptional relationships with their students. The student who writes in the journal demonstrates tremendous trust in her teacher as well as her classmates. It takes time and effort to build a classroom culture that respects privacy and values empathy

Survey Results

Comparison: teacher estimates of national rates of prevalence and teacher estimates of ACEs in their own classroom. Teachers at all three schools were asked to guess the national rates of prevalence for eight ACEs and estimate the number of children in their own classrooms affected by each ACE. Based on the percentage of students that receive free or reduced cost lunch (see table 1 on p. 41) and research linking increased rates of prevalence of some ACEs with poverty, I would expect teachers at Urban Public Elementary to estimate some ACEs, such as Repeated Food and Housing Insecurity, higher among their students than teachers at Affluent Public Elementary and Private Urban Elementary (see Table 7 on p. 74). Overall, I was surprised at how accurate many of the teachers were on some of the ACEs. A majority were correct that repeated

food and housing insecurity impacts 25% of children in the U.S. A majority of teachers at Affluent Public Elementary and Private Urban Elementary were correct that 8% of children in the U.S. have a parent or guardian who has been incarcerated . The majority of teachers at Urban Public Elementary guessed higher.

All participants at both Affluent Public Elementary and Private Urban Elementary guessed that the national rate of prevalence for sexual abuse was lower than it is but many teachers Urban Public Elementary answered accurately that 20% of girls and 5% of boys experience sexual abuse. Teachers at all three schools estimated their students to be impacted at rates significantly lower than that (see Table 8 on p. 75). Fifty-three percent at Affluent Public Elementary, 62% at Private Urban Elementary and 44% at Urban Public Elementary all state that that they suspected zero of their students have been victims of sexual abuse. As horrific as it is to consider, it is unlikely that they are correct.

Table 7 Teacher estimates of national rates of prevalence for 8 ACEs.

ACE	National Rate of Prevalence	Affluent Public Elementary	Private Urban Elementary	Urban Public Elementary
Repeated food and housing insecurity	25% of children in the U.S.	67% correct	87% correct	65% correct
Parental divorce or separation	23% of children in the U.S.	33% correct	38% correct	17% correct
Drug or alcohol abuse in the home	9% of children in the U.S.	40% correct The rest guessed higher	25% correct The rest guessed higher	12% correct The rest guessed higher
Lived with someone with severe mental health issues suicidal or severe depression	8% of children in the U.S.	40% correct	25% correct	41% correct
Seen or heard a parent slapped, hit, punched, or kicked in the home	6% of children in the U.S.	40% correct The rest guessed higher	50% correct The rest guessed higher	24% correct The rest guessed higher
Sexual abuse	20% of Girls 5% of boys, in the U.S.	27% correct The rest guessed lower	13% correct The rest guessed lower	53% correct The rest guessed lower
Parent or guardian incarcerated	8% of children in the U.S.	67% correct	75% correct	35% correct (majority guessed higher)
Witness violence in neighborhood	4% of children in the U.S.	0 correct All teachers guessed higher	0 correct All teachers guessed higher	0 correct All teachers guessed higher

Table 8 Teacher estimates of national rates of prevalence for 8 ACEs.

ACE	National Rate of Prevalence	Affluent Public Elementary	Private Urban Elementary	Urban Public Elementary
Repeated food and housing insecurity	25% of children in the U.S.	5% 1-2 children (67% majority estimated)	5% 1-2 children (67% majority estimated)	More than 30% more than 7 children (31% majority estimated)
Parental divorce or separation	23% of children in the U.S.	15% 3-5 children (67% majority estimated)	15% 3-5 children (67% majority estimated)	15% 3-5 children or around (44% estimated)
Drug or alcohol abuse in the home	9% of children in the U.S.	5% 1-2 children (67% majority estimated)	5% 1-2 children (67% majority estimated)	15%-30+% 3-5 children higher (63% estimated)
Lived with someone with severe mental health issues suicidal or severe depression	8% of children in the U.S.	15% 3-5 children (87% majority estimated)	15% 3-5 children (87% majority estimated)	38% estimated 1-2 or 5%
Seen or heard a parent slapped, hit, punched, or kicked in the home	6% of children in the U.S.	5% 1-2 children (53% majority estimated) (26% estimated 3-5 or 15%)	5% 1-2 children (53% majority estimated) (26% estimated 3-5 or 15%)	15% 3-5 children (44% majority estimated) (38% estimated higher)
Sexual abuse	20% Of Girls 5% of boys, in the U.S.	0 children (53% estimated)	0 children (53% estimated)	0 children/5% (44%/44% estimated)
Parent or guardian incarcerated	8% of children in the U.S.	0 children (60% estimated)	0 children (60% estimated)	32% estimated 1-2 or 5% 32% estimated 3-5 or 15%
Witness violence in neighborhood	4% of children in the U.S.	5% 1-2 children (67% majority estimated)	5% 1-2 children (67% majority estimated)	62% estimated more than 7 higher than 30%

Conclusion

Teachers have a well-earned reputation for being caring and generous people. Every teacher I interviewed demonstrated compassion for their students and a passionate

desire to support them. I observed various degrees of trauma-informed practices in their classrooms and various depths of awareness about the role ACEs play in the schools. I saw evidence that they had internalized the training provided by their schools and districts. However, I saw no evidence that their sensitivities to child trauma and ACEs were attributed to school-wide professional development. The degree to which they were sensitive to the challenges their students face outside of the classroom correlated with their own personal experience. Some practices appeared very intentional like the girls' lunch discussions and some seemed more innate like the special jobs for students to do during recess. The teachers with fewest ACEs in their own histories had the lowest estimates of ACEs in their classrooms and those with the most significant traumas in their childhoods had the highest estimates at both schools. Those with exposure to trauma, personal or vicarious, went beyond the routines set by the schools to get the information they felt they needed to support their students.

Regardless of how teachers find out about their students' ACEs, or whether or not they suspect them, it is virtually assured that some students remain unidentified. We have statistics about the prevalence of ACEs all over this country and how trauma-informed practices benefit individuals across settings. If teachers integrate effective training sponsored by schools as my study suggests, and the extensive data showing the prevalence of ACEs is correct, then we have every reason to believe that teachers properly trained in trauma-informed practices would be able to support students who are impacted by ACEs, without even needing to identify them.

My research questions guided me through this investigation and to its findings but did not limit it. Those questions were addressed. Do teachers have accurate assessments

of the national rates of prevalence of different ACEs? Few teachers did; though they guessed higher than the national percentage on several ACEs. How do those estimates compare to their estimates of ACEs in their own classrooms? They varied quite a lot but were largely split by the socioeconomic status of the communities they serve. The teachers serving affluent communities estimated most ACEs were rarer or absent among their students. Teachers whose students fell on the other side of the wealth spectrum gave estimates that were above, below and at the national averages. What connection, if any, do teachers perceive between ACEs and student behavior? Most of the teachers at all three schools did not know what ACEs are and so did not make any explicit connection between them and student behavior. However, some teachers attributed student behavior to trauma and several attributed to unspecified issues at home, indicating that at least some teachers perceive a relationship between behavior and challenging experiences outside school.

The findings that were guided by the research process proved to be more exciting and raise further questions of their own than the ones that related directly to the research questions. Some of the data supports the idea teachers may tend to internalize ongoing training endorsed by their principals. They also suggest that teachers' personal history with ACEs significantly impact how they perceive student ACEs. All but one of the teachers interviewed who were also a parent, stated that becoming a parent made them less critical of their students' parent and guardians. Not all ACEs occur at home or relate to parenting but this does raise questions about the relationship between being a parent/teacher and teachers' perception of student ACEs. As I stated at the beginning of

the chapter, teachers' personal experiences and their teacher training both play key roles in how they perceive their students and their position.

Chapter 5: Discussion

Summary of Findings

Teachers at two of my schools integrated the professional development that their principal endorsed into their teaching. Teachers at the third school may have done this as well but I had insufficient data to determine if they did. I found evidence that my participants' personal experiences impacted how they estimated ACEs among their students. Positively confirming ACEs in students' histories depended upon teachers' relationships with colleagues, parents, and students. I did not see evidence that positively confirming ACEs among students related to teachers suspecting more students of having these experiences. I also found that teachers were largely unable to correctly identify national rates of prevalence for most ACEs.

The Study's Relationship to the Existing Literature

There are only a few studies that address teacher perceptions and behavior. I found no studies that explore those topics in relationship to ACEs. I will address the two that I found that relate to teacher perceptions and student behavior. The first is Greenlee & Ogletree's 1993 survey of 41 Chicago public school teachers, titled *Teachers' attitudes toward student discipline problems and classroom management strategies*. The teachers named violence in the media as the leading cause of the problems they identified in the questionnaire. The authors discuss the media throughout, in terms that are reminiscent of the social-political discourse of that time, often associated with Tipper Gore, elicit lyric

labels, and censorship.⁹ Neither Gore nor the PMRC was mentioned in the article but I wondered if the national discussion of the time influenced the teachers to attribute the real problems they were seeing in their schools and communities to media. When I noticed how many teachers at Affluent Public Elementary included Zones of Regulation in their responses, I asked if they had received training on it. My personal view is that the debate around violence in the media is and has always been a dangerous distraction from more significant and relevant issues and that The Zones of Regulation program is a valuable resource to support children. I am not comparing the two except to note that when people hear something repeatedly, they are much more likely to accept it as truth and incorporate it into their belief schemas. When I began interviewing teachers at Urban Public Elementary, I saw the phenomenon again with teachers' belief in academic rigor and their ongoing training emphasizing it. Therefore, I have come to the conclusion that if training in trauma-informed practices were given on an ongoing basis and emphasized by administrators, we would soon see the concepts reflected in teachers' beliefs and in their teaching practices.

Much more recently Gamache & Cromer (2010) found that most of the teachers in their study believed that abuse and neglect have an impact on children's behavior. They categorized ways that they saw abuse affecting children and some of the same themes come up in their responses as my teacher participants such as, academic difficulties, ADHD, internalizing behaviors. A key difference between that study and mine is that the

⁹ The Parents Music Resources Center (PMRC) was a committee formed in 1985 by Tipper Gore, wife of then-senator Al Gore, Susan Baker, wife of Treasury Secretary James Baker; Pam Howar, wife of Washington realtor Raymond Howar; and Sally Nevius, wife of former Washington City Council Chairman John Nevius. Its stated primary concern was increasing parental control of children's access to music with adult themes. Critics believed its goal was censorship, particularly of a list of specific artists (Schonfeld, 2015).

students Gamache & Cromer's teachers were speaking to were already identified as having experienced abuse and neglect while only a small fraction of the students my teachers wrote and spoke about have been identified as having been exposed to ACEs. A similarity is that all of the teachers I spoke with believe that abuse and neglect have an impact on children's behavior. My survey asks teachers to start with behaviors and then produce their own hypothesized reasons for the behavior rather than starting with abuse and then looking for behaviors. I think most people, not only teachers, would agree that abuse and neglect can affect children's behavior.

There is a notable lack of data in the existing literature to which I can compare my findings with regard to teachers' beliefs. There were no studies that I was able to find that examine the ways teachers' personal experiences may influence their perception of student trauma or ACEs and no studies that examine how teachers might identify which students have experiences ACEs.

I did notice several ways that my data is consistent with the existing literature on ACEs. Fifty-seven percent of the teachers I interviewed have experienced at least 1 ACE. This correlates perfectly with the ACEs Study. Twenty-nine percent of my teachers experienced more than 2 ACEs. Approximately 23% of individuals in the original ACEs study experienced more than 2 ACEs. Many teachers estimated that 15% or more of their students had experienced several of the ACEs included in the survey (Felitti et al, 1998). I believe it is reasonable to assume that at least some of their estimates are lower than the actual rates of prevalence in their classrooms (especially given how many teachers reported that they suspect that zero children in their classrooms have experienced sexual abuse). If one assumes that they are correct, even 15% of elementary school students

impacted by ACEs would still warrant the implementation of measures that address those issues i.e. trauma-informed practices. According to the National Center for Educational Statistics 13% of U.S. children and youth ages 3-21 receive special education services (2018). Each has been assessed, or otherwise identified, and found to have a qualifying condition that impacts their ability to access the education they are entitled to by law. The ACEs research that has followed the ACEs Study strongly indicates that ACEs impact children's ability to access an education (Blitz, Anderson, & Saastamoinen, 2016; Blodgett & Lanigan; 2018; Dong, Anda, Felitti, Williamson, Dube, Brown & Giles, 2005; Fuller-Thomson, Mehta, & Valeo, 2014; Iachini, Petiwala & DeHart, 2016; Jimenez, Wade, Schwartz-Soicher, Lin, & Reichman, 2017; McKelvey, Edge, Mesman, Whiteside-Mansell & Bradley, 2018).

Among all ACEs, sexual abuse stands out in several ways. First of all, it is uniquely unpalatable and arguably the most difficult to think and talk about. Writing about it induces nausea in me. That discomfort and impulse to look away are not unique to me. I believe it plays an important role in the lack of comprehensive data on the subject and the trend in my data of the majority of teachers suspecting that none of their students experienced it despite the fact that 1 in 5 girls and 1 in 20 boys is the current rate of prevalence nationally (National Center for Victims of Crime, 2011). The younger a child is the less likely they are to report sexual abuse. The more imposed behavioral consequences a child experiences i.e. getting in trouble at home and school, the less likely they are to disclose sexual abuse (Leach, Powell, Sharman, & Anglim, 2017). Another detail that sets it apart from other forms of abuse is that factors related to parental stress are unlikely to affect it. A stressed out, under-resourced parent or caretaker who would

not otherwise abuse a child, may lose control and strike or lash out abusively at a child but not sexually abuse them (Fuller-Thompson & Lewis, 2015). Lastly, there is evidence that suggests that child sexual abuse is not impacted by socioeconomic factors to the degree that other ACEs are.

Rates of prevalence for ACEs among the very privileged is not well studied. Data pertaining to childhood sexual abuse, in particular, is almost impossible to find for this demographic in the U.S. I was able to find a few international studies. One study in Sub-Saharan Africa found “no association between CSA [child sexual abuse] and education, wealth and area of settlement” (Yahaya, Soares, De Leon & Macassa, 2012). Another study from 1996, in New Zealand, indicates that children from lower socioeconomic backgrounds were only slightly more likely to experience childhood sexual abuse than their more affluent peers. The researchers attributed the discrepancy to the reduced ability for working single parents to reinforce the child protective program at the heart of the study. The fact that 30% of perpetrators are family members and another 60% are nonrelative persons known to the family reduces the impact of programs designed to prevent sexual abuse from strangers or persons outside the family circle (Whealin, 2009).

The children at two of the three schools at which I conducted my research may be among the most privileged in the world. The San Francisco Bay Area is home to more billionaires than any other city in the world, after New York and Hong Kong (Imberg & Shaban, 2019). A public school in a famously wealthy county and a private school in an even wealthier one, are unlikely to have many students enrolled who have experienced repeated food and housing insecurity. The few who have experienced it may feel social pressure to hide their experiences if they can.

In a nation marked by the greatest income inequality in the developed world the Bay Area takes third place again after Bridgeport, CT and New York, NY as having the highest income inequality in the U.S. (Berube, 2018). Students at public school that provides 95% free and reduced lunch and has 85% English language learners are many times more likely to have experienced repeated or even ongoing food and housing insecurity than students at schools that have lower percentages on those statistics, in most (but not all) cases. They are more likely to witness neighborhood violence. They are more likely to have a parent or guardian who has been incarcerated. They are more likely to experience virtually every ACE. The literature focuses on the relationship between ACEs and race and income. There are good reasons for that; the numbers are stark and highlight the racial and income disparities that follow the systemic racism and classism that are so foundational in our country. But is it possible that communities with less economic voice are selected for studies in part because they have less ability to refuse participation? Individuals from upper-class demographics are underrepresented in studies related to ACEs but overrepresented in studies I read related to “Mindfulness,” “Responsive Classroom” or other resources the wealth of their communities affords their children. I believe that may contribute to the notion that their children are immune or at least that those experiences are rare. The quotation from the interviewed teacher comes to mind yet again: “What we have [in this community] is very quiet. People like to sweep things under the rug and put on a good face and nothing's wrong.” When the discussion is consistently about how much more likely women living in poverty are to experience domestic violence, it becomes easy to imagine that domestic violence is something only the poor experience. Marin County, for instance, may have a low crime rate overall and relatively low poverty but according to a Marin Independent Journal article from 2009,

domestic violence is its most prevalent violent crime (Upshaw). As of 2019, it remains the most prosecuted violent crime in the county (Halstead, 2019). RxSafe Marin reports that one in four Marin adults engages in drug and alcohol misuse and that prescription drug abuse is rising among youth under 18. Drug overdose in Marin is deadlier than breast cancer or car crashes (RxSafe Marin, n.d., para 2). The false notion that the wealthy (and often white) are immune to the uglier aspects of the human condition may serve to prop up racism and classism among those who most benefit from systemic exploitation of the poor and communities of color. When asked what several students with significant behavioral issues had in common, one teacher interviewed thought for a moment and said in a low voice, “They were all children...of color...” When I asked if there were any other similarities, she revealed that they also all lived with someone other than their parents. That commonality is obviously far more relevant to behavior than skin color. This teacher went through the process in front of me of recognizing her own bias. I would argue that she was brave, both to risk exposing her bias and to then to recognize it. The few studies that have been conducted that include individuals further up the socioeconomic ladder support the idea that ACEs occur across socioeconomic demographics (Halfon, Larson, Son, Lu, & Bethell, 2017)

Across the Bay Area, districts are starting to provide training related to ACEs and resilience. The director of the Office of Community Engagement of one of the largest school districts in the region told me that every single one of their schools serving minority-majority, low socioeconomic communities had provided some degree of trauma-informed training to its teachers but not a single school serving predominantly affluent white communities in the district had received any such training. I believe this

speaks to the perception I mentioned above that affluent, white communities don't commonly experience trauma. The teachers at the two schools serving affluent communities used the word "trauma" 22 and 4 times respectively while teachers at the school serving an economically disadvantaged community used the term 44 times. Several listed trauma-informed training as a resource that would help with behavior in the school.

Among the teachers I interviewed, teacher history of ACEs correlated with their estimates of the number of students in their classes who have or are experiencing ACEs (when adjusted for each school's demographic). The possibility that schools are relying on parent/guardian disclosure and the childhood histories of a fraction of their teachers for a sense of how many children may need support related to ACEs is a startling thought. Even with a history of ACEs teachers may require training in trauma-informed practices to know how to support them.

Mindfulness practices and other whole-child practices have been growing in popularity in the Bay Area in recent years (Melendez, 2019). They have been shown to support students impacted by ACEs (Bethell, Gombojav, Solloway & Wissow, 2016). However, without trauma-informed elements in place, even mindfulness practices can harm students impacted by trauma. Dr. Sam Himelstein, psychologist and author of several books on mindfulness and trauma, was interviewed in a recent article called *Why Mindfulness and Trauma-Informed Teaching Don't Always Go Together*. He describes working with teachers who may become upset with a student who refuses to follow directions like close their eyes or sit up straight. Someone who has experience with trauma, or even some people who haven't, may not feel safe with their eyes closed in a

room full of 30 people (Schwartz, 2019). The literature on ACEs from the last 20 years clearly demonstrates that children with high ACEs are more likely to have behavioral problems than those who don't, but no studies to date have indicated what proportion of all classroom behavioral issues are related to ACEs. Admittedly, that question would be considerably difficult to address given how many other factors influence classroom behavior and parents' reticence to disclose their children's ACEs. That is one reason so many studies examining ACEs rely on retrospective adult disclosure.

Implications for Policies and Practice in Education

Information has been available about the prevalence of adverse childhood experience and their lifelong adverse effects for just over 20 years. In that time, we have learned increasingly more about how they impact children and their ability to learn, such as the way they increase ADHD symptoms, increase challenging behaviors, and even increase the chance children will drop out of school. My research does not contribute to the list of reasons why we need to address the issue of ACEs in public education, though it exists within that framework. What it does contribute is the beginnings of a blueprint for the implementation of trauma-informed practices. It suggests that if administrators are enthusiastic about support an educational philosophy, a majority of teachers will adopt it. This study suggests that emphasizing the prevalence of ACEs might be a good start. And it suggests that many teachers may already perceive a relationship between ACEs and student behavior.

For classroom teachers. Every teacher I have ever spoken with and certainly those interviewed here wants to support their students. Every teacher knows that some

children face serious challenges and I believe that every one of them gets sad about that. Few teachers know just how common those experiences are or how much power they have to improve outcomes for those children. Behavior is communication. Not every challenging behavior indicates trauma (some children react to trauma by becoming very quiet or being the most eager to please) but every behavior expresses a need. Approaching student behavior through the lens of student need benefits all students and is trauma-informed. Teachers do not need to wait for their principals or districts to provide them with training in trauma-informed practices. By simply familiarizing themselves with ACEs and their rates of prevalence, they can take the first step of trauma-informed teaching: recognizing the possibility that any student can be carrying the weight of traumatic experience and that any behavior can be a manifestation of trauma. That is not to say teachers should treat students like fragile flowers. A professor in my teacher credentialing program once said of student behavior, "If it happens before 9:30 it's something that happened at home. Ask." I followed that advice and every time a child hit a classmate or refused to follow directions before 9:30 I would quietly ask them if something happened outside of school that morning or the night before that upset them and every time, they told me. Most of the time they had their smartphone taken away as a consequence or a family member was sick or they had fought with a sibling. In those cases, I had the opportunity to make that child feel seen and heard and usually, they had a much better rest of their day. A few times their answers meant I needed to talk with my principal and make a CFS report as a mandated reporter. Striving to be trauma-informed in our teaching does not mean treating trauma or identifying every child with an ACE in the class. It provides a framework to support all students.

The existing literature tells us that while ACEs are more common among the poor, they affect every demographic group. Teachers at all three sites told me about the challenges some of their students have faced and several of them said: “I would never have known if the [principal/parent/counselor] didn’t tell me.” Like adults, children cope with adversity in different ways. That is one of the reasons why universal practices are so important. If teachers want to promote universal trauma-informed practices at their school, they can talk to other teachers and request training from their principal. All of the principals in the schools where I conducted interviews valued teacher input in professional development.

For principals and superintendents. Teachers’ responses in my survey and interviews strongly suggest that many teachers internalize the training and philosophies emphasized by principals. None of the teachers I interviewed knew what the acronym ACE stood for but when I started naming ACEs several of them indicated that it was faintly familiar from a training they had once. The training on Zones of Regulation and Academic Rigor that the teachers internalized at their respective schools were ongoing and high quality. If principals and superintendents want to build trauma-informed schools, the training must be comprehensive and ongoing. Existing research also indicates that in order to be effective, professional development must include support between sessions to help teachers build the skills that are being introduced (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Based on what teachers said in my surveys and interviews they need professional development on what ACEs are and how common they are, types of behaviors that can indicate a student may need support, ways teachers can respond to a

child that has been triggered and support managing their expectations of what a child in “fight or flight” mode is capable of.

Universally applied trauma-informed practices benefit all students. Additionally, they align with aspects of other programs already supported by local districts. One example is the Zones of Regulation, which has been mentioned several times here. It helps teachers understand that a child who is triggered or “in the Red Zone” is not able to regulate their emotions or actions. They must get out of the ‘Red Zone’ or deactivate ‘fight or flight’ response before regaining the ability to engage in rational thought. Another popular example is mindfulness practices. Just one of the ways it aligns is its emphasis on breathwork. Breathing can be a powerful tool for those impacted by trauma. Somatic awareness is also a trauma-informed concept. I must note again, that not *all* aspects of Mindfulness curricula are trauma-informed (Schwartz, 2019). GLAD the English language learner support program that utilizes interactive journals, and provides structured opportunity to interact with peers in an appropriate, guided way. Interestingly, some GLAD strategies also benefit many students with other disabilities. (Some do not. I would never advocate for ELLs and students with IEPs to receive the same blanket intervention as has happened in some schools.)

Allow me to make the following analogy between trauma-informed practices and nutrition: specialized diets for cancer or inflammation are very similar to the Mediterranean diet because certain things are healthy for people in general. The Zones of Regulation and Responsive Classroom and elements of various social-emotional curricula all have characteristics in common for the same reason. I believe that trauma-informed practices get to the underlying causes that some other programs address by accident. They

have even been proven effective in anti-bullying initiatives (Blitz & Lee, 2015). If implemented systemically, they would certainly result in reductions in referrals and suspensions. All school employees interact with students experiencing trauma so all need training to establish a trauma-informed system. Aides, substitutes and office staff often interact with children who have behavioral issues during times of heightened stress (Anderson, Blitz & Saastamoinen, 2015). One interview revealed a case where a student with a disability and a history of trauma had been successfully mainstreamed until he had an interaction with a substitute who had not received adequate training. She demanded he give her a personal item and placed her hands on the child, forcibly taking it. Unfortunately for everyone involved, he reacted by stabbing her with a classroom object. Training substitutes and noncertified staff can be expensive for districts but so can incidents like that.

Implications for policy. If California policymakers initiated 1) measures to universally assess for ACEs in public schools, as has been suggested for pediatricians (Burke, Hellman, Scott, Weems, & Carrion, 2011), 2) a comprehensive referral process for identified children and families and 3) mental health and family support outreach and 4) universal trauma-informed practices in schools, it could change the face of the state. If children and families received support before many of the potential effects of ACEs took root, the impact on public health could improve the quality of life for millions of people and save the state hundreds of millions of dollars. It currently costs \$81,000 to incarcerate one person for a year in California (Legislative Analyst's Office, 2019). Incarcerated populations have some of the highest rates of ACEs of any demographic (Friestad, Åse-Bente, & Kjelsberg, 2012). Imagine the reduction in spending on the prison

system alone, not to mention reductions in healthcare spending associated with ACEs if the preventative measures I am suggesting were adopted. Funding the infrastructure required to universally assess for ACEs, establish protocols for systems of referrals and support for families, and train all public school employees would cost a tremendous amount of money. But the fiscal and human cost of ACEs to society is immeasurable.

Limitations

There are significant limitations to this study. One is the small sample size. Forty-one teachers provided sufficient data to suggest themes but not definitively prove anything. Many of the limitations are inherent to qualitative research. The quality is dependent upon my ability as a researcher and this is my first foray into research. I can say with confidence that I learned a great deal from the process. For instance, not all ACEs were included in my survey due in part to constraints on the number of questions I could have and still have access to one of my participating schools. My inexperience and lack of knowledge or practice with statistical analytical techniques limited my data analysis. Verification through reproduction is not possible. The qualitative and subjective nature of interviewing, while flexible and investigative, also exposes the research to the interviewer's bias.

Future Research

One of the many advantages of qualitative research is the potential for discovery it carries. This study found a correlation between a teachers' history of ACEs, or ACE score and their estimate of student ACEs with a sample size of six participants. A large scale quantitative study comparing the number of teacher ACEs to teacher estimates of student

ACEs would provide more reliable results. Researchers would have to make allowances for community demographics in order to yield meaningful results. Status in special education, class, ethnicity, and disability all impact statistics on ACEs. An investigation into the role relationships (teacher-teacher, teacher-administrator, teacher-parent, parent-administrator, and teacher-student) in ACE disclosure could have profound implications for education. Some schools are incorporating trauma-informed training but the quality and content can be uneven. Further study may be needed to determine the standards for trauma-informed practices in schools and how best to present them to teachers. I briefly raised the issue of privacy and confidentiality in a trauma-informed system here. A thorough investigation of their role in trauma-informed education should be conducted, perhaps with recommendations for standards moving forward. Most of the teachers I interviewed who are parents, stated that having children made them more sympathetic toward their students' parents. I suggest a larger sample study that examines teacher estimates of ACEs that indicate greater degree of culpability on the part of parents i.e. physical, emotional and sexual abuse as opposed to ACEs that may not be deliberately harmful such as living with a person with drug or alcohol issues or mental health issues to find out if teachers who are also parents estimate differently than teachers who are not parents.

This gap in the research is wide, which can be exciting for researchers but the lack of data on ACEs in schools and how to successfully introduce trauma-informed practices in schools may be harming kids.

References

- Abdul-Hamid, W. K., & Hughes, J. H. (2014). Nothing New under the Sun: Post-Traumatic Stress Disorders in the Ancient World. *Early Science and Medicine*, 19(6), 549-557.
- Almuneef, M., Qayad, M., Aleissa, M., & Albuhairan, F. (2014). Adverse childhood experiences, chronic diseases, and risky health behaviors in Saudi Arabian adults: A pilot study. *Child Abuse & Neglect*, 38(11), 1787-1793.
- American Counseling Association (n.d.) *Vicarious Trauma* [Fact Sheet]. Retrieved from <https://www.counseling.org/docs/trauma-disaster/fact-sheet-9---vicarious-trauma.pdf>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: Author.
- 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
- Barsky, A. J., Wool, C., Barnett, M. C., & Cleary, P. D. (1994). Histories of childhood trauma in adult hypochondriacal patients. *American Journal of Psychiatry*, 151(3), 397-401.
- Barker, L. (2015). "Toujours la chose génitale": Charcot, Freud, and the etiology of hysteria in the late 19th century. *University of Toronto Medical Journal*, 93(1), 9-13.

- Bazeley, P. (2014). *Qualitative data analysis practical strategies*. Los Angeles, CA: Sage.
- Beck, J. C. & Van der Kolk, B. (1987). Reports of childhood incest and current behavior of chronically hospitalized psychotic women. *American Journal of Psychiatry*, *144*(11), 1474-1476.
- Bethell, C. D., Newacheck, P., Hawes, E., & Halfon, N. (2014). Adverse childhood experiences: assessing the impact on health and school engagement and the mitigating role of resilience. *Health Affairs*, *33*(12), 2106-2115.
- Blitz, L. V., & Lee, Y. (2015). Trauma-informed methods to enhance school-based bullying prevention initiatives: An emerging model. *Journal of Aggression, Maltreatment & Trauma*, *24*(1), 20.
- 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. *The Urban Review*, *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.
- Bloom, S. L. (1997). *Creating sanctuary: Towards the evolution of sane societies*. London: Routledge.

- Bowland, S., Edmond, T. & Fallot, R. D., (2012). Evaluation of a spiritually focused intervention with older trauma survivors. *Social Work, 57*(1), 73-82.
- Bremner, J. D., Southwick, S. M., Johnson, D. R., Yehuda, R., & Charney, D. S. (1993). Childhood physical abuse and combat-related posttraumatic stress disorder in Vietnam veterans. *American Journal of Psychiatry, 150*(2), 235-239.
- Briere, J. (1988). The long-term clinical correlates of childhood sexual victimization. *Annals of the New York Academy of Sciences, 528*(1 Human Sexual), 327-334.
- Bulik, C.M., Sullivan, P.F. & Rorty, M. (1989). Childhood sexual abuse in women with bulimia. *The Journal of Clinical Psychiatry, 50*(12), 460-464.
- Burgess, A. W., & Holmstrom, L. L. (1974). Rape Trauma Syndrome. *American Journal of Psychiatry, 131*(9), 981-986.
- Burke, N. J., Hellman, J. L., Scott, B. G., Weems, C. F., & Carrion, V. G. (2011). The impact of adverse childhood experiences on an urban pediatric population. *Child abuse & neglect, 35*(6), 408–413.
- Center, D. B., & Wascomb, A. M. (1987). Teacher perceptions of social behavior in behaviorally disordered and socially normal children and youth. *Behavioral Disorders, 12*(3), 200-206.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: SAGE Publications.

- Damodaran, D. K., & Paul, V. (2018). The Unveiled Indian Picture of Adverse Childhood Experiences: Socio-Demographic Correlates Among Youth in Kerala. *IAHRW International Journal of Social Sciences Review*, 6(7), 1248-1257
- David, D., Giron, A., & Mellman, T. A. (1995). Panic-phobic patients and developmental trauma. *The Journal of Clinical Psychiatry*, 56(3), 113.
- Day, A. G., Somers, C. L., Baroni, B. A., West, S. D., Sanders, L., & Peterson, C. D. (2015). Evaluation of a trauma-informed school intervention with girls in a residential facility school: Student perceptions of school environment. *Journal of Aggression, Maltreatment & Trauma*, 24(10), 1086-1105.
- Dell'Omo, A. (2016) Trauma and Recovery, by Judith Herman (1992). *Not Even Past*, Department of History at the University of Texas at Austin. Retrieved from <https://notevenpast.org/trauma-and-recovery-by-judith-herman-1992/>
- Didi-Huberman, G. (2005). *Invention of hysteria: Charcot and the photographic iconography of the Salpêtrière*. (Hartz, A., trans) Cambridge, MA: The MIT Press.
- Dong, M., Anda, R. F., Felitti, V. J., Williamson, D. F., Dube, S. R., Brown, D. W., & Giles, W. H. (2005). Childhood residential mobility and multiple health risks during adolescence and adulthood: The hidden role of adverse childhood experiences. *Archives of Pediatrics & Adolescent Medicine*, 159(12), 1104-1110.
- Dube, S. R., Anda, R. F., Felitti, V. J., Edwards, V. J., & Croft, J. B. (2002). Adverse childhood experiences and personal alcohol abuse as an adult. *Addictive Behaviors*, 27(5), 713-725.

Encyclopaedia Britannica, the Editors of (2019). Assyria. *Encyclopaedia Britannica*.

Retrieved from Encyclopaedia Britannica database

Encyclopaedia Britannica, the Editors of (2018). Code of Hammurabi: Babylonian laws.

Encyclopaedia Britannica. Retrieved from Encyclopaedia Britannica database

Esaki, N., Benamati, J., Yanosy, S., Middleton, J. S., Hopson, L. M., Hummer, V. L., &

Bloom, S. L. (2013). The sanctuary model: Theoretical framework. *Families in Society, 94*(2), 87-95.

Fallot, R. D., McHugo, G. J., Harris, M., & Xie, H. (2011). The trauma recovery and

empowerment model: A quasi-experimental effectiveness study. *Journal of Dual Diagnosis, 7*(1-2), 74-89.

Fallot, R., & Harris, M. (2002). The trauma recovery and empowerment model (TREM):

Conceptual and practical issues in a group intervention for women. *Community Mental Health Journal, 38*(6), 475-485.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V.,

Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245-258.

Finkelhor, D., & Jones, L. M. (2004). *Explanations for the Decline in Child Sexual*

Abuse Cases. Juvenile Justice Bulletin. Washington D.C.: The Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice.

- Fratto, C. M. (2016). Trauma-informed care for youth in foster care. *Archives of Psychiatric Nursing*, 30(3), 439-446.
- Friedman, M. J., (n. d.) History of PTSD in veterans: Civil war to DSM-5. Retrieved from https://www.ptsd.va.gov/understand/what/history_ptsd.asp
- Friestad, C., Åse-Bente, R., & Kjelsberg, E. (2012). Adverse childhood experiences among women prisoners: Relationships to suicide attempts and drug abuse. *International Journal of Social Psychiatry*, 60(1), 40-46.
- Fuller-Thomson, E., Mehta, R., & Valeo, A. (2014). Establishing a link between attention deficit disorder/attention deficit hyperactivity disorder and childhood physical abuse. *Journal of Aggression, Maltreatment & Trauma*, 23(2), 188-198.
- Fuller-Thomson, E., Lewis Danielle A. (2015). The relationship between early adversities and attention-deficit/hyperactivity disorder. *Child Abuse & Neglect*, 47, 94-101.
- Gamache Martin, C., Cromer, L. D., & Freyd, J. J. (2010). Teachers' beliefs about maltreatment effects on student learning and classroom behavior. *Journal of Child & Adolescent Trauma*, 3(4), 245-254.
- Greenlee, A. R., & Ogletree, E. J. (1993). *Teachers' attitudes toward student discipline problems and classroom management strategies*. Report prepared for the Office of Educational Research and Improvement, U.S. Office of Education.

Halfon, N., Larson, K., Son, J., Lu, M., & Bethell, C. (2017). Income inequality and the differential effect of adverse childhood experiences in US children. *Academic Pediatrics, 17*(7), S70-S78.

Harris, M. (1998). *Trauma recovery and empowerment: A clinician's guide for working with children in groups*. New York: Free Press.

Harris, M., & Fallot, R. D. (2001). Envisioning a trauma-informed service system: A vital paradigm shift. *New Directions for Mental Health Services, 2001*(89), 3-22.

Imberg, M. & Shaban, M. (2019) *Billionaire Census 2017*. New York, NY: Wealth-X.

Legislative Analyst's Office (2019) How much does it cost to incarcerate an inmate? (2019, January). Retrieved May 1, 2019, from https://lao.ca.gov/policyareas/cj/6_cj_inmatecost

Iachini, A. L., Petiwala, A. F., & DeHart, D. D. (2016). Examining adverse childhood experiences among students repeating the ninth grade: Implications for school dropout prevention. *Children & Schools, 38*(4), 218-227.

Jimenez, M. E., Wade, R., Schwartz-Soicher, O., Lin, Y., & Reichman, N. E. (2017). Adverse childhood experiences and ADHD diagnosis at age 9 years in a national urban sample. *Academic Pediatrics, 17*(4), 356-361.

Berube, A. (2018, March 28). City and metropolitan income inequality data reveal ups and downs through 2016. The Brookings Institution. Retrieved from

<https://www.brookings.edu/research/city-and-metropolitan-income-inequality-data-reveal-ups-and-downs-through-2016/>

- Kenny, M. C., Vazquez, A., Long, H., & Thomson, D. (2017). Implementation and program evaluation of trauma-informed care training across state child advocacy centers: An exploratory study. *Children and Youth Services Review*, 73, 15-23
- Koball, H., & Jiang, Y. (2018, February 28). Basic facts about low-income children under 18 years, 2016. Retrieved from http://www.nccp.org/publications/pub_1194.html
- Kulinna, P. H. (2008). Teachers' attributions and strategies for student misbehavior. *Journal of Classroom Interaction*, 42(2), 21-30.
- Kuypers, L. (2018) Learn more about the Zones. Retrieved from <https://www.zonesofregulation.com/learn-more-about-the-zones.html>
- Leach, C., Powell, Martine, B., Sharman, S. J., & Anglim, J. (2017). The relationship between children's age and disclosures of sexual abuse during forensic interviews. *Child Maltreatment*, 22(1), 79.
- Levine, P. A., & Frederick, A. (1997). *Waking the tiger: Healing trauma: The innate capacity to transform overwhelming experiences*. Berkeley, CA: North Atlantic Books.
- Livingston, G. (2018, April 27). About one-third of U.S. children are living with an unmarried parent. Retrieved from <https://www.pewresearch.org/fact->

tank/2018/04/27/about-one-third-of-u-s-children-are-living-with-an-unmarried-parent/

MacKenzie, M. J., Nicklas, E., Waldfogel, J., & Brooks-Gunn, J. (2013). Spanking and child development across the first decade of life. *Pediatrics*, *132*(5), e1118-1125.

McKelvey, L. M., Edge, N. C., Mesman, G. R., Whiteside-Mansell, L., & Bradley, R. H. (2018). Adverse experiences in infancy and toddlerhood: Relations to adaptive behavior and academic status in middle childhood. *Child Abuse & Neglect*, *82*, 168-177.

Melendez, L. (2019, March 22). San Francisco elementary schools practicing mindfulness in the classroom. Retrieved from <https://abc7news.com/education/sf-schools-practicing-mindfulness-in-the-classroom/5210938/>

Morley, N. (2017). Thucydides and the historiography of trauma. *KTÈMA Civilisations De L'Orient, De La Grèce Et De Rome Antiques*, *42*, 195-206.

Musa, S., Peek-Asa, C., Jovanović, N., & Selimović, E. (2018). Association of adverse childhood experiences and health risk behaviors among young adults visiting a regional primary healthcare center, Federation of Bosnia and Herzegovina. *Plos One*, *13*(3).

National Center for Victims of Crime (2011). Child Sexual Abuse Statistics. Retrieved from <https://victimsofcrime.org/media/reporting-on-child-sexual-abuse/child-sexual-abuse-statistics>

- Nurius, P. S., Logan-Greene, P., & Green, S. (2012). Adverse childhood experiences (ACE) within a social disadvantage framework: distinguishing unique, cumulative, and moderated contributions to adult mental health. *Journal of prevention & intervention in the community*, 40(4), 278–290.
- Reilly, K. (2014, February 07). Sesame Street reaches out to 2.7 million American children with an incarcerated parent. Retrieved from <https://www.pewresearch.org/fact-tank/2013/06/21/sesame-street-reaches-out-to-2-7-million-american-children-with-an-incarcerated-parent/>
- Rx Safe Marin (n.d.) About Us. Retrieved from <https://rxsafemarin.org/about/>
- Sapolsky, R. M. (2018). *Behave: The Biology of Humans at Our Best and Worst*. London: Vintage.
- Schonfeld, Z. (2015, September 19) Parental advisory forever: an oral history of the PMRC's war on dirty lyrics. *Newsweek*. Retrieved from: <https://www.newsweek.com/2015/10/09/oral-history-tipper-gores-war-explicit-rock-lyrics-dee-snider-373103.html>
- Soares, A. L., Howe, L. D., Matijasevich, A., Wehrmeister, F. C., Menezes, A. M., & Gonçalves, H. (2016). Adverse childhood experiences: Prevalence and related factors in adolescents of a Brazilian birth cohort. *Child Abuse & Neglect*, 51, 21-30.
- Sophocles. (2011). *Sophocles: Ajax* (Cambridge Classical Texts and Commentaries) (P. Finglass, Ed.). Cambridge: Cambridge University Press.

- Stein, J. L. (2015). Examining post-traumatic stress disorder and the plight of Vietnam veterans. *The Iowa Historical Review*, 5, 7-22.
- Stevens, J. E., (2012) The Adverse Childhood Experiences Study — the largest, most important public health study you never heard of — began in an obesity clinic [Blog Post] Retrieved from <https://acestoohigh.com/2012/10/03/the-adverse-childhood-experiences-study-the-largest-most-important-public-health-study-you-never-heard-of-began-in-an-obesity-clinic/>
- Swett, J., C, Surrey, J., & Cohen, C. (1990). Sexual and physical abuse histories and psychiatric symptoms among male psychiatric outpatients. *American Journal of Psychiatry*, 147(5), 632-636.
- Substance Abuse and Mental Health Services Administration Trauma. (n.d.). Retrieved April 24, 2019, from <https://www.integration.samhsa.gov/clinical-practice/trauma>
- Tasca, C., Rapetti, M., Carta, M. G., & Fadda, B. (2012). Women and hysteria in the history of mental health. *Clinical Practice & Epidemiology in Mental Health*, 8(1), 110-119.
- Tulis, M. (2013). Error management behavior in classrooms: Teachers' responses to student mistakes. *Teaching and Teacher Education*, 33, 56-68.
- U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, 39th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2017, Washington, D.C.

- United States Senate (1985): Record Labeling: Hearing before the Committee on Commerce, Science, and Transportation. United States Senate, Ninety-ninth Congress, First Session on Contents of Music and the Lyrics of Records (September 19, 1985). Washington, DC: U.S. Government Printing Office.
- Unkelbach, C., & Rom, S. C. (2017). A referential theory of the repetition-induced truth effect. *Cognition*, 160, 110-126.
- Van der Kolk, B. A. (2014). *The body keeps the score: Brain, mind, and body in the healing of trauma*. New York: Viking Books.
- Van der Kolk, B. A. (1989). The compulsion to repeat the trauma. re-enactment, revictimization, and masochism. *The Psychiatric Clinics of North America*, 12(2), 389.
- Van der Kolk, B., & Najavits, L. M. (2013). Interview: What is PTSD really? surprises, twists of history, and the politics of diagnosis and treatment. *Journal of Clinical Psychology*, 69(5), 516-522.
- Van den Wall Blake, R. (2013). Considering childhood trauma in the juvenile justice system: Guidance for attorneys and judges. *Child Law Practice Newsletter*, 32(11), 171.
- Walcot, P. (1978). Herodotus on Rape. *Arethusa*, 11(1/2), 137-147.
- Walusinski, O. (2014). The Girls of La Salpêtrière. *Hysteria: The Rise of an Enigma Frontiers of Neurology and Neuroscience*, 35, 65-77.

Walusinski, O., Poirier, J. & Déchy, H. (2013) Augustine. *European Neurology*, 69(4), 226–228.

Whealin, J. (2009). Child Sexual Abuse. National Center for PTSD, United States Department of Veteran Affairs. Retrieved from <https://web.archive.org/web/20090730101002/http://www.ptsd.va.gov/public/pages/child-sexual-abuse.asp>

Yahaya, I., Soares, J., De Leon, A. P., & Macassa, G. (2012). A comparative study of the socioeconomic factors associated with childhood sexual abuse in sub-Saharan Africa. *The Pan African Medical Journal*, 11, 51.

Yoon, K. S., Duncan, T., Lee, S. W.-Y., Scarloss, B., & Shapley, K. (2007). Reviewing the evidence on how teacher professional development affects student achievement (Issues & Answers Report, REL 2007–No. 033). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. Retrieved from <http://ies.ed.gov/ncee/edlabs>

Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). Building academic success on social and emotional learning: What does the research say? New York, NY, US: Teachers College Press.

Appendix A: Letter of Acceptance from the Institutional Review Board



January 29, 2019

Bridget Anne Mudd
50 Acacia Avenue
San Rafael, CA 94901

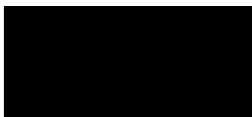
Dear Bridget,

On behalf of the Dominican University of California Institutional Review Board for the Protection of Human Participants, I am pleased to inform you that your proposal entitled *Teacher Perceptions of Adverse Childhood Experience Prevalence by Type and Student Behavior in Elementary Schools* (IRBPHP application #10766) has been approved.

In your final report or paper please indicate that your project was approved by the IRBPHP and indicate the identification number.

I wish you well in your very interesting research effort.

Sincerely,



Randall Hall, PhD
Chair, IRBPHP

Appendix B: Survey Questions

Short Answer

1. What are some examples of challenging behaviors you see in the classroom?
2. What are the primary reasons why some students have behavioral issues?
3. What tools/training/resource do you think would be most helpful to support students who are struggling emotionally and behaviorally?

Multiple Choice Questions

1. How long have you been a teacher?
 - A) <5 years
 - B) 5-10 years
 - C) 10-15 years
 - D) >15 years
2. How many students do you have in your class?
 - A) less than 20 students
 - B) 20-25
 - C) 25-30
 - D) More than 30
3. How many students in your class exhibit frequent (daily or weekly) challenging behaviors?
 - A) 1-2 students
 - B) 2-5
 - C) 5-7
 - D) More than 7
4. Do you think changing classroom routines for students who may or may not have experienced a trauma experience is reasonable expectation for a teacher?
 - A) Dealing with trauma is not a teacher's job
 - B) Maybe if someone tells me what the student experienced
 - C) I would definitely make any changes that would help if I found out I had a student like that.
 - D) I try to anticipate and minimize factors in my classroom that might trigger my students
5. How many children nationally do you estimate have experienced verbal or emotional abuse (experience parents or guardians calling them names, humiliate them, or threaten them?)

- A) 45% of all children nationally
- B) 33% of all children nationally
- C) 7% of all children nationally
- D) 1% of all children nationally

6. How many children nationally do you estimate have experienced repeated food or housing insecurity?

- A) 50% of all children nationally
- B) 25% of all children nationally
- C) 10% of all children nationally
- D) 5% of all children nationally

7. How many children nationally do you estimate have experienced their parental divorce or separation?

- A) 52% of all children nationally
- B) 23% of all children nationally
- C) 9% of all children nationally
- D) 4% of all children nationally

8. How many children nationally do you estimate have lived with someone with drug or alcohol problems?

- A) 52% of all children nationally
- B) 23% of all children nationally
- C) 9% of all children nationally
- D) 4% of all children nationally

9. How many children nationally do you estimate have lived with someone with severe mental health issues (suicidal or severe depression)?

- A) 56% of all children nationally
- B) 29% of all children nationally
- C) 8% of all children nationally
- D) 3% of all children nationally

10. How many children nationally do you think experience sexual abuse by the age of 18?

- A. 20% of girls and 5% of boys
- B. 15% of girls and 15% of boys
- C. 10% of girls and 2% of boys
- D. 5% of girls and 1% of boys

11. How many children nationally do you estimate have had a parent or guardian who became incarcerated?

- A) 56% of all children nationally
- B) 29% of all children nationally

- C) 8% of all children nationally
- D) 3% of all children nationally

12. How many children nationally do you estimate have seen or heard a parent or guardian slapped, hit, punched, or kicked in the home?

- A) 49% of all children nationally
- B) 32% of all children nationally
- C) 6% of all children nationally
- D) 1% of all children nationally

13. How many children nationally do you estimate have been a victim or witness to violence in their neighborhoods?

- A) 58% of all children nationally
- B) 27% of all children nationally
- C) 11% of all children nationally
- D) 3% of all children nationally

14. 5. How many children in your class do you estimate have experienced verbal or emotional abuse (experience parents or guardians calling them names, humiliate them, or threaten them)?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

15. How many children in your class do you estimate have experienced repeated food or housing insecurity?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

16. How many children in your class do you estimate have experienced their parental divorce or separation?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

17. How many children in your class do you estimate have lived with someone with drug or alcohol problems?

- A) More than 7

- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

18. How many children in your class do you estimate have lived with someone with severe mental health issues (suicidal or severe depression)?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

19. How many children in your class do you think experience sexual abuse by the age of 18?

- A) More than 7 girls and boys
- B) 6-7 girls and 1-2 boys
- C) 3-5 girls and 3-5 boys
- D) 1-2 girls and no boys
- E) 0

20. How many children in your class do you estimate have had a parent or guardian who became incarcerated?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

21. How many children in your class do you estimate have seen or heard a parent or guardian slapped, hit, punched, or kicked in the home?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

22. How many children in your class do you estimate have been a victim or witness to violence in their neighborhoods?

- A) More than 7
- B) 6-7
- C) 3-5
- D) 1-2
- E) 0

23. How many students in your class do you suspect may have ever been touched in a sexual way by an adult or person at least 5 years older?

- A) 1-2
- B) 2-5
- C) 5-7
- D) More than 7

Appendix C: Interview Questions

1. How long have you been working in your current position?
2. What is something you enjoy about your work? Why/What about it do you enjoy?
3. What is one thing that is challenging about your work?
4. Imagine the students you have struggled with the most, behaviorally. Without identifying the students, what can you remember about their backgrounds? Anything they had in common?
5. Have you ever been offered training in trauma-informed practices in teaching? If so, can you tell me any details about it.
6. What stands out from the training that was especially insightful or helpful and why?
7. Can you think of any occasions where you might have benefited from training in Trauma-informed Practices in your interactions with students? Without identifying the student, can you tell me about that?
8. Given that we cannot, as teachers, diagnose or treat trauma what is the classroom teacher's role regarding students experiencing symptoms of trauma? (Especially since we cannot avoid dealing with the behaviors can accompany trauma.)
9. What if anything, has changed or shifted about how you view trauma since you started your position? What do you credit with that shift in thinking?
10. If you could go back in time, what advice might you give yourself about trauma among students that might have helped you?
11. What is your perception of other teachers' view of the trauma-informed training?
12. Do you want more training in this area and what specifically do you want to know more about?
13. Do you have anything you want to add?