CHAPTER

8

UCSF Healthy Environments and Response to Trauma in Schools (HEARTS)

Joyce Dorado, Ph.D.
Martha Merchant, Psy.D.

UCSF HEARTS: Key Elements of an Approach to Addressing Trauma in Schools

The University of California, San Francisco Healthy Environments and Response to Trauma in Schools (UCSF HEARTS) program is a multilevel, whole-school approach that aims to promote school success and resilience for trauma-impacted children and youth by creating trauma-informed, safe, supportive, equitable, and engaging learning and teaching environments that benefit everyone in the school community. The program works in partnership with schools and school districts, using a trauma-informed approach to build the capacity of school personnel to increase teaching and learning time in classrooms and reduce time spent on disciplining

problematic behavior. HEARTS approaches trauma as a serious public health issue and thus focuses on systemic change, emphasizing universal supports to prevent difficulties, followed by progressively more targeted interventions.

We began in December 2008, initially embedding HEARTS consultants at school sites serving several of San Francisco's most under-resourced, chronically trauma-impacted communities in the city's southeast sector. Since then, HEARTS has expanded to provide training and consultation at the broader school district level across the San Francisco Bay Area. For example, in San Francisco Unified School District, HEARTS trauma training is currently mandatory for all school social workers and school nurses. In addition, as part of a multi-tiered trauma-informed restorative practices program in Oakland Unified School District, HEARTS has provided trauma training in the district's six comprehensive high schools and for all of the district's school security officers. Given the cultural diversity of children in the schools and communities we serve, cultural responsiveness, equity, and social justice are all central to our work.

As a 3- to 5-year organizational transformation process for creating whole-school culture change, HEARTS draws from the flexible framework put forth by Massachusetts Advocates for Children and the Trauma and Learning Policy Initiative (TLPI; Cole et al. 2005). The TLPI framework for creating more trauma-sensitive school environments uses complex trauma and resilience research and fosters not only individual change and healing but school-wide change and healing. Our program also uses Attachment, Self-Regulation and Competency, an evidence-based intervention for children, youth, and families impacted by complex trauma (Blaustein and Kinniburgh 2010).

HEARTS is a principle-driven program guided by the following core principles for creating trauma-informed schools:

- Understanding stress and trauma
- Cultural humility and responsiveness
- Safety and predictability
- Compassion and dependability
- Resilience and social-emotional learning
- Empowerment and collaboration

These principles are modified from the guiding principles of the San Francisco Department of Public Health Trauma Informed Systems Initiative (SFDPH TIS), an initiative that the HEARTS director played a significant role in developing and implementing (K. Epstein, K. Speziale, E. Gerber,

et al., "Trauma Informed Systems Initiative: 2014 Year in Review," unpublished manuscript, San Francisco Department of Public Health, San Francisco, CA, 2014). The SFDPH TIS principles are grounded in research on trauma interventions and were developed after an extensive review of trauma-informed systems work across the country, including the work being done by the Substance Abuse and Mental Health Services Administration. (See Table 8–1 for rationale and description of HEARTS principles. The social emotional learning competencies named in the "resilience and social-emotional learning" principle are from the Collaborative for Academic, Social, and Emotional Learning [CASEL], a national organization aimed at promoting the integration of evidence-based social and emotional learning into education from preschool to high school.)

Although these principles can help promote wellness and school success for all members of a school community, they are particularly important for those impacted by trauma. Further, although many of these principles are goals that are part of numerous standard educational practices, the negative effects of chronic stress and trauma can make it difficult to consistently abide by them. We believe that educational strategies, procedures, and policies ultimately need to promote each of these six principles in order to be completely trauma informed and that if practices go against any one of these principles, they can potentially be trauma inducing. Given the multitude of complicated stressors and challenges faced by people in trauma-impacted school communities, we have found it helpful to organize our trainings, consultations, and supports by these principles and use them to guide problem-solving discussions.

The following vignette illustrates how unaddressed trauma can manifest in classrooms.

Clinical Vignette

Ryan is a fifth-grade boy. This morning, when Ryan arrived at school, his teacher, Ms. Lang, asked him for his homework, but Ryan did not have it. She expressed frustration at him and took away his recess as a consequence. A short time later, Ryan's deskmate accidentally bumped him. As a result, Ryan punched his deskmate in the stomach. Ms. Lang, naturally upset by this outburst, began to yell at Ryan to stop. Ryan began screaming, kicked over a chair, and hid under his desk. After 10 minutes of trying to extract Ryan from the classroom, Ryan was brought to the principal's office. Ryan was then suspended for 5 days for his behavior (Dorado 2012b).

Conventional school solutions to Ryan's behavior include exclusionary procedures such as disciplinary referrals to the office, suspension, or

TABLE 8–1. UCSF HEARTS core guiding principles for creating trauma-informed schools

Principle	Trauma-informed lens rationale	Description of principle
Understanding trauma and stress	When we do not understand trauma, we are more likely to misinterpret trauma-related behaviors as "willful," "sick," or "crazy," which can lead to ineffective, stigmatizing, and/or punitive reactions to people impacted by trauma.	Understanding how trauma and stress can affect individuals, relationships, and organizations helps to reframe otherwise confusing or aggravating behavior. This assists us in recognizing trauma's effects more accurately, which leads to more compassionate, strength-based, and effective responses to trauma-impacted people that promote healing rather than reactions that inadvertently retraumatize and cause harm.
Cultural humility and responsiveness	We come from diverse cultural groups that may experience different traumas and stressors, react to these adversities differently, and experience differences in how others respond to our traumatic experiences.	When we are open to understanding the trauma and adversity caused by historical, institutionalized, and societal oppression and respond to them with cultural humility, we can work together to mitigate these harms, and equity is enhanced.
Safety and predictability	Trauma unpredictably violates our physical, relational, and emotional safety, resulting in a sense of threat and a need to focus resources on managing risks.	Establishing physical, relational, and emotional safety, as well as predictability in the environment, enables us to focus resources on healthy development, wellness, learning, and teaching.

TABLE 8–1. UCSF HEARTS core guiding principles for creating trauma-informed schools (*continued*)

Principle	Trauma-informed lens rationale	Description of principle
Compassion and dependability	Trauma can leave us feeling isolated or betrayed, which may make it difficult to trust others and receive support.	By fostering relationships that are compassionate and attuned, as well as dependable and trustworthy, we re-establish trusting connections with others that foster healing and well-being.
Resilience and social-emotional learning	Trauma can derail the development of healthy skills in regulating emotions, cognitions, and behaviors, as well as healthy interpersonal skills, which may then compound trauma's negative effects.	Promoting wellness practices and building social-emotional learning competencies of self-management, self-awareness, social awareness, relationship skills, and responsible decision making (www.CASEL.org) help us to be resilient and more successful in school and at work.
Empowerment and collaboration	Trauma involves a loss of power and control that can make us feel helpless and hopeless.	When we are given meaningful opportunities to have voice and choice and our strengths are acknowledged and built on, we feel empowered to advance growth and well-being for ourselves and others and can work together to forward the cause of social justice.

(with repeated incidents) eventual expulsion. These reactions, however, are not an effective method for creating positive change for students like Ryan, nor are they effective for a school community. Further, unnecessarily punitive discipline procedures such as these add to the risk of such students dropping out or being pushed out of school (Public Counsel 2015).

One simple, profound change we can make in order to create more trauma-informed schools is a shift in perspective. In the face of confusing, undesirable behaviors, we tend to ask, "What is wrong with you?" If instead we ask, "What has happened to you?" we allow the opportunity to see beyond the surface behaviors to the underlying causes driving the behavior (Bloom 1995). Note that we are not suggesting that these questions are being or should be asked out loud, particularly in the middle of a heated situation. However, asking these questions internally can shift the way we understand, feel, and react to or respond to the situation. This shift is in accord with broader initiatives for creating more trauma informed-systems (Substance Abuse and Mental Health Services Administration 2014) and can facilitate a more effective and compassionate response that can help students succeed in school rather than engendering a punitive reaction that can ultimately lead to students' disengagement from school. Shifting our perspective, along with an understanding of the effects of chronic stress and trauma, can help schools recognize students like Ryan as needing support as opposed to simply requiring discipline.

Consider the vignette again, this time including the underlying chronic stress and traumatic events (i.e., what has happened?) and the resulting experiences of the student, teacher, classroom, and school (inserted in italics):

> Ryan is an *African American* fifth-grade boy *from a very low-income neighborhood where community violence is a frequent occurrence. He has been witnessing severe domestic violence between his parents since he was a baby. One night, in front of Ryan, his father beat up and injured his mother so badly that a neighbor called 911. His father was handcuffed and taken away by the police, and his mother was taken in an ambulance to the hospital. Ryan slept little that night, terrified by the events and anxious about what would become of his mother and father. In the morning, Ryan asked his neighbor to take him to school. Ryan attends a chronically under-resourced public school that serves children largely from Ryan's neighborhood. The school has experienced two lockdowns due to community violence in the past several months. Ryan's teacher has been overwhelmed by the large number of high-needs children in her classroom as well as the fact that there have been several physical fights between her students in recent weeks. As a relatively new teacher, she has been putting in many extra hours to try to prepare her lessons and manage student difficulties, and she is exhausted.* This morning, when Ryan arrived at school, his teacher, Ms. Lang, *who did not know about his traumatic ex-*

periences, asked him for his homework, but Ryan did not have it. She expressed frustration at him and took away his recess as a consequence. *Ryan was upset and triggered by being in trouble with his teacher.* A short time later, his deskmate accidentally bumped Ryan. *Ryan was already to some degree triggered into a heightened state of vigilance and preparation for defense against threat (i.e., survival mode), and this physical contact fully triggered him into a fight/flight/freeze reaction.* As a result, Ryan punched his deskmate in the stomach. Ms. Lang, naturally upset by this outburst, began to yell at Ryan to stop, *which further escalated him.* Ryan began screaming, kicked over a chair, and hid under his desk. After 10 minutes of trying to extract Ryan from the classroom *(during which time Ms. Lang felt frightened, helpless, and defeated and the other children in the classroom could only look on in fear and frustration),* Ryan was brought to the principal's office. Ryan was then suspended for 5 days for his behavior, *inadvertently exposing Ryan not only to a major loss of instructional time but also to a period of time during which he would have no refuge from the trauma and suffering in his home life* (Dorado 2012b).

When we ask, "What has happened to Ryan?" we can see that he has been impacted by chronic trauma and that his escalated behavior is a trauma-related reaction triggered by his interactions with his teacher and classmate. Similarly, when we ask, "What has happened to Ms. Lang?" we see that she is also experiencing a number of overwhelming stressors and is in a sensitized state that has made her vulnerable to being triggered by Ryan's behavior. Shifting our perspective and looking beyond the surface behaviors through a trauma-informed lens can help us to better understand behaviors and guides a formulation of what is needed to meet the needs behind these behaviors and to prevent escalations from occurring in the future. We can see that what is underlying the interactional escalation between Ryan and Ms. Lang is a triggered fear response, and thus what is needed above all else is to address the underlying fear and do what is necessary to help both Ryan and Ms. Lang feel safe. Asking "What has happened?" also allows us to see Ryan and Ms. Lang's strengths despite the adversities they are facing, such as Ryan's desire to come to school and Ms. Lang's dedication and diligence, and we can build on these strengths to promote resilience and school success.

As illustrated by the approach above, when we bring a trauma-informed lens to challenging situations, we advocate asking "What has happened to you?" not only for the student but also for the staff member, the classroom, and the school as an organization. Taking this wider approach has been crucial. This shift in perspective creates an opportunity to address burnout and secondary traumatic stress in teachers and other school staff. When staff begin to understand that they too are affected by chronic stress and trauma and experience attempts to alleviate these effects, their

capacity to recognize the importance of addressing the needs of their trauma-impacted student increases, and they can engage in this work with renewed empathy and hope. Working to counteract an "us versus them" mentality, in which there are traumatized students on one side and adults who have to deal with them on the other, HEARTS strives to foster a mentality of "we are all in this together," advancing the understanding that each and every person can play a role in creating a safer and more supportive school that benefits everyone in the school community.

The traditional mental health approach to addressing trauma in schools is to identify students and refer them to mental health services. However, even on-site, trauma-specific treatment is not enough to create meaningful change for trauma-impacted students and communities if psychotherapy is provided within the context of a negative, unsupportive learning and teaching environment. Although Ryan may be able to build coping skills in the therapy room, too often he will return to his classroom only to be inadvertently triggered into survival ("fight/flight/freeze") mode by trauma reminders in the school environment such as a sudden change in classroom routine, a challenging interaction with another student, or a disciplinary practice that he perceives as a threat. In a school where a student like Ryan is seen as a problem to be fixed, there is a risk that his learning and development might be set aside as the school system tries to find a way to "manage" Ryan and his behaviors. Thus, much of HEARTS aims at improving school climate—the norms, goals, values, interpersonal relationships, and organizational structures of a school. A safe and supportive school climate fosters learning and development and allows everyone at the school to experience growth and satisfaction.

A commonly used educational system approach that can promote supportive school cultures and climates as well as provide more intensive supports as needed is multi-tiered systems of supports (MTSS), a comprehensive framework for integrating and aligning academic and behavioral instruction and support. MTSS is often represented by the same triangular graphic as the one used in public health. Tier 1 indicates the bottom of the triangle and identifies universal supports for all students that are meant to be sufficient to serve the needs of most students. Tier 2 indicates the middle of the triangle, comprising selected interventions for students for whom the universal supports are not sufficient. Tier 3 indicates the smallest, top part of the triangle, which includes targeted and intensive interventions for students for whom both tier 1 and tier 2 supports are not sufficient.

The HEARTS program offers supports and interventions across all three MTSS tiers. Further, for each of the tiers, UCSF HEARTS attends to three levels of the school community: students, adults in the caregiving
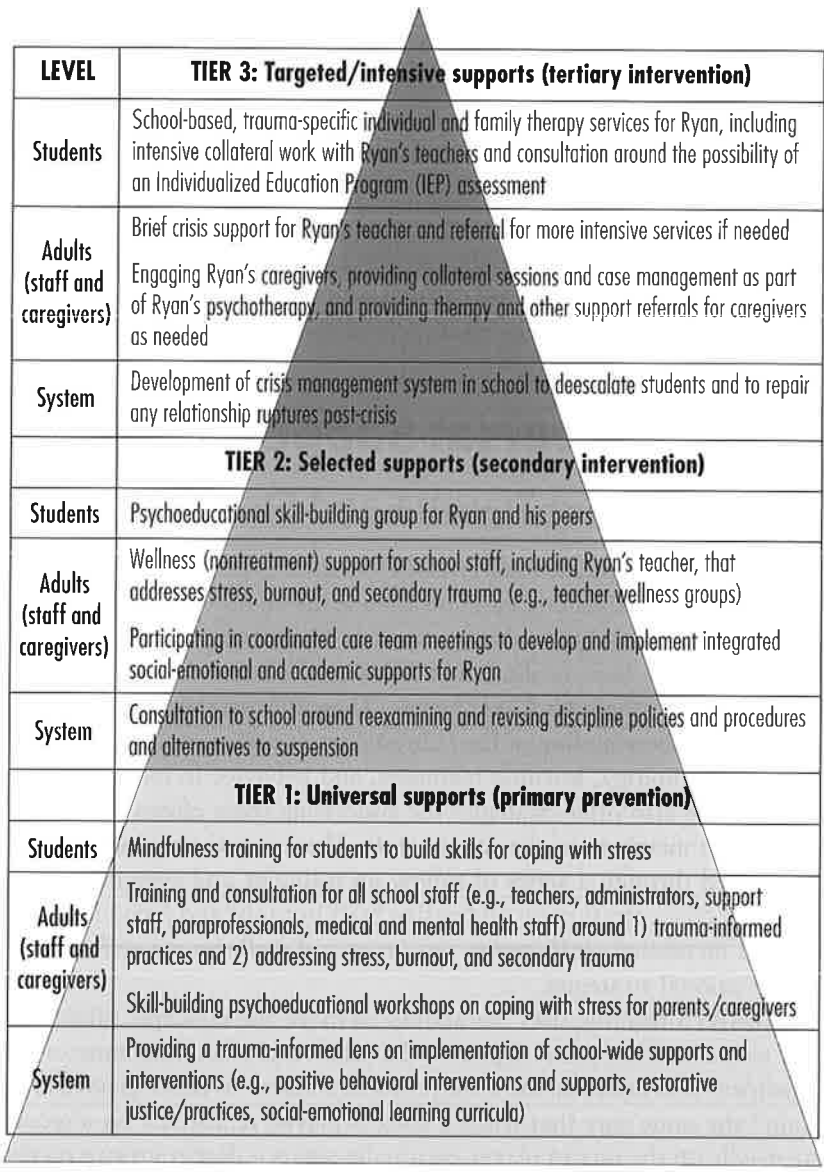
system (i.e., staff and caregivers), and the school system as a whole. (See Figure 8–1 for a sample of HEARTS supports across the three MTSS tiers that could help to support a student like Ryan.) The six trauma-informed principles are applied in all three tiers across all three levels, guiding development and implementation of practices, strategies, supports, and interventions. Because other chapters in this book cover tier 2 and 3 supports, the bulk of descriptions in the following sections will focus on an application of these principles to tier 1 aspects of HEARTS that are fundamental to making school cultures more safe, supportive, equitable, and trauma informed for the entire school community.

Tier 1: Universal Supports

Understanding Trauma and Stress

Since we began implementing HEARTS in 2009, we have recognized the importance of establishing baseline knowledge on how trauma affects individuals, relationships, and organizations as a whole. Therefore, as part of HEARTS, we have facilitated half-day professional development (PD) trainings before the school year begins. These PDs establish common language and understanding of how chronic stress and complex trauma can affect neurobiology, learning readiness, and behavior in individuals and systems. We also offer strategies for addressing these effects that can be used by all members of the school staff. These initial trainings are then augmented through a series of follow-up trainings and consultation, including a concentration on addressing staff burnout and secondary trauma and increasing staff coping resources and wellness via self-care and organizational strategies.

HEARTS training uses metaphors to make the concepts salient and easy to recall. The first metaphor is that of a vinyl record. Because of use-dependent alterations to the brain, chronic trauma "wears a groove in the brain" the same way that when a song is played repeatedly on a record, the needle on the record player eventually wears a deeper groove on that song's track (Dorado 2012a). A different song can be playing, but if the record player is bumped, the needle will skip across the record and land in the record's deepest groove. Indeed, that groove can become so deep that the needle gets stuck in this groove rather than going on to the next song. Consider Ryan's response to his teacher's reaction. Although the event may not seem traumatic from the outside, Ryan's brain may have been "bumped" into his deep "trauma groove" by Ms. Lang's raised voice

LEVEL	TIER 3: Targeted/intensive supports (tertiary intervention)
Students	School-based, trauma-specific individual and family therapy services for Ryan, including intensive collateral work with Ryan's teachers and consultation around the possibility of an Individualized Education Program (IEP) assessment
Adults (staff and caregivers)	Brief crisis support for Ryan's teacher and referral for more intensive services if needed Engaging Ryan's caregivers, providing collateral sessions and case management as part of Ryan's psychotherapy, and providing therapy and other support referrals for caregivers as needed
System	Development of crisis management system in school to deescalate students and to repair any relationship ruptures post-crisis
	TIER 2: Selected supports (secondary intervention)
Students	Psychoeducational skill-building group for Ryan and his peers
Adults (staff and caregivers)	Wellness (nontreatment) support for school staff, including Ryan's teacher, that addresses stress, burnout, and secondary trauma (e.g., teacher wellness groups) Participating in coordinated care team meetings to develop and implement integrated social-emotional and academic supports for Ryan
System	Consultation to school around reexamining and revising discipline policies and procedures and alternatives to suspension
	TIER 1: Universal supports (primary prevention)
Students	Mindfulness training for students to build skills for coping with stress
Adults (staff and caregivers)	Training and consultation for all school staff (e.g., teachers, administrators, support staff, paraprofessionals, medical and mental health staff) around 1) trauma-informed practices and 2) addressing stress, burnout, and secondary trauma Skill-building psychoeducational workshops on coping with stress for parents/caregivers
System	Providing a trauma-informed lens on implementation of school-wide supports and interventions (e.g., positive behavioral interventions and supports, restorative justice/practices, social-emotional learning curricula)

FIGURE 8–1. HEARTS tiered supports at three levels of intervention to support Ryan.

Source. Modified from Dorado JS, Martinez M, McArthur LE, et al: "Healthy Environments and Response to Trauma in Schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe, and supportive schools," *School Mental Health* 8:163–176, 2016, p. 165, Fig. 1, "Examples of HEARTS tiered supports at three levels of intervention." With permission of Springer, © Springer Science+Business Media New York 2016.

and his feeling of being in trouble, which act as trauma reminders or triggers. The neurobiological stress response takes over, and Ryan reacts as if he is actually under threat.

PDs also include information about how unaddressed trauma is associated with negative outcomes in attendance and school performance, including higher levels of school absence; lower grade point average (Hurt et al. 2001); and increased risk of school dropout, suspension, or expulsion (Eitle and Eitle 2004; Porche et all 2011) as well as ways that trauma affects the functioning of both the "learning brain" and the "survival brain" (for a review, see Ford 2009). In order for the learning brain to be fully engaged and learning ready, students need to feel safe. If they perceive that their safety is in question and they feel threatened, the survival brain takes over and the learning brain goes offline.

HEARTS uses the metaphor of a rider and a horse (van der Kolk 2014, citing Paul MacLean) to illustrate the brain science of this phenomenon with students and staff. The rider, or the learning/thinking brain, is the part that is able to see and consider the context of a situation, to plan, and to make rational decisions. The horse, or survival/emotional brain, is the part that is lower down and reacts quickly, powerfully, and instinctively on the basis of emotions and a need for protection. When these two parts are working together in an integrated way, they can do productive work and go far toward a goal. However, if triggered, the horse rears uncontrollably, and the rider falls off the horse, rendering the learning/thinking brain unavailable. In these moments, standard teaching techniques that attempt to appeal to the learning/thinking brain such as rewards and consequences, lecturing, or requiring the triggered person to explain his or her behavior by filling out a reflection worksheet are not likely to be effective and instead may further escalate the situation (Dorado et al. 2016).

Moreover, when school staff react to a student with their own riders off their horses, perhaps due to experiencing burnout or secondary trauma, they may inadvertently trigger the student into survival brain. Unaware of their own role in provoking this behavior, staff may then penalize the student for the challenging behavior that results. Ultimately, when we understand more about the ways trauma can affect the brain, we can respond to triggered behavior with the knowledge that the student is in survival mode and therefore can work to ensure safety rather than unintentionally making the situation worse.

In our trainings and consultations, we emphasize that trauma reactions have often served an adaptive function in helping a trauma-impacted person survive traumatic events. For example, a boy like Ryan who has wit-

nessed severe domestic violence may have learned to hide or run if someone looks like he or she might be angry. This behavior may be adaptive at home with Ryan's family because it helps to protect him from getting hurt, but at school it is less adaptive because without an understanding of the traumatic context of the behavior, school staff generally consider it unacceptable for students to run away from them and hide. We also highlight the fact that the brain can be rewired throughout the lifespan, instilling hope and encouraging teachers and adults who work with children and youth to continue to provide these young people with new experiences to change the wiring of their brains toward healthier ways of being.

Importantly, HEARTS centers on a systems approach to understanding how trauma affects not only individuals but also relationships, groups, and organizations. A system filled with people impacted by chronic stress and trauma can begin to act like a trauma-impacted organism, in which the organization experiences such symptoms as fragmentation, lack of cohesiveness and integration, extreme reactivity, numbness and lack of empathy, decontextualized decision making by those in authority, and an overly intense focus on threat reduction such that order, control, and rigid rules are prioritized at the expense of creativity, development, and innovation (Bloom and Farragher 2013). When staff are having these negative experiences in their schools, rather than asking, "What is wrong with our organization?" it is more helpful to ask, "What has happened to our organization?" This shift in perspective can help to reduce blame and finger-pointing and can help the organization to concentrate their efforts on healing the underlying chronic stress and trauma on an organizational level instead.

Cultural Humility and Responsiveness

Along with understanding trauma and stress, the principle of *cultural humility and responsiveness* is foundational to creating trauma-informed schools. Racism, sexism, heterosexism, xenophobia, and other forms of societal and institutionalized oppression can be experienced as a form of trauma, termed *insidious trauma* by Maria Root (cited by Brown 2008). Insidious trauma can be caused by the looming threat that one's safety and well-being are not as important as another person's safety and well-being because of the lottery of birth (e.g., the color of one's skin, how one talks, whom one loves, where one was born). When shifting the perspective from "What is wrong with you?" to "What has happened to you?" we advocate that schools consider the possibility that one of the things that may have

happened to a student (or adult) with challenging behavioral or emotional presentations could be the chronic experience of insidious trauma.

Furthermore, although most forms of trauma occur across class lines, the trauma of community violence disproportionately affects highly stressed, low-income urban neighborhoods, which, because of historical and institutional racism, are largely inhabited by communities of color (Buka et al. 2001). The negative impact of community violence and other types of trauma on school behavior and learning, combined with insidious trauma and the pernicious effects of implicit and explicit bias in individuals and institutionalized policies and procedures, can have a synergistically adverse effect on students from marginalized communities and can contribute to inequity in suspensions, expulsions, and dropout (Soto-Vigil Koon 2013), feeding what is known as the school-to-prison pipeline. The *school-to-prison pipeline* refers to the way that these inequitably administered punitive and exclusionary disciplinary measures result in students of color and students with disabilities being disproportionately pushed out of school and into the juvenile justice and prison population (e.g., Losen et al. 2012). Because Ryan is an African American student from a low-income community, implicit and institutionalized biases are likely factors that contribute to his school-related difficulties.

Because trauma feeds the school-to-prison pipeline, addressing trauma in schools is a crucial component of stemming this harmful pipeline's flow. Additionally, given that stress and time pressure exacerbate implicit bias (Casey et al. 2012), addressing chronic stress in educators and other school staff can also help to mitigate disproportionality. On the whole, educators are highly motivated to teach all children well and to eliminate the achievement gap. An understanding of how chronic stress and insidious trauma are related to the achievement gap and the school-to-prison pipeline can serve to propel schools toward seeking additional training on addressing the effects of implicit and institutional bias in educational and disciplinary practices. This can be a gateway for creating space to discuss cultural humility issues.

Safety and Predictability

Trauma understanding also helps to bolster practices that align with establishing *safety and predictability*. Because students, teachers, and people in general cannot upshift into learning/thinking brain if they do not feel safe (Cole et al. 2005; Ford 2009), it is critical that schools prioritize establishing physical, relational, and emotional safety for everyone in the school community. Furthermore, creating predictability in the environ-

ment is needed for members of the school community to be able to decrease energy spent being hypervigilant for unexpected stressors and instead focus their energy on learning and teaching. This principle is a simple entry point for many educators because they already have many skills in creating structure and predictability in the classroom that are part of standard practice, such as maintaining a written classroom schedule on a whiteboard.

Compassion and Dependability

Because trauma so often involves being harmed or betrayed by another person, forming and maintaining trusting relationships can be challenging for people impacted by trauma. *Compassionate and dependable* relationships are vital to counteracting the results of relational trauma. This is another principle that many educators are masters at before we begin working with them. We help deepen their understanding of why relationships help trauma-impacted students heal and succeed in school by describing interpersonal neurobiology. In the healthiest of circumstances, babies, who are not yet able to regulate their arousal states, obtain coregulation from their adult caregivers when they are in states of distress and dysregulation. When the adult caregiver is able to soothe a baby, this coregulation helps build and strengthen the baby's neural networks involved in calming down after distress, thus developing the child's capacities for self-regulation. However, complex trauma can interfere with the provision of healthy coregulation if adult caregivers are either the source of trauma or are unable to provide coregulation to the developing child because of their own suffering or impairments (Cook et al. 2003), as was the case in Ryan's family. This lack of coregulation can lead to a lag in the development of healthy self-regulation skills for children impacted by trauma.

Just as relationships can be the source of trauma, they can also be the healers of trauma. We are hardwired for attunement from a caring other to create a sense of felt safety (Siegel 2007) and to soothe us when we are feeling distress. Thus, our PDs have emphasized that part of the job of teachers and other school staff is to provide coregulation for students so that they can stay calm and keep their learning brains engaged and on track. We also underscore that staff need coregulation from colleagues and supervisors in order to achieve and maintain the self-regulated state they need in order to provide coregulation to students.

In order to ground our work in compassionate and dependable relationships, we offer collaborative, relationship-based, trauma-informed

consultation with teachers and other school staff. On-site consultation helps school staff apply the knowledge that they gain in PDs to their work with students, families, and colleagues. At HEARTS schools, HEARTS clinicians are present at the school site at least 3 full days per week. This allows them to bear witness to the difficulties that the school staff are facing, to establish and maintain supportive working relationships with staff, and to provide capacity building in real time, modeling for and supporting staff in vivo. This level of consultation helps to solidify learning and practice change.

Resilience and Social-Emotional Learning

Rather than becoming mired in the hardship and struggle caused by chronic stress and trauma and focusing solely on reducing negative symptoms, it is important to acknowledge and capitalize on strengths and proactively build social-emotional well-being. Developing social-emotional skills in emotion management, relationship building, and responsible decision making not only undergirds academic achievement but also is associated with resilience in the face of stress. Students like Ryan who have experienced complex trauma may not yet have had the opportunity to develop healthy social-emotional skills. Thus, explicit social-emotional learning instruction is especially important for students who are lagging in these skills because of trauma or other causes.

In order to foster *resilience and social-emotional learning*, we integrate trauma-informed practices with other district initiatives. For example, at the San Francisco Unified School District, we provided a trauma-informed lens to school staff's implementation of school-wide Positive Behavioral Interventions and Supports (PBIS), a framework that includes strategies and practices that promote prosocial behavior and social-emotional wellness (see www.pbis.org for information). Implementing PBIS can increase predictability in a school environment because PBIS sets clear expectations for behavior and espouses explicit instruction around these behaviors so that students are provided sufficient support to meet these expectations. The trauma-informed caveat is that staff may need to modify PBIS for some students to ensure that the supports are not inadvertently triggering. For example, in Ryan's case, public praise could be a trauma trigger because, given his family history, one of his survival strategies has been to hide and remain "under the radar." Until Ryan is well on the path toward healing from his traumatic experiences, private praise may be a more helpful form of support. Additionally, an understanding of how trauma and adversity can adversely affect the development of social-emotional

skills (e.g., emotion management) can help educators to enhance social-emotional learning curricula as needed.

We encourage periodic affect regulation activities, or *brain breaks*, emphasizing that practicing affect regulation on a regular basis can help to strengthen students' emotion management skills. When students are feeling stress or fatigue, such breaks can help to decrease stress arousal, reset the brain and body, and get students' energy level to where it is needed for the classroom task at hand.

Many of our HEARTS schools' classrooms also supplement whole class brain breaks with opportunities for individual students to use calming affect modulation tools when they need them. The materials are contained in a mobile "cool-down kit" or are placed in a space in the classroom (e.g., a "peace corner") where students can go for a few minutes when they are becoming dysregulated (Cole et al. 2005). We recommend that teachers establish routines and structure around the use of these tools, model appropriate usage, and refrain from using the space or kit as a consequence. We also underscore that although these trauma-informed practices can prevent disruptive behavior by providing an opportunity for self-regulation, they should augment, not replace, existing classroom management systems and practices.

In addition to boosting students' resilience, we also work to support resilience in school staff, providing training and consultation in science-based wellness strategies drawn from such sources as the Greater Good Science Center at the University of California, Berkeley. We advocate that schools build into the work day regular opportunities for staff to engage in activities that allow them to take better care of themselves and one another.

Empowerment and Collaboration

Because trauma by its nature can leave people feeling helpless, when youth experience chronic trauma, it can be difficult for them to believe that they can have agency in the world and rise up to challenges, which can hinder school success. Further, unnecessarily taking away a person's power or control around personally important issues can be particularly triggering to someone impacted by trauma. By creating opportunities wherein students and staff can exercise their voice and choice, we can begin to mitigate these negative effects. Knowing that one's voice is heard and that one's choices are valued contributes toward healing from trauma.

Inviting students to participate in team meetings centered on increasing their success in the classroom is one way that educators can facilitate

voice and choice. For example, when a student like Ryan is given the opportunity to *collaborate* with the staff support team to build a plan around coping with triggering situations, he feels *empowered* and is better able to use the resulting plan. Further, as students practice asserting their voices for their own personal needs, they may be more likely to seek out opportunities to use their voices to empower and benefit others. One trauma-impacted student in a HEARTS elementary school created a petition and rallied his classmates to speak up about a change in a school procedure that was important to them. This, in turn, further encouraged him to be more engaged in his own classroom learning.

Facilitating empowerment and collaboration by incorporating youth voices in the development and implementation of school-wide social-emotional support systems (e.g., PBIS) can make supports more relevant and practical for the young people we serve and can be an important component in the recovery process for youth impacted by trauma. Furthermore, we empower youth by providing them with knowledge about how their own brains and bodies react to stress and what they can do to self-regulate. Inviting youth to be peer educators and to share these concepts and strategies with classmates helps to engage them in promoting the health, resilience, and well-being of themselves and others.

Tier 2: Selected Interventions

The HEARTS core guiding principles are embedded in tier 2 interventions as well. In one main tier 2 intervention, the HEARTS consultant participates as part of a school's weekly coordinated care team, which typically consists of administrators and mental health, special education, and other support staff who meet regularly to discuss students and school-wide concerns. *Trauma understanding* guides the development of behavioral supports that are less punitive and more resilience building. For example, behavioral contracts are a commonly used tier 2 intervention for students demonstrating a pattern of inappropriate behavior. The behavior contract relies on a system of rewards and consequences designed to motivate the student to engage in more appropriate behavior. PBIS asserts that such contracts are effective for "won't do kids" who are choosing not to do what they are supposed to do in a given situation, but such contracts are not helpful for "can't do kids" who lack the skills to do what is being asked of them. In formulating behavioral contracts, it is important to understand that when triggered into survival brain, a student can temporarily change from a won't do kid to a can't do kid because his or her thinking

brain has been knocked temporarily offline and the student has lost access to the skills and knowledge that he or she normally has. In such circumstances, enforcing a behavioral contract with a triggered student becomes not only ineffective but unnecessarily punitive and retraumatizing.

HEARTS also delivers psychoeducational interventions for at-risk students that help to strengthen resilience and social-emotional learning. For example, we provide skill-building groups (e.g., improving self-regulation through teaching self-awareness and self-management skills) using evidence-based interventions and social-emotional learning curricula, as well as in vivo behavioral coaching during relatively unstructured periods (e.g., recess) to support the use of prosocial behavior for students who are at risk of being triggered into problematic behavior. In addition, we offer trauma-informed consultation and training to enhance implementation of alternatives to potentially punitive disciplinary practices. Around this aim, HEARTS dovetails with restorative practices (RP) and restorative justice (RJ) approaches that aim to build positive relationships and involve processes and practices that restore relationships when harm has been done.

One tier 2 practice in the RP multi-tiered continuum includes restorative conversations or circles, which provide a structure and process in which people who have been involved in a harm (both those who acted in a harmful way and those affected by these actions) have a voice regarding what happened and what the effects were, as well as choices about what should be done to repair the harm. A trauma-informed lens can help teachers and staff to implement RP and RJ more effectively. For example, one difficulty encountered in some schools is the use of restorative conversations while a student and/or staff member is still in a dysregulated state. RP implementation goes more smoothly when restorative conversations are postponed until everyone's rider is firmly back on the horse.

In addition, HEARTS provides supports to mitigate the effects of chronic stress and vicarious trauma on school staff. Through the coordinated care teams, we provide consultation on ways the team can support teachers who are struggling with difficulties associated with students impacted by trauma. We also offer skill-building wellness groups for school staff that address burnout and secondary traumatic stress in which staff discuss student and school issues that are causing them stress along with strategies for taking care of themselves and each other. When challenging school climate issues arise, we work to facilitate empowerment by supporting meetings or forums in which staff, as well as students and parents or caregivers, can be given real opportunities to voice their concerns and participate in making meaningful decisions about issues that affect them.

Tier 3: Targeted or Intensive Interventions

Tier 3 interventions are grounded in the HEARTS six principles as well. Tier 3 interventions include trauma-specific therapy provided on site by a HEARTS clinician to students who are highly impacted by trauma. Students are triaged into HEARTS therapy on the basis of recommendations from the coordinated care team. Therapy goals for students typically include building affect regulation skills, fostering compassionate, dependable relationships between students and their families, and processing trauma. Clinicians also work closely with students' caregivers to reframe each child's behavior through understanding trauma and to assist the family in building resilience and social-emotional skills around self-regulation and coregulation. Clinicians collaborate with students' teachers and other school staff in order to integrate staff's insights and information into their clinical assessments and treatments, as well as to promote the embedding of trauma-informed practices into the students' everyday school experiences.

Program Evaluation Summary

Program evaluation in the schools where the full three-tiered HEARTS program has been implemented for at least 2 years has yielded promising results (Dorado et al. 2016). Staff at HEARTS schools reported significant increases in their understanding of trauma's effects and in their implementation of trauma-sensitive practices. They also reported significant increases in their students' ability to learn, time on task, and school attendance and attributed these changes to the HEARTS program. Comparison of pretreatment and posttreatment data indicated that students who received HEARTS tier 3 psychotherapy demonstrated a significant decrease in trauma-related symptoms and a significant increase in their adjustment to trauma (ability to function in daily living), affect regulation, and ability to develop healthy relationships. In addition, in the school where HEARTS was implemented for the longest period (5 years), the following improvements were found: a 32% decrease in total disciplinary office referral incidents after 1 year and an 87% decrease after 5 years, a 43% decrease in incidents involving physical aggression after 1 year and an 86% decrease after 5 years, and a 95% decrease in out-of-school suspensions after 5 years (Dorado et al. 2016). Although these outcomes are from pretreatment-posttreatment program evaluation rather than from an experimental design

study, they indicate that HEARTS is a promising program deemed feasible, acceptable, and useful by educators.

Developmental Considerations

Elementary School–Age Children

Working with elementary school–age children can help prevent future behavioral and academic difficulties that can lead to school failure and dropout. Once children reach the age when they are spending most of their waking hours in school, schools with a safe and supportive climate can be an important protective factor that helps mitigate the effects of trauma and adversity. Caregivers' involvement in their child's schooling is another protective factor (Scales and Leffert 2014). Younger children are particularly dependent on adults for their safety and well-being. Thus, when a school-age child is having difficulty in school, it is crucial that professionals providing academic, behavioral, and/or mental health support to students work collaboratively with the child's caregivers. However, when caregivers do not have a positive working relationship with the school and/or they are themselves struggling with multiple stressors, adversity, and trauma, it can be difficult to engage them in their children's academic and social-emotional supports. HEARTS clinicians and consultants attempt to serve as a relational bridge between caregivers and the school, using a trauma-informed lens to create understanding about what may be getting in the way of caregiver involvement, as well as using trauma-informed principles to guide engagement strategies and approaches (e.g., fostering compassionate, dependable relationships with caregivers and empowering them to take an active part in developing and implementing their child's supports).

High School–Age Youth

HEARTS provides tier 1 professional development training as well as consultation around tier 2 and tier 3 interventions using trauma-informed RP in Oakland Unified School District high schools. When engaging high school educators, it is important to acknowledge and account for ways that high schools are structured differently from elementary and middle schools. For example, trainers must attend to the fact that high school teachers work with many more students than do their elementary school counterparts (often between 100 and 200 students), and thus they need

different (e.g., less time-intensive) strategies for developing caring and trustworthy relationships with their students.

In our work with high schools, it has been helpful to review normal adolescent brain development to illuminate why emotionally intense situations can lead to impulsive behaviors in typical adolescents. We explain that although an adolescent may have the physical stature and appearance of an adult, his or her brain is still "under construction," with the more fully developed survival/emotional brain (e.g., the limbic system) more likely to overtake the less developed learning/thinking brain (e.g., prefrontal cortex) when the youth is feeling strong emotions. Thus, adolescents commonly need compassionate, dependable adult allies to provide coregulation and thought partnering when navigating emotionally challenging situations. Moreover, experiencing complex trauma can exacerbate normal adolescent affect regulation challenges, so supportive relationships with trusted adults are all the more crucial.

Unfortunately, because adolescents can at times be perceived as threatening in a way that smaller children may not be, some of our most vulnerable youth may lose support from adults when they need it most (e.g., when youth are triggered into a fear response). Racial bias may make this worse for African American boys as young as 10 years old, who tend to be perceived as older and more culpable for their actions than their same-age peers (Goff et al. 2014). Perhaps because of this, we have experienced a relatively high demand for training around how to deescalate out-of-control, dysregulated students (e.g., students who hit or throw things), especially in middle and high schools. Reframing adolescent behavior in terms of normal brain development and adding a trauma-informed lens to this understanding can help adults keep in mind adolescents' potential vulnerability and need for help. In addition, using requests for deescalation training as an entry point for providing professional development around trauma-informed escalation prevention, deescalation, and postescalation repair has been an effective way to engage educators about the use of trauma-informed practices.

Challenges and Overcoming Them: Lessons Learned

One frequently encountered challenge has been educators' concern about not having the time or energy to add more to their heavy load of programs and initiatives to be implemented (e.g., PBIS, Common Core, RP). In or-

der to create time for professional development trainings, we have worked with school districts to secure funding for stipends to pay for staff time outside the normal work day when needed, as well as to offer continuing education credits when possible. Perhaps more importantly, we have underscored that a trauma-informed approach is not meant to be a stand-alone program to be added to educators' already full plate but instead can integrate with and augment a school's existing programs and practices so that they work more effectively for all students, including the students who otherwise tend to fall through the cracks. A trauma-informed lens can help a school community understand the reasons why investing time and energy in PBIS and RP practices is important, and conversely, these practices, when implemented in a trauma-informed manner, provide well-elaborated strategies and procedures for creating a more trauma-informed, safe, and supportive school.

Turnover in school leadership has also sometimes led to difficulties in program implementation. Because engagement with a school's leadership is essential for success, when school leaders change, we prioritize investing the time to establish a positive working relationship with the new leaders. We empathize with them about the difficulty of inheriting programs put in place by previous leadership. We provide a comprehensive overview of the values, principles, and strategies of HEARTS, discussing these points with the new principal to ensure that HEARTS is aligned with the principal's values and vision for the school. Further, buy-in from the majority of the school's staff about working with HEARTS has tended to help new leadership become more invested in program implementation. We also support the wellness and resilience of new school leaders by 1) developing a compassionate and dependable relationship with them that can provide coregulation in times of stress and 2) providing them with safe and predictable time and space to reflect with us about what they need to feel supported themselves, what they can do to provide trauma-informed leadership for their school, and what they believe is needed for their school community to succeed.

Implications for Social Justice and Policy

School reform efforts to improve school performance; close the achievement gap; and eliminate disproportionality in the meting out of punitive, exclusionary disciplinary measures have ranged from a push for more rigorous standardized testing and curricula (e.g., No Child Left Behind) to

major, disruptive structural change via administrative and staff replacements and school restructuring (e.g., U.S. Department of Education School Improvement Grants). However, without a trauma-informed lens that includes a cultural humility approach, even the most well-intentioned efforts can be derailed, and school failure and disproportionality can potentially be made worse. For example, when teachers experience intense stress and anxiety caused by the pressure to obtain high achievement test scores without sufficient support, this stress is passed on to students and can dysregulate students enough to interfere with their ability to access their learning brain and perform their best on these tests. Further, when policies compel replacement of principals and school staff (as was required at schools awarded School Improvement Grant funding), students lose educators with whom they have had caring, trusting relationships. These losses work at cross purposes with the goal of increasing school success for low-achieving students because they echo with the histories of traumatic loss experienced by trauma-impacted students, triggering dysregulation and hindering students' ability to learn. In this way, when attempts to improve school systems are not trauma informed, they can be trauma inducing as opposed to trauma reducing, harming many of the at-risk students whom these efforts are ostensibly aimed at helping.

In addition, we have come to realize the centrality of cultural humility and responsiveness as one of our foundational principles. In fact, it is clear that if an approach or intervention is not socially just (e.g., does not promote racial justice), then it is not trauma informed. Without a cultural humility lens, there is a risk that trauma concepts could be used to pathologize communities of color rather underscoring their resilience in the face of an inequitable sociopolitical environment and institutionalized oppression and the sociocultural trauma that can result.

Moreover, we believe that cultural humility and responsiveness are critical in our work to create safer, more supportive, and equitable school climates. For example, in looking at the demographics of staff at schools serving underresourced communities, we have often observed staff communities where credentialed teachers are largely white, whereas classified staff (e.g., paraprofessionals, school security guards, administrative assistants) are largely people of color, often from the same low socioeconomic status communities where most of the students live. Although classified staff do not have teaching credentials, in addition to their professional experience and training, they often bring tremendous assets to the table, including long-standing relationships with students and their families, invaluable lived experience, and an understanding of the strengths and challenges of communities served by the school. Yet classified staff have

frequently expressed to us that they feel disempowered, relatively unvalued, and left out of important decisions concerning the school community. Bringing a cultural humility approach to addressing this challenge is an important step in repairing ruptured staff relationships and knitting together a stronger, healthier school staff community.

Conclusion

UCSF HEARTS is a principle-driven, multi-tiered, whole-school approach for ensuring that all students are afforded the opportunity for both resilience and school success, despite the impact of trauma on some students' lives. Our aim is to use training and consultation to create school communities that promote safety, support, and equity and that make engagement and learning readiness possible. We offer the key components of HEARTS for school communities and professionals to consider when addressing chronic stress and trauma in their schools. Further, HEARTS core guiding principles can be used as a road map to guide the development and implementation of trauma-informed supports and interventions for creating learning and teaching environments where everyone in the school community—students and adults alike—can develop and thrive.

KEY CONCEPTS

- A trauma-informed schools approach applies the science of trauma, resilience, neurobiology, and systems theory to the goal of creating safe, supportive, equitable, and engaging learning and teaching environments that benefit everyone in the school community.
- A trauma-informed approach that involves whole-school culture change, as opposed to the traditional approach of identifying and referring symptomatic students to support services, is needed to create meaningful change for trauma-impacted students and school communities.
- The six HEARTS core guiding principles for creating trauma-informed schools (promoting understanding of trauma and stress, cultural humility and responsiveness, safety and predictability, compassion and dependability, resilience and social-emotional learning, and empowerment and collaboration) can be used as a road map for

developing and implementing strategies for mitigating the effects of trauma and chronic stress in schools.

• These core guiding principles should be applied not only to students but to all members of the school community, including teachers, paraprofessionals, support staff, administrators, and parents or caregivers.

• Integrating a trauma-informed approach with existing programs and initiatives (e.g., Positive Behavioral Interventions and Supports, restorative practices, social-emotional learning curricula), as opposed to implementing stand-alone trauma-informed programs, is key to feasibility, effectiveness, and sustainability of trauma-informed practices.

Discussion Questions

1. How might you apply HEARTS key elements and core-guiding principles for creating trauma-informed schools to your work in healing trauma given your role (e.g., as a clinician)?

2. Do your practices and interventions promote each of the six core guiding principles?

3. Do any of your practices or interventions inadvertently thwart any of the six core guiding principles?

4. In your work in healing trauma, do you consider the effects of family, school, neighborhood, culture, and societal context on your patient, and do you include these contextual factors in the interventions you provide?

Suggested Readings

Craig SE: Reaching and Teaching Children Who Hurt: Strategies for Your Classroom. Baltimore, MD, Paul H Brookes, 2008

Hammond Z: Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor Among Culturally and Linguistically Diverse Students. Thousand Oaks, CA, Corwin, 2015

Souers K, Hall PA: Fostering Resilient Learners: Strategies for Creating a Trauma-Sensitive Classroom Book. Alexandria, VA, ACSD, 2016

Goff PA, Jackson MC, Di Leone BAL, et al: The essence of innocence: consequences of dehumanizing black children. J Pers Soc Psychol 106(4):526–545, 2014 24564373

Hurt H, Malmud E, Brodsky NL, et al: Exposure to violence: psychological and academic correlates in child witnesses. Arch Pediatr Adolesc Med 155(12):1351–1356, 2001 11732955

Losen DJ, Martinez T, Gillespie J: Suspended Education in California. Los Angeles, CA, Center for Civil Rights Remedies at the Civil Rights Project at UCLA, 2012. Available at: http://civilrightsproject.ucla.edu/resources/projects/center-for-civil-rights-remedies/school-to-prison-folder/summary-reports/suspended-education-in-california. Accessed March 16, 2018.

Porche MV, Fortuna LR, Lin J, Alegria M: Childhood trauma and psychiatric disorders as correlates of school dropout in a national sample of young adults. Child Dev 82(3):982–998, 2011 21410919

Public Counsel: Fix School Discipline: Toolkit for Educators. Los Angeles, CA, Fix School Discipline, 2015. Available at: http://fixschooldiscipline.org/educator-toolkit. Accessed March 16, 2018.

Scales PC, Leffert N: Developmental Assets: A Synthesis of the Scientific Research on Adolescent Development, 2nd Edition. Minneapolis, MN, Search Institute, 2014

Siegel D: The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being. New York, WW Norton, 2007

Soto-Vigil Koon D: Exclusionary School Discipline: An Issue Brief and Review of the Literature. Berkeley, CA, Chief Justice Earl Warren Institute on Law and Social Policy, Berkeley School of Law, University of California, April 2013. Available at: www.law.berkeley.edu/files/BMOC_Exclusionary_School_Discipline_Final.pdf. Accessed March 16, 2018.

Substance Abuse and Mental Health Services Administration: SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach (HHS Publ No SMA-14-4884). Rockville, MD, Substance Abuse and Mental Health Services Administration, July 2014. Available at: https://store.samhsa.gov/shin/content/SMA14-4884/SMA14-4884.pdf. Accessed March 16, 2018.

van der Kolk B: The Body Keeps the Score. New York, Viking, 2014