EVIDENCE BASED INTERVENTION



Trauma-Informed School Programing: Applications for Mental Health Professionals and Educator Partnerships

Brenda M. Morton¹ · Anna A. Berardi¹

Published online: 27 June 2017 © Springer International Publishing AG 2017

Abstract An alarming number of children experience significant trauma or chronic stress throughout childhood, manifesting in cognitive, social, physical, and emotional impairment. These challenges are expressed in the P-12 academic setting through difficulties with behavioral and emotional self-regulation, academic functioning, and physical ailments and illness. Advances in trauma-informed care, as applied to the school environment, have inspired new hope for educators who observe first-hand the learning challenges facing traumatized children. This article defines the nature of the problem along with a guiding framework to assist educators and mental health professionals in transforming to a trauma-informed school culture.

Keywords Child abuse · Chronic stress · Trauma-informed · Mental health professionals · Educators

Educators have long known that many students face significant challenges engaging in academic and social tasks of the school environment due to severe and / or chronic traumatic stress (Cozolino 2013; Rossen and Hull 2013). Across disciplines, many are alarmed by the emerging data confirming our suspicions: Unacknowledged childhood trauma has detrimental impacts across the lifespan on health and wellbeing (Centers for Disease Control and Prevention 2015). On a positive note, our understanding of the interconnectedness of safe

Brenda M. Morton aberardi@georgefox.edu

Anna A. Berardi bmorton@georgefox.edu and sustained attachment and the neurobiology of stress and trauma has increased, offering confirmation that traumainformed methods of response are healing and increase resilience (Cozolino 2014; Siegel 2012).

This article details conceptual elements to promote an effective and sustained shift to trauma-informed school programming. First, we affirm a rationale for trauma-informed school environments due to the pervasive impact of childhood stress and trauma on academic and social learning. Characteristics of trauma-informed schools are then detailed, including the distinct knowledge and dispositions required of educators and mental health professionals. Emphasis is placed on the responsibilities of educator and mental health professionals, as cross-collaboration is key to creating communities of care that support parents, students, and educators.

Trauma as Barrier to Academic Success

Attachment, Trauma, and Readiness to Learn

ACE data has had a startling impact on our social consciousness. Current statistics indicate that perhaps more than 50% of all adults have experienced significant childhood trauma. And while most of us display resiliency in the face of these traumas, there is a staggering positive correlation between the quantity of childhood adverse events and the bio-psycho-social challenges faced by those children as adults (Centers for Disease Control and Prevention 2015). These statistics have greatly motivated communities to break the cycle of childhood abuse (Massachusetts Advocates for Children 2013; Prewitt 2014.)

The impact of childhood chronic stress and trauma on adult functioning corresponds with current understandings regarding how our attachment relationships are the foundation of creating internal resiliency schemas and corresponding

¹ College of Education, George Fox University, Newberg, OR 97132, USA

neurobiological structures (Siegel 2012). The psychosocial impact of trauma undermines the creation or sustainment of the child's resiliency structures. A trauma-informed response invites us to examine the interrelationship between attachment theory and neurobiology to understand how adverse events impact the child. In so doing, greater insight is gleaned regarding the pivotal role schools play in mitigating the impact of childhood trauma.

Anxiety Management and Emotional Dysregulation

Attachment theory acknowledges that the human experience is characterized by anxiety, whether real or imagined, and it is through sustained attachment relationships that we gain the internal confidence and skills to manage that anxiety as it ebbs and flows on a daily basis (Berardi 2015; Bowlby 1988; Cozolino 2013). This care provided by trusted others creates internal schemas that life is manageable, despite inevitable uncertainties and co-existing anxieties. Anxiety is thus managed, as we trust that if and when we need help along the way, we know we can reach out to an available community of care.

This ability to feel safety despite the presence of anxiety reflects the building blocks of self-efficacy, frustration-tolerance, delayed gratification, and empathy. Securely attached students are able to increasingly tolerate environmental demands as an outgrowth of receiving sustained care, even as they learn that self and other are never all knowing or all caring. This builds the student's inner confidence that anxiety can be tolerated and managed, help is available as needed, and that eventually all will be well (Berardi 2015). Thus, the securely attached student is better equipped to return to and maintain emotional and physical homeostasis, allowing effective use of new and previously learned self-regulation skills.

Repeated misattunement, characteristic of chronic stress and trauma, robs the child of extended states of relaxation, impairing the parasympathetic nervous system's ability to return the body to a homeostatic state of calm, undermining fragile neurostructures central to anxiety management and emotional regulation (Siegel 2012). The child experiences an over-abundance of norepinephrine and cortisol surges, placing stress on the child's emotional and cognitive processing, digestive, and immune systems, further increasing the child's vulnerability to social, emotional, and physiological dysregulation brought on by sustained distress (Everly and Lating 2012; Van Der Kolk 2014). Such dysregulation overwhelms the child's ability to cope, inviting reactive behaviors such as withdrawal or aggression, further complicating the child's social interactions (Cozolino 2014). This interferes with learning, including the ability to focus and take in new information, and the ability to access previous learning (Perry 2006; Rossen and Hull 2013).

Heightened anxiety indicates that the child may be in a chronic flight-fight-freeze response state characterized by a

continual production of norepinephrine (Everly and Lating 2012; Van Der Kolk 2014; Vermetten and Bremner 2002). The academic and social challenges of the school environment can trigger this threat response expressed in unpredictable, impulsive, or otherwise inappropriate behaviors (Carrion and Wong 2012; Perry 2006; Souers and Hall 2016). The classroom teacher often misinterprets the behavior as simple defiance or disinterest. Rather, the child who is withdrawn, not completing assignments, skipping class, relationally disengaged, or escaping into drugs is often exhibiting traumainduced flight behaviors. Fight responses can include acting out, physical aggression, defiance, hyperactivity, and emotionally combative responses (Souers and Hall 2016). Freeze behaviors are more difficult to detect and represent a more severe coping response and can include severe withdrawal, dissociating that appears to be daydreaming or lack of focus, and the inability to commit new information to short term memory (Everly and Lating 2012). Often these behaviors are met with punitive responses ranging from grade deductions to school expulsion. Teachers logically experience frustration due to the student's lack of engagement and learning. Without understanding the experiences of students impacted by trauma, teachers are unable to mitigate extraneous stimuli that could trigger a stress response or learn how to assist the child return to a state of calm after responding to a trigger (Holmes et al. 2014). Teachers are often on their own to interpret and assist a student in distress amidst a classroom of children.

Learning and Cognitive Processing

Each area of the brain develops and adapts as it is exposed to both positive and negative stimuli. The prefrontal cortex, cerebellar vermis, and hippocampus are three of many regions critical for cognitive functioning, including short term to long term memory conversion, abstract reasoning, and problem solving and are most susceptible to impairment due to chronic stress and trauma (Carrion and Wong 2012; Rossen and Hull 2013). When children are exposed to traumatic events or experience prolong periods of stress, their central nervous system becomes overstimulated as the short term norepinephrinedriven fight-flight-freeze response and the long term cortisoldriven General Adaptation Syndrome response systems are activated (Everly and Lating 2012; Van Der Kolk 2014; Vermetten and Bremner 2002). Over exposure to stressresponse hormones impair the functioning of these and other structures essential to cognitive processing.

The impact of chronic or traumatic stress on brain development and functioning is most apparent in student academic and social struggles (Rossen and Hull 2013). The student is unable to engage in academic tasks when the central nervous system is in a constant state of high norepinephrine and cortisol production. Instead, anger and fear escalate, as the prefrontal cortex is not effective in mitigating the alarm signals of the limbic system (Everly and Lating 2012; Vermetten and Bremner 2002).

Therefore, survival becomes the dominant priority for students, not academic and social learning. This means that children are unable to recognize the difference between a threatening and non-threatening situation, or form working relationships with adults and often peers. Likewise, their capacity to express one's inner experience in words is also greatly diminished, further compounding social interactions (Landreth and Bratton 2015; Massachusetts Advocates for Children 2005).

Hence, students commonly find themselves overwhelmed by the activities, directions, and the visual and auditory stimuli in the school environment. The social and academic pressures to be competent in arenas where struggle is expected compound this. For stressed children, this common struggle triggers a cascade of fear and anxiety. The heightened state of alarm with its attendant impairment in higher order reasoning and language expression impairs students' abilities to articulate what they are feeling, or to ask for help.

Teachers rely on students to be able to ask for what they need, explain what they do not understand, or to be able to answer questions when asked. However, once the student's stress response circuitry is activated, it is not uncommon for teachers to misinterpret the response or actions of the student. If this misinterpretation or miscommunication is not resolved, it often results in classroom exclusions, such as an office referral, restrictions on necessary breaks such as recess, or more serious actions such as suspensions or expulsions (Perry 2006). Suspensions are a predictor of negative student outcomes, including crime, delinquency, and drug use (Hemphill et al. 2014), lower grade point averages, higher rates of absences, decreased reading ability, and higher rates of school leaving (Souers and Hall 2016).

As indicated, children with trauma histories generally present with psychosocial, cognitive, and physical vulnerabilities. These challenges are often expressed through difficulties with behavioral and emotional self-regulation (acting out or withdraw behaviors), academic functioning (completing grade-level academic tasks), and physical ailments and illness related to chronic stress-induced compromised immune systems (Commodari 2013; Geddes 2006; Nagel 2009). The root cause of these difficulties is often unintentionally ignored due to school-based systems not equipped to understand and effectively respond to the needs of the traumatized child (Berardi and Morton 2017). The absence of processes to address these challenges contributes to the greater likelihood of the next generation of adults experiencing psychosocial and behavioral health challenges, including relational and economic struggles, and higher mortality and crime rates (Centers for Disease Control and Prevention 2015; Monahan et al. 2014).

Trauma-Informed Schools as Response

The prevalence and impact of trauma on students' ability to meet the academic and social demands of the education environment presents educators and the greater community with the responsibility to act. It is not the sole responsibility of educators, and the change needed cannot be metabolized after a few in-service orientations. But change is imperative lest we continue to produce marginal to dismal outcomes in many of our most vulnerable school districts.

In response to this urgency, a growing movement toward creating trauma-informed schools has steadily gained momentum (Craig 2016; Massachusetts Advocates for Children 2005, 2013; Prewitt 2014; Stevens 2015). It signifies a shift in communities taking greater levels of ownership over responding to the social and emotional needs of one another rather than delegating this strictly to mental health professionals. Students' recovery requires a community-based way of being in relationship with each other, using relationship to heal relational injuries as prerequisite to, and co-occurring with, academic achievement (Berardi and Morton 2017).

These changes cannot be formalized and implemented in isolation, but in partnership with mental health and education professionals, both of whom have trauma-informed training and expertise. Such multidisciplinary partnerships work in collaboration with districts to design implementation strategies relevant to that district's needs, including parent support meetings, and provide ongoing training, coaching, and consult with educators as trauma-informed skills and dispositions are more fully developed. We examine these elements in greater detail below.

Characteristics of Trauma-Informed Schools

Trauma-informed school program training prepares educators to apply the trauma-attachment-neurobiological conceptual model of trauma response to the school environment (Berardi and Morton 2017; Craig 2016; Kinniburgh et al. 2005; Siegel 2012; Van Der Kolk 2014). Communication methods, including both instructional and student management techniques, are informed by this literature, contextualized according to the staff person's role and the needs of the students. The trauma-informed approach is not viewed as a separate set of activities or an occasionally-used set of tools, but as a paradigm shift with its attendant content domain foundational to helping children master academic and social challenges throughout their schooling. This shift has significant training implications for current and future educators, and requires sustained partnerships with parents, students, school personnel, and trauma-informed experts who assist in training and implementation (Children's Defense Fund 2014; Massachusetts Advocates for Children 2005, 2013).

This framework allows the educator to hypothesize that children's defiant or non-engaged behaviors in the school environment may be logical stress reactions congruent with the nature of sustained loss and trauma. Before instruction can begin, overly stressed students need safety and stabilization in order to return to a state of calm. These are achieved by assuring students that they are understood, valued, and are in a relationally safe space. Students begin to associate school as a secure base when these attachment-informed responses are characteristic of the broader school system, allowing growth and development to resume and thrive.

This conceptual model co-exists with educator dispositions informing the creation of specific cultural practices including teaching methods, classroom management, daily routines, ritual, and processes. Examples of trauma-informed dispositions for school personnel include curiosity and compassion for the life circumstances of each student; unwavering acceptance of each child regardless of the student's successes or failures; commitment to creating a trauma-informed culture of care in each classroom reflective of the school and district's same commitment; and a view of discipline or structure as a method of providing safety to self and other while affirming the student's ability to learn less harmful coping measures (Berardi and Morton 2017).

Implementation Partnerships: Responsibilities and Challenges

Educators are experts in pedagogy, informed by cognitive development, learning theory, and associated teaching methods designed to promote learning outcomes for a particular grade level or subject matter (Rossen and Hull 2013). Today's student learning challenges resulting from severe and/or chronic stress require educators to re-examine conceptual models. Advances in our understanding of the prevalence and impact of trauma indicate that trauma-informed school programming form the basis for re-conceptualizing how educators approach their work with P-12 students (Massachusetts Advocates for Children 2005; Rossen and Hull 2013).

While the reasons for this needed shift are grievous (student suffering and the challenge this presents for educators), advanced knowledge in trauma response and how this can be incorporated into the school setting provides hope. But it presents a challenge: How to develop trauma-informed competencies in educators, a profession that has historically not considered this as part of its conceptual framework. This endeavor requires educators and mental health professionals to form a new partnership, as trauma-informed school programing requires an integration of each other's knowledge domains and skills. In this section we examine the challenges and conceptual shifts required by educators and mental health practitioners to ensure effective and sustainable implementation of trauma-informed school programming.

Educator Challenges

The role of the teacher is complex. In recent years, there has been greater focus on school climate, academic outcomes, and the role of the classroom teacher. Due to an increase in challenging student behaviors, high stakes testing, and new accountability standards for teachers, it is not surprising that approximately 50% of all teachers will leave the profession within five years of accepting their first position (Pas et al. 2012).

Teachers are charged with meeting the academic needs of each student in their classroom. Their job performance is evaluated in large part by student scores on high stakes exams. This creates competing tensions between meeting the needs of students and focusing on content. Teachers are facing tremendous pressure to get through material and prepare students for the test, over ensuring each student has learned the previous day's content. To compound their role, many of their students have been impacted by trauma, resulting in behavioral, social, and academic challenges. The pressure to make it through the assigned curriculum, coupled with no understanding of the barriers to academic achievement for trauma-impacted students, results in frustration on the part of the teacher, which becomes burnout if left unmitigated. The students' reaction will, most likely, be misunderstood, resulting in merely behavioral consequences (such as classroom exclusion) rather than coupled with traumainformed reasoning and response intended to partner with the student to deescalate reactive behaviors.

This disconnect, however, is not limited to the individual teacher and their classroom. Schools have many initiatives designed to support students but often require school personnel to focus in multiple directions. Divided by expertise, grade/content level teams or subjects, there is often little to no collaboration between all school professionals, creating silos. With each new initiative or program, teachers are logically hesitant to buy into what is often perceived as the latest fad, especially when it undermines instruction time or efficacy in producing the student outcomes for which they are evaluated. This includes trauma-informed practices.

These challenges must be considered when creating an implementation strategy that is practical, effective, and sustainable over time, lest trauma-informed programming become a fad at least or a misapplied and ineffective concept at worst. The following offers meta-structure recommendations in response.

Expand Educator Conceptual Frameworks Advances in neurobiology, specifically the impact of chronic stress and trauma on brain function and development, further confirm what educators have known: Traumatized children, often labeled with a range of mental health disorders, struggle academically and socially in the school environment (Cozolino

2013; Craig 2016). Rossen and Hull (2013, p. 265) point out that "schools are not in the mental health business; their mission is to educate." However, without addressing the mental health challenges their students have, their ability to educate is drastically limited.

Trauma-informed competencies (outlined in the next section) provide an added conceptual framework to learning theory and teaching methods, and are designed to address the neurological issues, hence cognitive, emotional, and social barriers, to learning (Cozolino 2013; Craig 2016). Due to the complex needs of traumatized students, it is imperative that the role of the school and classroom teacher be expanded to include understanding and responding to the trauma-induced challenges of students. This expanded conceptual framework enables educators to see the contextual relevance to demonstrating trauma-informed competencies as foundational to student learning and development. Without this expansion, schools will be unable to achieve their mission.

Nurture Multidisciplinary Collaboration Educators by nature are able to accomplish the multitude of tasks associated with the functioning of a school due to clearly defined roles and responsibilities. In addition, schools are microcommunities charged with the education of the next generation; safety measures are in place to protect the integrity of the classroom and the teaching profession. Both of these professional qualities, endemic to the nature of teaching, invite silos, the tendency to become a closed system and hence eschewing co-collaborations with others, whether within our immediate system or the broader community.

Trauma-informed school programming requires everyone to get on board the bus - from school board members to bus drivers, credentialed and non-credentialed staff alike; all persons regardless of roles are instrumental to creating a unified, cohesive trauma-informed environment promoting student learning and development.

Successful program implementation and sustainability also requires educators to collaborate with trauma-informed mental health educators. The training, coaching, and monitoring process is not merely content driven, but involves coaching educators in perceptual, conceptual, and executive skills historically embedded in mental health training programs.

Implement Trauma-Informed Specializations in Teacher Preparation Programs To support this critical move to trauma-informed practices in schools, teacher preparation programs must also join in the effort. Teacher preparation programs need to implement trauma-informed competencies as a content domain and demonstrate how these competencies can reduce classroom management challenges and promote optimal cognitive functioning needed to learn. This allows teacher candidates to implement trauma-informed classroom teaching and management strategies in their clinical practicum settings, further resourcing their field placement sites as well as honing their trauma-informed skills. These competencies will prepare teachers to enter into their first year of teaching with added confidence that they can address today's student learning challenges. Likewise, it ensures graduating teachers are qualified to teach in established trauma-informed schools or can serve as a support to schools not yet implementing trauma-informed programming.

Mental Health Practitioner Challenges

Require Trauma-Informed Expertise No longer can it be assumed that all mental health professionals are competent to respond to trauma, given the advances in traumainformed knowledge. Prior to partnering with educators, the mental health practitioner must demonstrate traumainformed competencies.

This expectation is congruent with a foundational principle for mental health professionals embedded in ethical codes and state licensing laws to not practice beyond one's scope of competence and practice. For the mental health professional to practice effectively, the following trauma-informed competencies are expected (Brymer et al. 2006; Council for Accreditation of Counseling and Related Educational Programs 2015; George Fox University 2016; Substance Abuse and Mental Health Services Administration 2014):

- Nature of Trauma: The trauma-informed practitioner understands the prevalence and types of trauma, and mitigating factors impacting risk and resiliency.
- Impact of Trauma: The trauma-informed practitioner is aware of current research regarding the physiological, emotional, and social impact of severe stress and trauma. This includes neurobiological and developmental (attachment and cognition) components.
- Best Practice Response: The practitioner is aware of and has demonstrated competencies in phase- and contextspecific interventions, including wellness, prevention, immediate and long-term treatment interventions for acute and chronic traumatic events.
- Trauma Response as a Community-Wide Endeavor: The trauma-informed practitioner is able to differentiate between therapeutic acts of care or response versus treatment, and is able to provide appropriate instruction and supervision to professional and peer / community-based responders.

The mental health practitioner is expected to demonstrate expertise in the integration of these competencies prior to training and supervising others, specifically school-based professionals, in trauma-informed programming. Nurture Multidisciplinary Collaboration In the mandate to do no harm and not promote mental health treatment outside of one's profession-specific education and training processes, mental health practitioners commonly function within silos, rarely venturing outside of our content domains to share our knowledge and skills with other professions that may benefit. Likewise, we may be reticent to learn from other disciplines with knowledge and expertise that may be of value to our work. The community-wide response to the prevalence and impact of trauma requires all of us to examine our silos and rethink cross-collaborations.

Trauma-informed mental health professionals naturally understand that multidisciplinary collaboration with other professions, for example, educators, is both logical and necessary in order to respond to human suffering. Embedded within trauma-informed competencies are two key concepts central to assisting mental health professionals in their partnership with educators. The first is the recognition that healing does not occur exclusively as a result of professional mental health treatment. While psychotherapeutic treatment addresses many distinct issues with intervention strategies only appropriate in that venue, trauma-informed knowledge and strategies are informed ways communities can provide nurture and structure to one another as both building blocks to general health and in response to severe stress and trauma (Brymer et al. 2006).

The second concept expands on the idea that not all therapeutic strategies merely belong in the treatment environment, and can, in fact, be enacted by parents, educators, and others trained in trauma-informed care. This concept is central to peer-assisted models of care (Brymer et al. 2006, 2012; International Critical Incident Stress Foundation 2016), parenting-child training programs (Landreth and Bratton 2015), as well as trauma-informed school programming.

This conceptual framework helps the mental health professional partner with educators (P-12 educators, administrators, and teacher educators) without fear of compromising practice standards but as part of our ethical mandate to collaborate in multidisciplinary environments on behalf of promoting healing and resiliency. In this case, mental health professionals play a central role in assisting educators in the development of trauma-informed competencies. Such tasks include:

- Learning about the skills and dispositions of the education profession, along with the context-specific challenges of the educators seeking to implement trauma-informed practices.
- Training educators in trauma-informed concepts and core skills. Ideally and eventually, team-teach with traumainformed educators.
- Collaborating with educators to implement concepts contextualized according to the needs of the educator, students, and learning environment.

- Providing peer consultation and coaching throughout an academic year, and on occasion as needed.
- In partnership with the educator, gathering efficacy data on desired staff and student outcomes.

Parents as Collaborators

A key component contributing to the success of a traumainformed school is parent participation, an element often missing in school-based initiatives. A misleading conclusion is that parents are solely responsible for the level of trauma children experience. Likewise, school personnel are not equipped with the time and resources to directly serve or include parents in collaborative projects. Both of these factors may contribute to reticence on the part of trauma-informed school program implementation teams to include parents.

This underscores the importance of partnerships with trauma-informed system's trained mental health professionals. Parents are often the first to know that their children struggle. As we deepen our understanding of the multigenerational impact of trauma, environmental factors stressing parents, and the sudden twists of fate that undermine the safety and stability of a family, a trauma-informed response to parents inspires deep empathy for the entire family while offering parents a way to contribute to healing multigenerational traumas. Parents are students' best allies and must be included as partners with the trauma-informed school program implementation process.

Trauma-Informed Communities of Hope

Trauma-informed school programming is designed to be transformative for parents, students and staff. As a side note, there is much hope embedded within traumainformed practices that is accentuated in the cross collaborative process. These authors, an educator and a mental health practitioner, have deepened our own traumaresponse work as a result of walking into one another's professional worlds as we have designed trauma-informed school program trainings and certifications. While we already see promising data regarding the benefits of traumainformed schools on student outcomes (ACEs Connection Network 2016; Craig 2016), teacher job satisfaction and retention rates (Pas et al. 2012), we also invite you to see the trauma-informed approach as a way of being in the world that breaks down walls and builds community. We are all impacted by trauma in ways known and unknown; the trauma-informed response has at its core a method of helping us all learn how to give and receive care in more informed ways that is of mutual benefit to us all.

Compliance with Ethical Standards

Conflict of Interest Author A, Brenda M. Morton declares that she has no conflict of interest.

Author B, Anna A. Berardi declares that she has no conflict of interest.

References

- ACEs Connection Network. (2016). Retrieved from http:// acesconnection.com.
- Berardi, A. (2015). Mahler, Margaret. In E. S. Neukrug (Ed.), *The SAGE encyclopedia of theory in counseling and therapy* (pp. 624–626). Thousand Oaks: SAGE Publications.
- Berardi, A., & Morton, B. (2017). A rationale for a trauma-informed school approach to maximize academic success with students in foster care. *The Journal of At-Risk Issues*, 20(1), 10–16.
- Bowlby, J. (1988). A secure base: parent-child attachment and healthy human development. New York: Basic Books.
- Brymer, M., Jacobs, A., Layne, C., Pynoos, R., Ruzek, J., Steinberg, A., Vernberg, E., & Watson, P. (2006). *Psychological first aid: field operations guide* (2nd ed.). Los Angeles: National Child Traumatic Stress Network.
- Brymer, M., Taylor, M., Escudero, P., Jacobs, A., Kronenberg, M., Macy, R., Mock, L., Payne, L., Pynoos, R., & Vogel, J. (2012). *Psychological first aid for schools: field operations guide* (2nd ed.). Los Angeles: National Child Traumatic Stress Network.
- Carrion, V. G., & Wong, S. S. (2012). Can traumatic stress alter the brain? Understanding the implications of early trauma on brain development and learning. *Journal of Adolescent Health*, 51(2), S23–S28.
- Centers for Disease Control and Prevention. (2015). Ace study: major findings. Retrieved from http://www.cdc.gov/violenceprevention/ acestudy/findings.html.
- Children's Defense Fund. (2014). Issue brief: building trauma-informed systems of care for children in Ohio. Retrieved from http://www. cdfohio.org/research-library/documents/building-trauma-informed. pdf.
- Commodari, E. (2013). Preschool teacher attachment, school readiness and risk of learning difficulties. *Early Childhood Research Quarterly*, 28(1), 123–133.
- Council for Accreditation of Counseling and Related Educational Programs. (2015). 2016 CACREP standards. Alexandria: Author.
- Cozolino, L. (2013). The social neuroscience of education: optimizing attachment and learning in the classroom. New York: W. W. Norton.
- Cozolino, L. (2014). *The neuroscience of human relationships: attachment and the developing social brain* (2nd ed.). New York: W.W. Norton.
- Craig, S. E. (2016). Trauma-sensitive school: Learning communities transforming children's lives, K-5. New York: Teachers College Press.
- Everly, G. S., & Lating, J. M. (2012). A clinical guide to the treatment of the human stress response. New York: Springer.
- Geddes, H. (2006). Attachment in the classroom: the links between children's early experience, emotional well-being and performance in school. London: Worth Publishers.
- George Fox University. (2016). Post-graduate certificate in trauma response services. Retrieved from http://www.georgefox.edu/catalog/ graduate/soe/counsel/certtrauma.html.
- Hemphill, S. A., Plenty, S. M., Herrenkohl, T. I., Toumbourou, J. W., & Catalano, R. F. (2014). Student and school factors associated with

school suspension: a multilevel analysis of students in Victoria, Australia and Washington state, United States. *Children and Youth Services Review*, *36*, 187–194.

- Holmes, C., Levy, M., Smith, A., Pinne, S., & Neese, P. (2014). A model for creating and supporting trauma-informed culture for children in preschool settings. *Journal of Child and Family Studies*, 24(6), 1650–1659. doi:10.1007/s10826-014-9968-6.
- International Critical Incident Stress Foundation, Inc. (2016). Certificate of specialized training. Retrieved from http://www.icisf.org.
- Kinniburgh, K. J., Blaustein, M., Spinazzola, J., & Van Der Kolk, B. A. (2005). Attachment, self-regulation, and competency. *Psychiatric Annals*, 35(5), 424–430.
- Landreth, G. L., & Bratton, S. C. (2015). *Child parent relationship therapy (CPRT): a 10-session filial therapy model*. New York: Routledge.
- Massachusetts Advocates for Children. (2005). Helping traumatized children learn: supportive school environments for children traumatized by family violence. Retrieved from http://traumasensitiveschools. org/tlpi-publications/download-a-free-copy-of-helping-traumatizedchildren-learn/.
- Massachusetts Advocates for Children. (2013). Helping traumatized children learn 2: safe, supportive learning environments that benefit all children. Retrieved from http://traumasensitiveschools.org/tlpipublications/download-a-free-copy-of-helping-traumatizedchildren-learn/.
- Monahan, K. C., VanDerhei, S., Bechtold, J., & Cauffman, E. (2014). From the school yard to the squad car: School discipline, truancy, and arrest. *Journal of Youth and Adolescence*, 43(7), 1110–1122.
- Nagel, M. (2009). Mind the mind: Understanding the links between stress, emotional well-being and learning in educational contexts. *The International Journal of Learning*, 16(2), 33–42.
- Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacher-and school-level predictors of teacher efficacy and burnout: identifying potential areas for support. *Journal of School Psychology*, 50(1), 129–145.
- Perry, B. D. (2006). Fear and learning: trauma-related factors in the adult education process. *New Directions for Adult and Continuing Education*, 2006(110), 21–27.
- Prewitt, E. (2014). State, federal lawmakers take action on traumainformed policies, programs. Aces too high news. Retrieved from http://acestoohigh.com/2014/04/30/state-federal-lawmakers-takeaction/.
- Rossen, E., & Hull, R. (2013). Supporting and educating traumatized students: a guide for school-based professionals. New York: Oxford University Press.
- Siegel, D. J. (2012). The developing mind: how relationship and the brain interact to shape who we are (2nd ed.). New York: Guilford Press.
- Souers, K., & Hall, P. (2016). Fostering resilient learners: strategies for creating a trauma-sensitive classroom. Alexandria: Association of Supervision and Curriculum Development.
- Stevens, J. E. (2015). Massachusetts, Washington state lead U.S. traumasensitive school movement. Aces Too High News. Retrieved from http://acestoohigh.com/2012/05/31/massachusetts-washingtonstate-lead-u-s-trauma-sensitive-school-movement/.
- Substance Abuse and Mental Health Services Administration. (2014). *Trauma-informed care in behavioral health services*. Treatment improvement protocol (TIP) series 57. HHS publication no. (SMA) (pp. 13–4801). Rockville: Author.
- Van Der Kolk, B. (2014). *The body keeps the score: brain, mind, and body in the healing of trauma*. New York: Penguin.
- Vermetten, E., & Bremner, J. D. (2002). Circuits and systems in stress: preclinical studies. *Depression and Anxiety*, 15(3), 126–147.