ADOPTION ADVOCATE

NO. 75

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Creating Trauma-Informed Classrooms

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Ending the summer and beginning a new school year is a source of both excitement and anxiety for most children. But amidst the thrill of choosing special school supplies, finding a distinctive backpack, and shopping for new clothes are anxiety-inducing questions such as: *Will I like my new teacher? Will I be in the same class as my friends?* While for most children this transition to a new teacher and a new class may present a mild challenge, for children with histories of trauma or harm, entering school may reactivate previous uncertainties, losses, fears, and terrors.

Early research from our lab assessed the neurotransmitters of at-risk adopted and foster children during the summer, and then again during the early weeks of school. Not surprisingly, data showed a dramatic shift of 53% in the stress chemical adrenaline, in addition to a drop of 13% in the calming neurochemical GABA. These shifts were associated with an increase in anxious and withdrawn behaviors. Additionally, a spike of 40% in PEA (beta-phenylethylamine) was associated with thinking and learning problems during the initial weeks of school. (For more information, see Purvis, Mittie, Kellermann & Cross, 2011, "Neurotransmitter Levels in At-Risk Adopted Children," *Adoption Factbook* V, page 491.)

This type of stress reactivity is a hallmark of children with histories of harm, putting them on a crash course for academic, behavioral, and relational challenges. Educators often identify these children as their behavioral "frequent flyers," who take significant time from instruction

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for behavioral management. Tragically, these children are often sidelined from the academic setting, and too often become those who drop out of school or end up in alternative educational settings. They are in desperate need of academic settings that are trauma-informed and can meet their unique challenges and needs induced by histories of harm.

Over the past 16 years, our Institute of Child Development has created a research-based intervention, Trust-Based Relational Intervention® (TBRI®), which has been used in various settings to improve outcomes for vulnerable children. TBRI® is holistic, trauma-informed, and evidence-based. We began with implementation with families; in recent years, we have turned to the needs of children and teachers in an academic environment, with stunning results.

An Oklahoma elementary school—labeled the "worst school in the state" due to receiving the lowest test scores in Oklahoma for two successive years—implemented TBRI® with tremendous success. Data documented an 18% decrease in incident reports and a 23% decrease in referrals for the top ten most frequently referred students. In Missouri, working with an alternative high school, we noted a dramatic shift in the thinking of the school's leadership team, as evidenced by their decision to move from using three sterile eight-foot square "cell blocks" to isolate disruptive teens, to using a behavioral management system that taught students to self-regulate through the use of calming aids, such as a sensory room. Finally, in a Texas charter school serving a residential facility for 200 at-risk youth, graduation rates increased from 74% to 95%, and overall school referrals decreased 99.4% during the second year of TBRI® implementation. (For additional information on TBRI®, see Purvis, Parris & Cross, 2011, "Trust-Based Relational Intervention: Principles & Practices," *Adoption Factbook V*, page 497.)

Academic outcomes were dramatically altered in each of these schools, as educators and administrators began to recognize the impact of past neglect and trauma on previously abused children's behavior and capacity to learn. To put it simply, educators in these schools began to see the children and youth they were serving through a "trauma-lens." They began to recognize the impact of trauma, the hidden risk factors, the role of fear in behaviors, the unique physical needs of their students, the ability to learn proactively, and—perhaps most importantly—the power of nurturing relationships in the classroom.

Recognize the Impact of Trauma

Successfully implementing trauma-informed classrooms requires understanding of the dramatic impact of trauma on all development

systems. Recent advances in neuroscience have documented previously unknown alterations in brain development, brain chemistry, and brain activity as a result of abuse and trauma. Only in the past six years have scientists documented changes to biological structures, including alterations in expression of the DNA, attributable to early histories of harm.

In our work, we often refer to at-risk children as those who have come from "hard places." Not only are there changes in the brain and the biology, there are also tragic changes in the belief systems of these children. Because trusted adults harmed them, they are often confused about how to make and keep friendships, how to interact with peers and adults, and how to figure out whom to trust. For many educators, reframing their students' behaviors as *survival strategies* rather than *willful disobedience* creates a dynamic shift in classroom interactions and behavior management.

Recognize the Risk Factors

Vulnerability in children from hard places can be attributed to six primary risk factors. Parents and educators are often stunned to realize the broad nature of these risks.

The first and most profound risk factor is prenatal stress. If the child's mother experiences hardship of any kind during pregnancy, her developing infant will bear neurochemical marks of her stress. Research documents the fact that anxious or depressed mothers give birth to infants who have higher levels of stress chemicals as well as alterations in brain activity. An additional prenatal risk is substance exposure, which is believed to be present in 80% of children in the foster care system (Dicker & Gordon, 2004). Prenatal substance exposure induces sweeping changes in brain development, and is associated with a plethora of cognitive and behavioral aberrations.

Another risk factor is birth trauma, which can, for example, cause minor brain hemorrhages that ultimately effect learning and behavior. A third risk factor is hospitalization in the early years of development. Medical procedures designed to save the life of a prematurely born infant, for example, comprise medical trauma. Surgeries, NICU care, and hospitalizations after accidents or during serious illnesses all impact development in ways similar to any other type of harm. In sum, "medical trauma" comprises trauma and bears a resemblance in impact and outcome to many other types of trauma.

The last three risk factors are more commonly recognized than the first three, and include abuse, neglect, and trauma. Abuse and neglect are common themes in the lives of children who are fostered or adopted.

Physical abuse, sexual abuse, and emotional abuse are common among those removed from their biological families. Another major risk factor is neglect, which is the daily fare of children adopted from orphanages and from many domestic environments. While neglect may seem less impactful then abuse, in many ways it can be more damaging. The message of abuse is "I don't like you"; the message of neglect is "you do not exist."

Most teachers will never know the full backstory of vulnerable children in their classrooms. However, insightful teachers will bear in mind that these experiences might have been the daily standard for children from hard places, and these past experiences cast a shadow over their thoughts and actions in the classroom.

Trauma can also include multiple foster placements, separation from biological siblings, loss of biological family, acrimonious divorce, a prior adoption dissolution, unwelcome moves to new cities or schools, natural disasters, and much, much more. For too many vulnerable children, varying risk factors compounded, one on top of another, exposing them to a broad range of risks and harms, creating deeper and deeper complexity in their needs.

By recognizing all of these potential risk factors, educators are often able to "reframe" behavioral and learning challenges. For example, a child who was adopted at birth but has significant problems in school might have experienced prenatal stressors, including potential substance exposure, which could be the source of these problems. Armed with such knowledge, educators are able to create more comprehensive plans for teaching children with a variety of needs.

Recognize the Role of Fear in Behavior

The amygdalae comprise a set of almond-sized nuclei in the brain that regulate *fight*, *flight*, *and freeze* responses, and are active and "online" even during pregnancy, creating aberrations in behavior for some children even if they were adopted at birth. The amygdalae are hyper-responsive in children coming from hard places (Perry, 1994), causing them to remain in a constant state of reactivity, inducing vigilant scanning of the environment to assess for potential threat. Because they are investing their energy in feeling safe, regions for learning are "offline," creating tremendous impediment to acquiring new knowledge. Simply put, fearful children can't learn.

Informed teachers can begin to disarm the amygdalae and help children feel safe by structuring the classroom so that it isn't over-stimulating

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(e.g., not too cluttered or loud). They can learn behavioral intervention strategies that don't exacerbate trauma. They can partner with the fearful child in ways that help him overcome his fears.

Another powerful way to disarm fear in children is to "give voice." Children who feel heard feel safe. Giving voice can be done many ways—by giving undivided attention, for example, or by offering choices, compromises, or behavioral "re-dos." (For additional resources about giving voice to vulnerable children, see "The Healing Power of 'Giving Voice,'" *Adoption Advocate* No. 61, retrieved from www.adoptioncouncil.org/publications/adoption-advocate-no-61.html.)

Recognize Unique Physical Needs

Harkening back to the impact of trauma, trauma-informed environments will need to make proactive accommodations for children coming from hard places.

For example, glutamate, a neurotransmitter that is commonly elevated in children with histories of harm, is more active when children are dehydrated. This creates significant issues behaviorally, because glutamate is associated with aggression, violence, and seizures. By simply making water bottles accessible to children during school hours, glutamate levels can be controlled (Boudaba, Linn, Halmos, & Tasker, 2003). Insulin receptors are altered by chronic stress and prenatal exposure to alcohol, resulting in variations in blood sugar that are associated with dips in learning and behavior. Having snacks at times of day when children's blood sugar may be low (e.g., mid-morning between breakfast and lunch; mid-afternoon between lunch and dismissal) can keep blood sugar from dropping too low and significantly improve behavior and learning (Benton, 2007; Benton & Stevens, 2008; Gailliot et al., 2007; Kaplan et al., 2004).

Finally, a majority of children with histories of harm are reactive to sensory input. Being prepared to meet these unique needs is critical. For example, in music class, if the sounds are too loud—or in art class, if the finger painting project is tactilely aversive—children can be permitted to choose an alternative activity, thereby disarming their fear and earning their trust.

Recognize the Power of Connection

In his seminal article "The Three Pillars of Trauma-Informed Care," Howard Bath identifies three pillars: Safety, Connection, and Emotional Regulation. He notes that Connection is the central pillar, without which

trauma-informed care cannot occur (Bath, 2008). If children feel safe and connected to their teachers, they will be able to learn. Teachers can set the stage for connection and, with it, learning, by looking into the eyes of her students with "soft eyes," using a warm, welcoming voice, and greeting her students at the door each morning. As Bath writes, "Safety itself depends on the development of the second pillar of trauma-informed care—comfortable connections between traumatized children and their care providers and mentors. Positive relationships are necessary for healthy human development, but trauma undermines these life-giving connections. Although the importance of positive relationships has long been recognized, there is now good scientific evidence from human services that these are the critical ingredients in healing and growth."

The first pillar Bath identifies, Safety, is closely tied to Connection. In optimal child development, the capacity to feel safe is associated with having a trusted adult that will meet their needs and offer protection. Bath writes: "[C]onsistency, reliability, predictability, availability, honesty, and transparency are all carer attributes that are related to the creation of safe environments for children. Including the child in decision-making is also important, as is the provision of knowledge about their circumstances (where appropriate). Bruce Perry (2006) places considerable emphasis on ensuring that children have appropriate power and control over their circumstances where it is developmentally and practically possible." Another consideration in creating safety, according to Bath, is meeting children's needs and "the absence of punitive and/or controlling responses from adults."

The final pillar of Trauma-Informed Care is Emotional Regulation. In optimal child development, it is the adult who regulates physical and emotional needs. Among children coming from hard places, regions of the brain for self-regulation have been impaired. Teachers who understand this alteration in brain development can begin to reframe misbehavior as a cue from the child that they need the teacher's presence and guidance to help them regulate. According to Bath: "There are many approaches to the teaching of self-regulation skills. For example, some traumatized children have not had the benefit of parental figures who have taught them how to calm themselves down. These children may need adults who are willing to 'co-regulate' with them when their emotions run wild, rather than relying on coercive approaches. The basic skills of active listening have a central role, especially the reflective skills which promote the labeling of feelings."

Conclusion

A burgeoning body of research documents the fact that children who feel safe with their teachers have lowered levels of the stress chemical

If children feel safe and connected to their teachers, they will be able to learn.

cortisol and higher levels of learning. Insightful, informed teachers who understand and recognize the unique needs of their students coming from hard places have the capacity to open the doors of learning to them, and to become partners in creating safe, nurturing trauma-informed classrooms—the gateways to satisfying outcomes for their students.

Appendix: TBRI® Principles and Strategies for Trauma-Informed Classrooms

The foundation for both TBRI® and the Three Pillars of Trauma-Informed Care is relationships. Students must feel connected in order to feel safe, and it is this safety that gives them the capacity to learn. A Trauma-Informed Classroom (TIC) is an environment where children from "hard places" can be successful, involved learners. Following is a list of TIC strategies:

- Reframe students' behaviors as *survival strategies* instead of *willful disobedience*.

- Recognize developmental risk factors (prenatal stress, birth trauma, early hospitalization, abuse, neglect, and trauma) and their contribution to students' behaviors. Use this information to respond to the underlying *need* of the behavior instead of the behavior itself.

- Nurture relationships with students and between students.
  » Make eye contact using soft eyes when speaking with students or making a request.
  » Encourage healthy positive touch into the classroom routine, such as handshakes, high fives, and fistbumps.
  » Take an interest in students' lives. For example:
    - Ask questions.
    - Listen.
    - Incorporate a journaling activity in class. Read and respond to entries.
    - Recognize emotional states; e.g., when a student looks like they are upset or angry.
    - Have a check-in question at the beginning of each class; e.g., "On a scale of 1 to 10, my stress level is a ___" or "The best gift I ever received was _____."

- Create an environment where students feel safe. Children from hard places need predictable environments.
  » Physical environment should be organized and not overwhelming in terms of lighting, colors, materials.

» Establish and practice routines for classroom procedures; e.g., what to do when entering the classroom, how to ask a question, where journals go, etc.

» Post a classroom schedule and give warnings if it is going to change.

» During daily transitions, provide warnings leading up to the transition; e.g., "Five minutes until we go to lunch," "Three minutes until we go to lunch," "One minute until we go to lunch."

» Give students a voice in the classroom and allow it to be heard.

- *Give undivided attention.* Make eye contact and extend a handshake when students enter the classroom.

- Offer *choices*, such as allowing students to complete assignments in the order they choose.

- Make *compromises*, such as extending a deadline to Monday so students can have the weekend to complete a group project.

- Practice behavioral *re-dos*, such as having a student "try it again" if they use disrespectful words.

• Address students' physiological needs.

» Allow water bottles and snacks in the classroom.

» Encourage physical movement, such as allowing students to get up and walk around or to stand up while they work.

» Understand students' sensory needs and provide tools to accommodate for these needs, such as:

- Noise-cancelling headphones

- A quiet place to work

- Soft background music

- Weighted items (lap pad, blanket, vest, etc.)

- Fidgets (squeeze balls, velcro under the desk, etc.)

- Bubble gum

- Soft or natural lighting

• Practice self-regulation skills.

» After a cognitively challenging task, practice deep breathing or other self-regulation techniques.

» Purposefully plan an activity that will excite students; e.g., freeze tag, water balloon toss, science experiment. Then practice self-regulation or calming techniques.

» Help students identify their level of alertness.

- Be proactive.
  - » Teach skills and behaviors before they are needed or required.
    - Teach and practice calming or self-regulation techniques *before* exciting or stimulating activities; e.g., deep breathing, pressure points, chair sit-ups, pushing down the wall, weighted items, fidgets.
  - » Help students identify their feelings by using a feelings check during class. Say, "If you are feeling *embarrassed/anxious/bored/ etc.*, give me a thumbs-up; if not, give me a thumbs-down. If you aren't sure, you can turn your thumb sideways."
  - » Practice labeling emotions and make plans for dealing with them; e.g., have student list three things she can do when she feels *sad/ mad/scared/etc*. Practice the plans.

- Have fun!
  - » Students' brains are primed for learning when they are engaged in a joyful activity.
  - » Play review games and throw a prize to the student with the correct answer.
  - » Have dramatic readings, mini-concerts, or theatrical performances that meet learning objectives.
  - » Improve a sense of classroom community by incorporating team-building exercises into your curriculum.
  - » Take dance and motor breaks.

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