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The Impact of Losses and Stress on the Student's Mind and Body

t may seem to be an irony that in a wealthy nation, many children are confronted with loss; compounding the irony, children face losses that adults seemingly navigate with ease. However, significant losses are cumulative and can change a child's understanding of self and even alter brain development.

LOSSES

In every classroom there are students who have experienced grievous losses within their immediate circumstances. For some, these losses have been multiple; for some, they have been sudden and shocking. Understandably, shocking losses mean the family is also in crisis, and the grieving adult(s) may not be able to fully attend to their hurting 9- to 14-year-old.

James Fogarty tells us, in his book *The Magical Thoughts of Grieving Children* (2000), that youngsters in concrete operations (ages 7 to 11) are still able to engage in magical thinking, much as they did as preschoolers. Generating explanations that help youngsters understand something over which they have had no control brings them temporary relief. Magical thinking is a natural way of coping with the realization that one was helpless and couldn't bring about a more desirable ending.

As students developmentally move out of concrete operations, they become painfully aware of deeper understandings of injustices and unfulfilled needs in their lives. Among the experiences that now need processing and integration might be the death of their parents' marriage, or divorce (Fogarty), and the fact that one of their parents has chosen *not* to participate in their young life—losses often assumed to have been left behind.

However, when children languish in "if only . . ." thinking and assume accountability for a tragic incident in order to shield themselves from a sense of helplessness, they are *not* processing their grief. When unresolved losses collide with prepubescent hormones, that unresolved grief can explode into anger and rage. Aggressive or acting-out behaviors generally follow.

Fogarty demonstrated that anger is not a primary feeling but an umbrella or cover for the following feelings of despair and fear resulting from those unresolved losses:

- 1. The sense of abandonment, resulting from such events as divorce, parents in prison, placement in foster care or with a grandparent, adoption, or one parent's choosing not to parent
- 2. The sense of betrayal, resulting from having been treated as invisible or given explanations one now recognizes as less than the total truth
- The sense of helplessness, resulting from witnessing domestic violence or realizing one was powerless to prevent or stop a loss or tragic situation
- 4. The sense of shame, the result of perceiving that the grievous loss or unfulfilled needs mean one was unlovable
- 5. The sense of hopelessness, resulting from feelings that nothing will ever change or get better
- 6. The sense of disappointment, from grief over promises not kept and assurances not fulfilled
- 7. Sadness or depression, a blend of all of the above, resulting in no desire to continue

While these feelings emerge out of perceptions or interpretations, not realities, the feelings are very real to youngsters and ultimately drive their behaviors, that is, until the feelings are transformed, as described in Chapter 2. The inappropriate behaviors cannot be resolved until the children have had an opportunity to symbolically process and integrate their loss.

Young people of previous generations certainly experienced grievous losses and yet presented less volatile behaviors. It is natural to ponder why today's children can't just "suck it up" and "get over it," as the vernacular of earlier times might put it. Instead, we need to realize that we are in a society in which the cumulative changes in childhood collide with circumstances (such as parents' divorce) to exacerbate a child's affect and acting-out behaviors.

The challenge for the field of education and the community is whether to continue to react to the symptoms or instead to respond to the causes.

STRESS

The relationship issues outlined in the Introduction, stemming from attachment trauma, can overly sensitize youngsters to stress and result in stress pileups (Allen, 2001). When traumas collide with current stress, a student's underdeveloped prefrontal cortex may not be able to maintain a state of self-regulation. The student is then propelled into an unbearably painful emotional state of anxiety. Such stress pileup can generate the destructive actions of aggression, violence, and rage. It can also lead to self-destructive actions and depression. These are not simply moral issues or character flaws but the results of early relationship issues.

Experiencing abuse or neglect during infancy, as a toddler, or as a preschooler similarly affects the areas of the brain engaged in primal development at those stages. The neurobiological research by Bruce D. Perry reveals that young children living in persistently unpredictable and unsafe environments experience altered brain development for survival purposes. The midbrain and limbic systems of children who live with insecurity become hardwired for detecting threats to their well-being. Any real or perceived threat initiates an instant fight/flight/freeze reaction. Survival is a prime value, not a choice (Karr-Morse & Wiley, 1997). This built-in wiring of the alarm system will be operational in students in Grades 4–8 if no trauma transformation has been achieved.

Such traumatic memories of fear and helplessness are not cognitively available to the student; however, the behavioral reactions to threats and insecurities become real—to the student and to all others in the school setting.

WHEN TRAUMATIC MEMORIES ARE TRIGGERED

Very young children naturally dissociate, or numb out, when traumatic memories are triggered. Because such very early memories are body memories (Rothschild, 2000) rather than verbal memories, words and cognitive expressions are not possible for the traumatized child. The only way the youngster can express the triggered fear and insecurity is through actions, survival actions that appear to others as acting up and hyperactivity. The brain wiring resulting from very early childhood experiences of insecurity and unpredictability constitutes a developmental alteration in the brain, not what may be known as posttraumatic stress disorder. These brain changes become the tragic legacy of students who have had early childhood traumas.

However, with the onset of puberty, males make a dramatic shift from dissociation to aggression, or survival actions that appear to others as violent and assaultive. One explanation links this aggression to the anthropological male role of hunter and protector. This explanation does not address the current presentation of aggression in girls, however.

As with the issue of loss, the significant increases in volatile classroom behaviors reflect the combined effects of early stressful life experiences and living in a turbulent world. Witnessing domestic violence is particularly devastating and is now recognized as a major contributing factor in preadolescent rage (Bloom & Reichert, 1998). Young children cannot run away or leave the dwelling; neither can they predict when domestic violence might erupt. Consequently, they live in a constant state of helplessness, only to explode when threatened by anyone, often at school.

The stunning insight for teachers made possible through this recent neurological research is that students who experienced insecure childhoods are unable to access the neocortex when in a state of anxiety. This illumination makes the topics of stress, loss, and trauma relevant educational issues. My experience has been that when they receive this information, teachers express dismay over why it has not been integrated into educational policy or teacher training.

COGNITIVE LOCKOUT

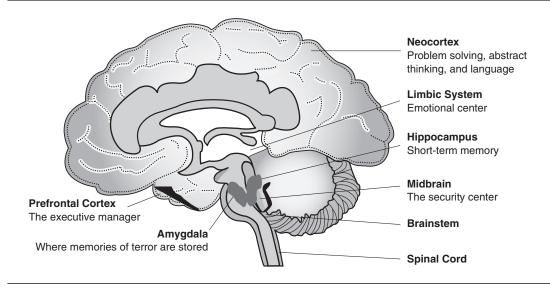
The cognitive lockout notion not only offers an understanding of increases in student hyperactivity and aggression but opens the door for explanations for the underachievement of alarming numbers of America's students. With the increased pressures and penalties of the No Child Left Behind Act now trickling down to local schools, I can only hope these cross-discipline topics are added to the conversation.

Unfortunately, without full integration of this vital information, more and more of America's children will be left behind, locked out, and literally thrown away.

Once again, early relationships and attachment trauma come into play. When an infant's prefrontal cortex is not stimulated into optimal development, its capacity to modulate the limbic system is diminished and self-regulation is weakened. Later, when that youngster or adolescent senses threat or danger, the limbic system, through the amygdala, virtually hijacks the monitoring capability of the underdeveloped prefrontal cortex. When this happens, the brain downshifts in a state of anxiety, and the survival-driven behaviors of volatile aggression erupt (see Figure 1.1).

When in this anxiety-driven survival mode, the brain has downshifted *out* of the neocortex, eliminating any possibility of engaging in problem-solving. This involuntary process is referred to as cognitive lockout. The midbrain and limbic system cannot engage in the learning process; only the neocortex can (Bailey, 2000). The neocortex is the only area of the brain where a choice can be made, that is, where rationality and logic can operate.

Figure 1.1 Brain Areas Discussed in This Book



Furthermore, when in a state of anxiety, the brain cannot recall information processed and stored successfully during less stressful times. This limits the student's ability to demonstrate successful learning—and successful teaching. Test taking becomes an intimidating nightmare for such a student. Proficiency tests are interpreted by these students to be an intellectual threat, and so these tests elevate the students' state of anxiety. In today's climate, a student's impaired test taking becomes a peril for the student's teacher, principal, and school as well as the student.

For a student who is the child of attachment trauma and a chaotic home environment, cognitive lockout also blocks the capability to participate in personal safety. For these students, deducing how to avoid future occurrences of threatening harm is not possible because they cannot learn from what they cannot remember. This means they live in perpetual helplessness and vulnerability; hence they rely on hypersensitivity and hypervigilance. Debate is growing over the clear differentiation between these hyperactive behaviors resulting from trauma on the one hand and attention-deficit/hyperactivity disorder, conduct disorder, and bipolar disorder on the other. The significance of assessments and interventions is pronounced for educators, parents, and students (Breggin, 2000; Fogarty, 2000; Silva, 2004).

Not only are these youngsters unable to control their volatile behaviors; they have no control over their emotional turbulence. Involuntary memories of terror are triggered by sensory arousals: by sounds, sights, aromas, touches, or movements that occur naturally and repeatedly around them. Hearing a siren somewhere outside the school building will undoubtedly trigger flashbacks of some crisis for individual students in a classroom.

These sensory triggers go unnoticed by peers or adults but terrorize the student with an unresolved trauma or insecurities from early childhood. Even more debilitating for traumatized students, remembering the incident of a terrorizing triggered flashback is also denied them because that memory is stored in the amygdala, *not* in their neocortex. These terrorizing sensations are beyond any internal controls, and life becomes a living nightmare. Such flashbacks or intrusive sensations make concentration and the ability to focus tenuous, if not impossible.

It is also possible for students from stable, supportive families to experience traumatic stress and cognitive lockout resulting from singular frightening events, such as natural disasters or being chased by a dog. Fortunately, recovery is more easily achieved for them when transforming activities and interventions are introduced.

Singular shocking experiences, such as car accidents, house fires, a surgical or health crisis, or witnessing or experiencing an assault or rape, can overwhelm a youngster's capacity to cope. Even learning about a shocking incident happening to a peer or relative can generate similar stress in some youngsters. There is no way to predict who will be affected and who will not (Steele, 1998).

The terrorist attacks of September 11, 2001, and the incessant television news images that followed, traumatized students across America. Unfortunately, shocking events happen quite regularly, locally, nationally, and internationally.

The confusing aspect of singular or secondhand traumatic stress for educators is that the dramatic behavioral changes often are not presented for months, possibly for more than a year, after the event. Only when the youngster feels totally safe will the numbing begin to subside. Unfortunately, the adults in that student's life have moved beyond recalling the event, and the student may be with a different teacher. Consequently, no one connects the sudden distressing behaviors, so inconsistent with previous patterns, with the tragic event so far in the past (Terr, 1990).

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Regrettably, because there appears to be no logical reason for these new behaviors, they are declared a discipline issue and treated as such by school policy.

Finally, a lasting devastation, for the students and their teachers, of living in persistently threatening environments is the destructive effect of the stress hormone cortisol on the neural cells in the hippocampus. The hippocampus is the center of memory in the human brain. This tragedy is another example of how environments and experiences affect academic achievements far more than genetics do (Bremner, 2002).

INTERVENTIONS ARE POSSIBLE

Certainly the safety and security within the school community will have an impact on the levels of loss and stress of the students in attendance. Hopefully, the information offered in this chapter will make it possible for educators to gain insights into the reasons for distressing student behaviors, permitting teachers to understand that these behaviors are not a personal affront. Securing parental input regarding any out-of-the-ordinary family happenings may also help teachers understand student behavior changes.

Take hope: the neurological and behavioral changes that have developed are not permanent in students in Grades 4–8—not yet. Specific strategies and activities for transforming and healing begin in Chapter 2.