The Resilient Brain

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Brain research opens new frontiers in working with children and youth experiencing conflict in school and community. Blending this knowledge with resilience science offers a roadmap for reclaiming those identified as "at risk." This article applies findings from resilience research and recent brain research to identify strategies for reaching challenging youngsters. All young persons have strengths and with positive support can change the course of their lives. They have resilient brains that can be "rewired" by positive learning experiences.

Risk and Resilience

Resilience is the ability to thrive in spite of risk or adversity. Youth at risk and children at risk first came into wide use in the 1980s. Originally this referred to dangerous environments, such as disrupted families and dysfunctional schools. But terms like *at-risk youth* and *high risk behavior* shifted the focus from how to build supportive environments to finding supposed defects in the child. Those who labeled youth as "violent" or "predators" created fear of dangerous children while letting adults off the hook (Males, 1996).

Developmental psychologists see risk as resulting from the interaction of a child in the social network of family, school, peers, and community (Bronfenbrenner, 1986). In a healthy ecology, children develop their strengths. When they display significant behavioral problems, this usually is a symptom of "DIS-EASE" in the ecology rather than "disease" in the child. Each child has a checkerboard of strengths and limitations. Children are also endowed with unique temperaments which, depending on the match with persons in their ecology, can contribute to harmony or conflict (Windle, 1992). Many so-called "behavior disorders" in children are a result of a poor fit between the child and the environment.

The term resilience comes from physics: a resilient object bends under stress but then springs back rather than breaks. To extend the analogy, a resilient youth not only springs back from adversity but can become stronger in the process, like tempered steel. They can develop an inner strength that has been called "survivor's pride" (Wolin & Wolin, 2004). This feeling of accomplishment that comes from solving challenging life problems is at the core of resilience. But those who take a "deficit" perspective overlook the potential strengths of youth to surmount difficult experiences and environments.

Initially some researchers thought resilience was a rare personality trait of a few invulnerable superkids (Anthony & Cohler, 1987). However, no person is invulnerable to extreme levels of stress. Still, regardless of external risk factors, by age thirty, a majority of persons are able to achieve successful life outcomes. Resilience turns out to be a natural trait of all humans. This should not be surprising since our brains are specifically wired to cope with problems. Humans cannot survive and thrive alone, but need encouragement from others.

Resilience is a combination of inner strengths and external supports (Lerner & Benson, 2003). All youngsters need supportive families, peers, schools, and mentors to optimally develop their potential strengths. Communities can be organized to build strengths or they can exacerbate problems. Thus the most "dangerous" schools are those with negative

climates of disrespect among peers and adults (Hyman, 1997). But when schools and communities provide opportunities for positive development, youth thrive and achieve their potential.

Recent advances in resilience science provide a roadmap for positive youth development, even in the face of adversity. Perhaps the most exciting finding is that the human brain is designed to be resilient. Resilience is universal across all cultures and encoded in human DNA. New imaging techniques are providing a better understanding of key brain-based processes impacting risk and resilience. It turns out that the brain is in the business of overcoming risk.

The brain is not like a computer, but more like a resilience library. It stores information bearing on our survival and well-being and discards most other data. Dry facts learned at school soon fade while events with strong emotions are etched in memory for a lifetime (Carter, 1998). A crisis can present a potent transformational event, since the outcome will likely be long remembered. For better or worse, problems can either be treated as occasions for punishment or opportunities for learning and growth.

The Brain Under Stress

Youth in crisis widely report that they experience deep inner pain (Anglin, 2004). The term *pain-based behavior* refers to destructive or defensive reactions triggered by such negative emotional states. Thus, a rejected youngster might act out in rage or retreat in depression. Describing such troubled emotions as "pain" is more than a figure of speech. When we say someone has "hurt feelings," this is literally true. Negative emotional experiences like rejection activate pain centers in the brain just as physical distress does.

Research shows that physical and social pain register in similar ways in the brain (Eisenberger, Lieberman, & Williams, 2003). Brain scans indicate that being excluded or rejected triggers feelings of distress and a burst of activity in the area of the brain that also reacts to physical pain.[1] Students who are best able to manage the pain of rejection have greater activity in the higher brain. Thus, being able to think about problems, talk them over with others, or even write about feelings or express them creatively can be helpful.

Social bonds are crucial for survival of humans, and our brains are highly sensitive to any signs of dislike or rejection (Leary, 1999). An automatic brain-based warning system is activated by indications or thoughts that one might be excluded, thus signaling the person to take corrective action. The brain's program for detecting signs of rejection or inclusion is called the sociometer. These rejection signals trigger the emotion of shame, which is a highly painful emotion that attacks self-worth. In contrast, belonging produces feelings of pride and well-being (Nathanson, 1992).

Many young persons daily navigate environments of severe physical, emotional, and social stress. Those unable to cope with this stress are in a state of crisis. The last thing they need is more pain and distress, but that is precisely what punishment is designed to do. Punishment comes from the Latin word *poèna* or pain. By design, punishment produces physical, emotional, or social pain. Stripped of any euphemism, punishment is using pain to try to change the behavior of youngsters who are acting out of pain (Brendtro & Larson, 2005).

All problems start with stress, a state of physical and psychological arousal that signals some challenge or difficulty (Lazarus & Folkman, 1984).

- *Danger produces distress* (negative stress) activating painful emotions like fear and shame.
- *Opportunity produces eustress* (positive stress) activating pleasurable emotions like curiosity and affection.

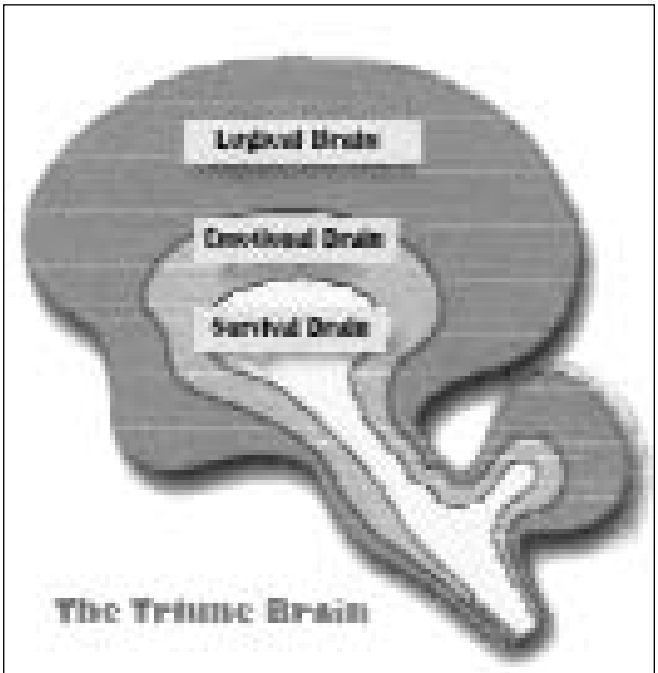
The same stressful situation (e.g., bungee jumping) is interpreted differently by various individuals. One person's threat is another person's thrill. Whether or not a challenging situation poses a threat depends on one's coping strengths, past experiences, and state of mind and emotion. Humans also handle stress better when supported by others.

Stress triggers emotions which motivate behavior. Emotions activate changes in thinking, bodily function, and behavior. Our emotions prime us for specific patterns of coping behavior. These changes occur instantly and automatically, activating many brain systems (LeDoux, 1996). These are portrayed in Figure 1, which describes the operation of the triune human brain.

The brain has three major parts with different tasks:

1. The brain stem handles basic survival in all animals and is known as the *reptilian brain*.
2. In mammals, the emotional or *limbic brain* is wrapped around the brain stem.
3. In humans the higher *prefrontal brain* is highly developed to handle logical thought, language, and problem-solving.

Figure 1: The Triune Brain



- **The Logical Brain** (prefrontal cortex) handles language, reasoning, and emotional control so humans can intelligently solve problems and make meaning out of life events. This area of the brain does not develop fully until adulthood.
- **The Emotional Brain** (limbic brain or mammalian brain) triggers emotions that motivate behavior. The amygdala scans stimuli for cues of danger or interest, triggers emotions, and stores important events in long term memory.
- **The Survival Brain** (brain stem or reptilian brain) reacts to danger by triggering fight or flight mechanisms. These reflexive behaviors insured survival in the wild but are not geared to the threats faced by humans in modern life.

There are highly traveled pathways going from the emotional brain to the survival brain which activate automatic flight and fight reactions. There are also many pathways from the emotional brain to the logical brain, which is why our emotions color our thinking. However, there are fewer pathways from the logical brain to the emotional brain. No wonder it is so difficult to keep emotions under logical control. In the following section, we examine how the brain operates in the face of stress and challenge.

The Amazing Amygdala[2]

The amygdala (the Greek word means almond) in the emotional brain influences our likes and dislikes, thinking, memories, and social interactions with others (Aggleton, 2000). Shaped like a pair of almonds, it is located in the emotional brain, inward from the temples. The amygdala's job is to constantly scan all senses for any emotionally charged data. The amygdala is the brain's danger and opportunity detector. This alert sentry is on the lookout for anything "important, interesting, attractive, fearful, distressing, irritating…" (Kusché & Greenberg, in press, p. 5). Within milliseconds, the amygdala makes a tentative decision of whether approach or avoidance is the best plan.

The amygdala is the linchpin of our emotional brain. It reads emotions of others and activates our own, preparing us for flight, fight, or approach behavior. One part of the amygdala reads facial expressions. The face has dozens of muscles whose only purpose is to signal a person's emotional state (Nathanson, 1992). Another part of the amygdala reads tone of voice. Thus, the sight of an angry face or sound of rancor in a voice sets off an amygdala alarm that this person is a threat.

The eyes send potent emotional messages monitored by the amygdala. Being able to detect when the eyes of others are trained on us provides important survival information. Hostile, piercing eyes communicate an invasive display of threat. Aggressive youth are often hypervigilant for cues of hostility, and even casual eye contact can be misconstrued as a threat. Children with autism and others who have been conditioned to fear adults often find eye contact threatening, which triggers gaze aversion and withdrawal behavior. If emotions on the face are confusing, one can get almost all necessary information by reading the language of the eyes (Carter, 1999).

The Trusting Brain

Humans have an innate desire for emotional closeness with others, and the amygdala is the gateway to trust by deciding if someone is "safe" or "dangerous." Because knowing whether or not to trust others has adaptive value, the amygdala spots subtle cues of inconsistency or deception. Humans have natural differences in this ability, and some can separate truth from deception with nearly 100% accuracy (Carter, 1999).

According to research by Zak and colleagues, when the amygdala interprets that someone trusts us, it stimulates release of the hormone oxytocin in the brain and body, which leads to social bonding (Society for Neuroscience, 2003). This can occur in a very short time based on subtle, unconscious cues, giving one a "gut feeling" that somebody is trustworthy. Trust begets trust as both parties release oxytocin, which calls forth primary human instincts for closeness, empathy, and cooperation. In contrast, the amygdala also detects the slightest cues of rancor and rejection and reacts to disengage from attachment.

The brain keeps a permanent archive of important, highly arousing life events. From the time of birth, the brain is archiving data on whether or not humans are to be trusted. Memories formed in a single emotionally charged event can last for a lifetime in "permastore." The amygdala keeps a permanent reference of memories about events that brought extremes of emotion, such as fear or joy. This is why learning tied to positive emotions is more enduring. But vivid, terrifying events are also seared into our brain circuitry and cannot be forgotten. While children's emotional brains are operating at birth, the brain's ability to manage emotions and solve problems develops only slowly over childhood.

Problems as Opportunity

In resilience terms, intelligence is the ability to use one's strengths and overcome one's limitations to solve problems and meet one's goals. As problems are resolved, we gain increased strength to face future challenges. Problems are best solved by engaging the logical brain, not reflexively reacting to emotions. With extreme emotion, the brain's center for rational thinking shuts down. Thus, the first priority when working with a youth in crisis is to create a safe environment and calm chaotic feelings. Young persons need to develop the ability to reflect on their emotions instead of acting them out impulsively. By thinking and talking about feelings, the brain begins to manage them.

By design, our brains find problem-solving to be a rewarding activity. Lacking problems, we invent them through puzzles and games, or vicariously solving conflicts through novels or movies. Once the brain locks on a problem, it is inclined to keep hunting for solutions (Zeigarnik, 1926). This innate desire to resolve problems is called the Zeigarnik effect and serves as motivation for humans to find better coping strategies to deal with conflict situations.

The problem-solving brain is less like a computer than a resilience library. It selects and stores information bearing on our survival and well-being and discards less important stuff. The brain catalogues memories of important life events which is called episodic memory. Once these episodes are archived in memory, they are preserved unless reprogrammed by the verbal brain. Among the most significant contributions an adult can make is to help a youth gain new perspectives on important life events, including those causing pain.

The Brain in Conflict

While conflict is normal among all social animals, the human brain is unique in its ability to spot threat, not just physically but in subtle social encounters. We are disposed to respond positively to those who treat us well, but turn negative when others show hostility. Psychologists call this the Tit for Tat rule (Rapaport, 1960). This is how it works:

> *On the first encounter with another person, be cooperative. Then, reciprocate the friendly or hostile reaction encountered.*

Humans are by nature friendly, but at the first sign of danger or disrespect, we are hard-wired to quit being nice. Presumably this gave humans an efficient rule for dealing with strangers, but it can easily get us into trouble. Tit for Tat hostility is the prototype of a conflict cycle. Most conflicts start small and escalate in a series of hostile barbs. Before one spike of anger dissipates, another is triggered, fueling a surge of intense feelings. When a youth shows hostile behavior, adults in authority

are in a double bind: coercive discipline mirrors the youth's behavior; backing down reinforces a youth's coercive tactics.

Punitive discipline sparks brain programs that motivate fight or flight behavior. Young persons need behavioral limits, but a tone of rancor renders correction ineffective. *Rancor* is an emotionally charged communication conveying bitterness and malice. It is the prime symptom of discord in relationships. The first step in calming agitated brains is to remove any tone of rancor from the interaction. If children experience chronic hostility or traumatic treatment, they can develop serious patterns of self-destructive and self-defeating behavior.

Zillman (1993) notes that the brain operates differently in aggression, depending on whether the behavior is proactive or reactive. In the first case, a person who is comparatively non-agitated seeks to gain control over others for some reward or incentive. Actions are often calculated and the person acts to gain some reward. In contrast, reactive angry aggression is seen when an agitated person seeks to reduce this stress by attacking someone held accountable for causing the problem. These actions are not necessarily premeditated and usually occur spontaneously as reactions executed in the heat of passion. Angry aggression is very common among parents, caretakers, and persons living and working together in stressful situations.

Brain research documents the operation of what Nicholas Long has long described as the conflict cycle (Zillman, 1993). In its beginning stages, it usually entails verbal abuse, which escalates. This aggression is not a response to a life threatening situation but to a cycle of provocation that generally starts with trivial disagreements and escalates by mutual provocation.

Angry aggression is a result of interplay between private logic and an agitated brain. When an individual perceives what appears to be a threat, this activates dispositions toward fight or flight behavior. In particular, disagreements, in which parties in conflict see themselves as being treated in ways unfair, demeaning, or rude, produce intense feelings of anger between the antagonists. The brain is motivated towards vigorous action and prepares the body for a short term episodic burst of energy for fight or flight.

A person can remain highly stressed for hours after the end of an angry conflict. In a sense, even one angry episode can set up the body for an aggressive posture that can carry over to other situations. Most interpersonal conflict escalates in a sequence of provocations, each triggering a spike of aggression that dissipates slowly.

Individuals differ in their temperament for aggression. For example, kids with ADHD are already more excitable and can be stimulated towards aggression. Delinquents and "psychopaths" have higher needs for adventure and excitement and may seek daring, risk-taking activities. Alcohol and other drugs can create a cognitive deficit where the individual is less able to use the logical brain to regulate emotional agitation. Children who cannot protect themselves from aggression can develop patterns of withdrawal and learned helplessness (Seligman, 1975). Their learned helplessness creates an automatic inhibition of aggression. In contrast, those who succeed with aggression are primed to take this course of action again, striking out instantly when provoked.

The Brain and Trauma[3]

Most explanations for childhood emotional and behavior problems are trauma theories whether using the word or not. Basically, something went wrong in the developmental process which had a damaging effect on emotional and behavioral adjustment. In trauma, some highly distressing experience produces very painful feelings, and the individual adopts defensive coping behaviors to protect against a recurrence. These may be conscious or unconscious.

A key task of the brain is to deal with danger. The brain initially treats unfamiliar persons or stimuli as potentially threatening, sending a low level alarm of possible danger. Throughout history, the most serious threat to human survival has been other humans. When our brains sense a person, group, or situation is unfamiliar, they are judged to be dangerous unless proven otherwise by opportunities for unthreatening or positive interactions.

Our brains go on high alert when we encounter a situation similar to previous unpleasant or painful events. An abused youngster who faces an angry authority figure may experience painful emotional

reactions similar to the original abuse. When children tap into past trauma, their reactions may range from low level alarm to feeling overwhelmed by panic, fear, anger, or terror.

Intense emotional experiences, both pleasurable and painful, are etched, perhaps indelibly, in a child's emotional storehouse. Traumatized children are "at risk" because their brains become less plastic—less likely to face new experiences in an unguarded and positive way. A child who is chronically maltreated may live in a persistent state of low to high levels of alarm and may respond to these feelings through aggression (fight), withdrawal (flight), or strategies to numb or block out the pain (freeze).

Five million children in the U.S. each year experience some trauma, and over two million are victims of physical or sexual abuse. These children have tremendous capacity for positive growth and development, but trauma can stunt their ability to reach their potentials. Past painful experiences become the dark lens through which future experiences are filtered. If painful memories are triggered by new situations, the brain acts as before, replaying the past or using defensive strategies to avoid further pain.

Psychiatrist Bruce Parry (2004) has found that children traumatized by neglect and abuse overuse more primitive brain systems. Their survival brains are chronically stimulated, and they are at high risk of engaging in behaviors which hurt themselves or others. These destructive emotional impulses can only be regulated by mature capacity in the higher brain centers. But many of these youngsters have not had the nurturance and learning experiences to fully develop brain pathways for self-control. Thus, their heightened impulsivity, frustration, and motor hyperactivity combine with an underdeveloped capacity to accurately perceive situations and problem-solve. This unfortunate combination severely limits the child's ability to maximize his or her potential.

Prolonged alarm responses can alter the brain's neural systems. Some pathways are strengthened (e.g., strike out, retreat). Others are weakened (e.g., stay calm, problem-solve). Brains rigidly organized in this way are less responsive to the environment. Rather than learning new behaviors, a child's emotional energy is diverted to avoiding pain. Traumatized children cannot optimally perform in the classroom if in a persistent state of arousal. The brain that should focus on learning is instead preoccupied with survival and safety.

The Resilience Code

We have inherited from our ancestors resilient brains with bio-behavioral programs for survival and well-being. For all the universal problems humans have faced throughout history, specific brain circuits motivate patterns of action (Tooby & Cosmides, 1990). Once these circuits are activated, we are strongly motivated, often unconsciously, to follow a particular course of action.

Beyond physical and survival needs, children have what Abraham Maslow termed growth needs which enable them to develop their strength and potential. A mass of resilience research suggests that four growth needs are universal in all children and across all cultures. According to the Circle of Courage model of Brendtro, Brokenleg, and Van Bockern (2002), these involve belonging, mastery, independence, and generosity. In effect, these are the brain-based instructions in the human resilience code. Expressed in developmental terms, these are the processes of attachment, achievement, autonomy, and altruism.[4]

Attachment: Developing Belonging

Children are biologically programmed to find other humans as the most interesting and important objects in their world. From birth, infants attend with great interest to the human face and the human voice. They do not form attachments randomly, but connect with persons who meet their needs and seek to model and learn from them. As they grow and expand their circle of attachment, children gain support from relatives, teachers, peers, and mentors.

Achievement: Developing Mastery

The human brain solves problems necessary for social, emotional, and academic success. The brain learns best with tasks that are challenging but not boring or overwhelming which is called "Just Manageable Difficulty." Task motivation, the joy of accomplishment, is preferable to egoistic motivation, being preoccupied with how we compare with others. Resilient youth find positive role models for success, and learn lessons from the failure of others.

Autonomy: Developing Independence

Positive growth requires balancing the need to attach and the need for autonomy. Youth who lack a sense of control over their life display either learned helplessness or rebellion. Resilient children develop a sense of self-efficacy, learning to take responsibility for their behavior. They are no longer victims of lousy life experiences but surmount these difficulties and thrive.

Altruism: Developing Generosity

Empathy and concern for others is tied to particular brain programs. Even infants react to the distress of others, and, with the development of empathy, children seek to help one another. Helping others releases chemicals in the brain that produce feelings of pleasure and well-being. Pioneering stress researcher Hans Selye (1978) saw altruism as the ultimate antidote to distress. Helping others also gives meaning to life and provides a sense of self worth.

In sum, meeting needs for attachment, achievement, autonomy, and altruism develops strength and resilience in children and youth. Frustrating these universal growth needs interferes with positive growth and development.

Turning Risk into Resilience

Blending brain science, resilience research, and best practices with youth at risk suggests practical strategies for turning problems into opportunities in order to develop their strength and resilience. These involve disengaging from destructive conflict and creating positive bonds.

Disengage from Destructive Conflict

Before we can help, we must "do no harm." A basic foundation skill for working with all youth, particularly those who are troubled, is to avoid destructive conflict cycles. Here are steps to defuse conflict in the brain of young persons—and in adults as well:[5]

1. Never take anger personally.

Conflict is a mirror image: both parties feel threatened and believe they have been violated. The sooner empathy can crowd out anger, fear, or blaming thoughts, the easier it is to deescalate. Tell yourself that this is a kid in pain and don't add to it or let the young person's pain become yours.

2. Monitor and defuse your own emotional arousal.

This requires awareness of internal cues that anger or fear is reaching disruptive levels. If you are unable to manage your feelings, it is usually better to disengage for a time until you are no longer telegraphing rancor.

3. Monitor and defuse a youth's agitation.

In a brewing conflict, an alert adult carefully tracks a youth's emotional arousal to avoid explosive outcomes. This involves reading cues in facial expression and tone of voice as well as listening with empathy to what the youth is saying.

4. Allow sufficient time for cooling down.

In its natural course, intense emotion fades; time is our ally if we don't rekindle the fires. In talking with a youth, a calm and concerned tone of voice can often quiet turbulent emotions. Sometimes you may need a bit of separation, but never disengage with a tone of rancor or rejection.

5. Model a generous spirit.

There is no greater act of giving than forgiving. Small acts of kindness can have powerful restorative effects since they communicate benevolence instead of malevolence. We also are modeling for the young person how to rebuild damaged relationships.

Connect with Challenging Youth

These strategies enable one to build positive connections with youth at risk so they can solve problems and develop strength and resilience.

1. Reach out to guarded youth.

Rather than wait for problems, one practices "preemptive connecting" with wary youth. This should be unobtrusive so as not to create impressions of favoritism. Connecting does not require a major investment of time; bonds can be built in natural moment-by-moment interactions. Small doses of connecting behavior are most effective. Forcing intimacy only frightens away youth who already are in an approach-avoidance conflict with adults. Those with histories of negative encounters with adults are strongly influenced by small cues of respect, humor, and good-will. The emotional brain signals, "This person is safe."

2. Avoid a judgmental tone.

Two centuries ago, pioneering educator Johann Pestalozzi suggested that the crowning achievement of education was being able to correct a student while at the same time communicating positive regard. We don't ignore problems, but criticism conveying anger or disgust only drives youth away. To be effective, criticism must be delivered in tandem with empathy and positive concern. To avoid adversarial encounters, one responds to needs and searches for strengths.

3. Connect in times of conflict.

All children have natural brain programs motivating them to attach to trusted persons when they are upset or in trouble. In crisis, the child's brain is signaling "find somebody who is safe," but traditional discipline by punishment or exclusion only creates further threat. Conflict and crisis present unparalleled opportunities to build trust, respect, and understanding. There are now specific training programs which provide mentors the ability to connect with youth in conflict and develop their strength and resilience. For example, Life Space Crisis Intervention (LSCI), Response Ability Pathways (RAP), Positive Peer Culture (PPC), and the EQUIP program all use problems as teaching opportunities.[6]

4. Understand behavior.

This is not as simple as it might seem. Many behaviors of youth confuse and disturb us, and it is easy to make incorrect assumptions as to "what motivated you to do *that*?" Intense emotions overwhelm children's ability to think and act rationally. They need someone who can help them identify, understand, and sort out their feelings and thinking. Trying to reason about consequences of their behavior while their "emotional brain" is still in charge may frustrate them further. This is especially true in instances where the current experience triggers past pain or trauma. As we understand the behavior from their perspective, we become sources of safety and encourage the "thinking brain" to assume control.

5. Clarify challenging problems.

The human brain is designed to make meaning out of chaos and confusion. This usually does not require formal counseling but an understanding mentor who can help a youth sort out "what happened." By using the brain's natural inclination to try to find meaning in events, we help a youth learn from problems. By exploring what happened in some conflict, such as getting kicked out of class, we help a youth develop more effective coping strategies. These conversations give us a window on the youth's private logic and goals. The youth examines how this behavior serves to meet personal goals and how others are affected. Resolving problems is the foundation for building resilience.

6. Restore harmony and respect.

Inner conflict and interpersonal discord trigger painful emotions in the brain. We help youth resolve problems and restore harmony. This entails building internal strengths and providing external supports. Examples of *internal strengths* are self-control and empathy for others. Examples of *external supports* are an engaging curriculum, respectful relationships, and positive expectations. Traditional discipline uses pain-based methods to motivate change. Restorative methods seek to restore broken bonds and build a climate of mutual respect.

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END NOTES

[1] This region in the emotional brain is closely tied to the amygdala in assigning an emotional valence to incoming stimuli and determining emotional reactions.

[2] This discussion draws from LeDoux (1996) and Aggleton (2000).

[3] This discussion draws from Parry (2004).

[4] This discussion is adapted from Brendtro & Larson (2005).

[5] Adapted from Brendtro & Shahbazian (2004).

[6] LSCI: Long, Woods, & Fecser (2002); RAP: Brendtro & Larson (2005); PPC: Vorrath & Brendtro (1985); EQUIP: Gibbs, Potter, & Goldstein (1995). For strength-based training resources, see www.reclaiming.com and www.starr.org

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