

Skillful Ways to Deal with Stress and Trauma

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As the national economy tanks, as jobs are lost after 10 and 20 years, as relationships are strained, as safety nets of retirement and health care unravel, I see more and more distress, fear, agitation among clients, colleagues, friends, even myself when I'm tired and vulnerable.

How do we stay resilient and resourceful when national disasters threaten to swamp our boat? When insecurity and distress seep through our circles of families and friends, how do we, in the words of dharma teacher Phillip Moffett, let ourselves be "affected but not infected"?

This article offers practical tools and resources for coping with stress and trauma. May you and your circle find them helpful and useful.

What Happens in the Body-Brain to Cause a Stress Response?

Stress is the body-mind's unconscious response to perceived threat or danger. The amygdala – our body-brain's 24/7 fear-alarm center and also our emotional meaning center – instantaneously processes input from our senses about external events and our internal physical-emotional states. The amygdala draws on its own implicit emotional memories – have we seen anything like this before? – to discern "This is OK or even good." or "This is bad or even dangerous." This sifting of experience is lightning fast, mere milliseconds; it never stops, not even in our sleep, and it operates completely unconsciously, outside of our awareness. So the stress response is rooted not in any particular event but in the meaning our brain attributes to that event and our response to that perceived meaning.

When the amygdala, instantly comparing experience in this moment to implicit memories of past experience, does sense danger, it signals the hippocampi – the structures of explicit memory that link our unconscious limbic system with our conscious cortex. In 3-5 seconds the frontal lobes of our "higher" cortex of our brain come on line in response to that event or series of events. We can consciously compare our associations of explicit memories – records of experience we are aware of – to assess and interpret, reality test, and come up with realistic action plans. If we've been resourceful in coping in the past, and are accessing the more positive explicit memories of that coping, this conscious cortical system works well to avoid stress and trauma in the present.

But the early warning system of the amygdala is designed to keep us alive above all, and it has a fast track to do so that remains unconscious. This faster track makes us

jump out of the way of a speeding car or catch a falling child or turn away from someone who gives us the creeps ten times faster than our “higher” brain can register anything has even happened.

The amygdala makes us act so quickly by activating the sympathetic or arousal side of the nervous system. The SNS is the gas that fuels our fight-flight response. We react reflexively, we take action quickly, without thinking at all, to protect ourselves and others. The arousal of the SNS is fueled by cortisol, the stress hormone that gets us moving and saves our lives. That’s the good news.

The two downsides are:

the fast track of the amygdala relies entirely on implicit (unconscious) memories which, depending on earlier, past experiences, are more likely to be biased toward the negative and slant the meaning of an event toward a stress response, perceiving threat or danger where there may not be any.

cortisol destroys brain cells. That’s the price we pay for our survival.

Cortisol suppresses our immune system; that’s why, with chronic stress, we become physically ill.

Cortisol destroys new cells and new synaptic connections among cells. The hippocampi, whose entire job is to create new cells and new connections among cells to create new explicit memories (i.e., learning), are especially vulnerable to damage by cortisol.

Too much cortisol flooding our brain can de-rail the capacities of the cortex to down-regulate the amygdala. With no signal coming from the higher executive centers of the brain – “It’s OK; we’re safe.” Or “It’s OK; we can handle this.” The amygdala doesn’t turn off the cortisol that keeps us aroused, alarmed, agitated, stressed. We’re in danger of going out of our “window of tolerance” into trauma.

It’s activating the parasympathetic wing of the nervous system, the PNS brakes of the SNS gas, that brings us back into balance, homeostasis, equanimity. And we must keep on line the integrated functioning of many parts of the cortex, especially the pre-frontal cortex that is only cell layers away from the amygdala, to accurately assess the true extent of any danger and to quell the fear response once any real danger has passed. We learn ways below to activate the PNS and strengthen the power of the pre-frontal cortex to quell the response of the amygdala, thus de-stressing our responses to any event, threatening or not.

What Happens in the Body-Brain to Cause a Trauma Response.

When a flood of too much cortisol, too much stress response, damages the explicit memory circuits of the hippocampi and de-rails the functioning of the cortex, even temporarily, reality testing becomes impaired, judgment becomes compromised, discernment and planning are pre-empted by impulsive reactivity. There is no quelling

of the fear response by any explicit memories of resilient coping. The brain begins to record new stressful experiences in implicit memory only, with no accurate explicit memory of them. “Something happened; I’m not sure what, but I’m really upset.” These implicit fear-based memories become self-reinforcing negative loops of trauma, isolated from any other parts of the brain that could consciously process the experience differently, more positively. This is why a traumatic memory can appear “out of the blue”, dissociated from anything else.

Trauma, by definition, is the body-mind’s record of any external or internal experience that overwhelms our normal capacities to process and cope.

Capital T trauma is an experience that would overwhelm anyone’s capacities, at least temporarily – losing a home or a family member in the floods of Katrina, watching a buddy die under friendly fire while deployed in Iraq, crushing a young child or dog under the wheels of our car.

Small T traumas are experiences that overwhelm some of us some of the time but not all of us all of the time: losing a home to a mortgage foreclosure, acting foolishly in front of strangers, witnessing a fatal car accident

Once a trauma loop has started, any new stimulus can be pulled unconsciously into an implicit association with past negative experiences. Any sudden braking in a car becomes a trigger of implicit memories of a car accident. Any banging door becomes a trigger of implicit memories of daddy coming home drunk. Any bounced check becomes a trigger of implicit memories of running out of money to pay the bills.

What To Do When There Is Stress

As the crash of the national economy continues, affecting and “infecting” so many, I’m reminding more and more clients, colleagues, friends. (myself!) to practice the techniques below to reduce stress and recover our resilience.

Activate the PNS, put the brakes on the arousal, slow down and BREATHE

a. Breathing. Deep belly breathing works because it activates the PNS and slows down our reactivity. Breathing slowly, deeply, can de-escalate a full-blown panic attack in a matter of minutes. Remembering to breathe throughout the day de-stresses us throughout our day, and helps us install calm as our real baseline, not stress as the new normal.

b. Hand on the heart. Neural cells around the heart activate during stress. A warm hand on the chest, in the area of the heart center, calms those neurons down again, often in less than a minute. It works, especially if paired with warm thoughts, feelings, images at the same time.

c. Poetry. Because poetry is metaphorical, imagistic, emotion and sense based, reciting poetry activates the right hemisphere of the brain which processes experience in a holistic, imagistic, emotion-sense based mode. Because the right hemisphere of the brain is rich in neuronal connections to the limbic system, including the alarm center and emotional meaning center of the amygdala, snuggling with a partner or a pet, drinking a warm cup of tea, and reading poetry can soothe and calm our nerves in about ten minutes.

The Peace of Wild Things

When despair for the world grows in me
and I wake in the night at the least sound
in fear of what my life and my children's lives may be,
I go and lie down where the wood drake
rests in his beauty on the water, and the great heron feeds.
I come into the peace of wild things
who do not tax their lives with forethought
of grief. I come into the presence of still water.
and I feel above me the day-blind stars
waiting with their light. For a time
I rest in the grace of the world, and am free.

-Wendell Berry, Collected Poems

d. Meditation. Sylvia Boorstein's book *Don't Just Do Something: Sit There!* speaks to our instinctive and socialized tendencies to do, to act (fight-flight). Following her instructions on compassionate mindfulness meditation is a gentle way to calm the mind and body, over time generating a steady inner calm that sustains us over the long haul.

2. Calm Jittery Neurons Through Touch

Modern neuroscience is validating what compassionate people have always known: we are hardwired to be soothed by touch. Skin-on-skin touch is a stress reducer because it

primes the brain to release oxytocin, the hormone that helps activate the PNS and cause cortisol levels to plummet. Touch heals.

Placing our hand on our own heart brings our heart rate variability into a calm rhythm, according to researchers at HeartMath Institute.

Holding hands with someone we feel safe with primes the brain to be less reactive to stress when disturbing events happen, according to Phil Shaver at U.C.Davis.

Holding hands with someone we feel safe with overrides anxiety and sensations of pain, even in situations stressful to others, according to James Coan of Duke University.

A 20-second full body hug releases oxytocin in the brain, according to Stan Tatkin at UCLA, reducing stress in couples.

People can distinguish a touch of compassion from touches of anger, fear, grief, etc., with 80% accuracy, according to Dacher Keltner at U.C. Berkeley.

Finding ways to “stay in touch” with loved ones is the best possible antidote to stress and a great buffer against trauma.

Find a friend or co-worker to exchange 5-minute head rubs with, sensual without being sexual. The gentle massage of fingers on the scalp, the forehead, the nose, the jaw, the ears can lower your blood pressure and calm your racing thoughts. The touch, warmth, movement releases the oxytocin in your brain, calming the fear center, allowing a few moments respite from stress and pressure.

3. Count to Ten Before Reacting. The folk wisdom of counting to ten before reacting works because counting to ten gives our brain the few precious seconds it needs for the cortex to focus and reflect on an event before we respond. The cortex is the part of our brain that can most powerfully over-ride the stress response and quell the firing of the amygdala. It is also the only part of our brain that operates consciously, with awareness. We need our cortex to be functioning so we can reflect on our experiences before we respond to them.

Among mindfulness practitioners, counting to ten is known as the Pause. The Pause works because we get to draw on conscious explicit memories in our assessment of what to do. Our conscious explicit memories tend to be more positive than the earlier implicit-only memories of our amygdala. We break the automaticity of our old reactive patterns when we pause long enough to become aware of what’s actually, truly happening. Seeing clearly, accurately, what we are experiencing, without reactivity, without distortion, allows us to respond to any event more flexibly, more wisely, more resiliently.

4. Access Memories of Resilient Coping. Once the cortex is on line, we can access networks of explicit memories of times in the past when we have coped with disturbing

events well. The brain creates self-reinforcing loops of memories that can spiral up into resilience or spiral down into trauma. If we have a memory of having love, even with the loss of a relationship, we can trust we'll have love again. If we have a memory of having gotten a job before, even with lay-offs in rough times, we can trust we'll have a job again. If we have a memory of coping well with distressing events before, even when circumstances become more dire, we can persuade ourselves we can cope well again.

Even if you have to go back to the third grade to find a moment where you met a moment of distress or disappointment with pluck and determination, find even that one moment and nurture it. Nurture a sense of yourself as resilient, brave, resourceful. Take it in as part of your true nature, your innate capacities to cope with the stresses of life, so you can draw on it as you face new stressors now.

5. Take Time to Smell the Roses

Spending time in nature could be part of slowing down, breathing, coming back to the big picture, re-grouping to cope better. Recent research proves even the smallest increments of being in nature nurtures our brains, thus our functioning, thus our coping.

Researchers at University of Michigan have found that people who have just spent even 10 minutes walking through a park consistently out-perform other people, who have just spent equal amounts of time walking around a city's downtown, on mental tasks involving attention and working memory. People perform better on the same mental tasks when looking out an apartment window onto a garden than other people looking out the window onto a parking lot.

Other research shows that people with major health problems or depression improve their functioning more quickly when they are responsible for taking care of plants than when they are not. Office workers increase their productivity when plants are part of the office environment.

All of this research on the nurture of nature was brought home to me when my friend David went for a walk through a local park after what could have been a life-saving financial deal fell through. He was greatly despondent as he headed out the door. Several hours later he returned, his internal state quite changed. He said simply in his quiet Texas drawl, "That was the most peaceful half hour — I have ever spent — in my entire life." Problems not yet solved, but face-able.

6. Forgive Yourself for Mistakes. With the current financial crisis impacting everyone directly or indirectly, I find people are kicking themselves all over the place. "I should have done this" or "I shouldn't have done that." It's important to show up for the challenges of life, take responsibility, learn the lessons, yes. Absolutely. But once that's done, perpetuating the guilt simply perpetuates the stress. And stress inhibits the functioning of the parts of the brain that could wisely discern what to do now.

“Finish each day and be done with it. You have done what you could; some blunders and absurdities have crept in; forget them as soon as you can. Tomorrow is a new day; you shall begin it serenely and with too high a spirit to be encumbered with your old nonsense.” – Ralph Waldo Emerson

Self-forgiveness is essential for the inner serenity that is essential to cope wisely in the future. And —

“Without forgiveness, there is no future.” -Desmond Tutu

What to Do When There is Trauma

When stress is layered upon previous trauma, the dissociated and unconscious trauma memories can block the speedy resolution of present day stress without our even knowing why. Uncovering un-integrated memories of previous trauma often works best with the skillful collaboration of a therapist trained in healing trauma. The websites below link to empirically validated modalities for healing trauma and national directories of therapists trained in those modalities.

www.emdria.com

Eye Movement Desensitization and Reprocessing (EMDR) is a set of standardized protocols proven effective for the treatment of trauma. EMDR, now becoming known as Adaptive Information Processing, allows the brain to re-process traumatic events and re-integrate them into a conscious sense of self.

www.sensorimotorpsychotherapy.com

Sensorimotor Psychotherapy is a mindfulness based, body-oriented trauma therapy that integrates verbal techniques with body-centered interventions in the treatment of trauma, attachment, and developmental issues.

www.traumahealing.com

Somatic Experiencing employs the awareness of body sensation to help people “renegotiate” and heal their traumas rather than relive them. With appropriate guidance with the body’s instinctive “felt sense,” individuals are able to access their own built-in immunity to trauma, allowing the highly aroused survival energies to be safely and gradually discharged. When these energies are discharged, people frequently experience a dramatic reduction in or disappearance of their traumatic symptoms.

www.aedpinstitute.com

Working with trauma, loss, and the painful consequences of the limitations of human relatedness, Accelerated Experiential Dynamic Psychotherapy is a transformation-

based, healing-oriented model of psychotherapy and trauma therapy. AEDP fosters the emergence of new and healing experiences through the in-depth processing of difficult emotional and relational experiences.

This article was revised from the March 2009 newsletter Healing and Awakening into Aliveness and Wholeness, archived on www.lindagraham-mft.com. Linda Graham, MFT, is a psychotherapist in full-time private practice in San Francisco and Corte Madera, offering consultation and trainings on the integration of relational psychology, mindfulness and neuroscience.

<http://lindagraham-mft.net/resources/published-articles/skillful-ways-to-deal-with-stress-and-trauma/>