

Fighting the Fire: Emotions, Evolution, and the Future of Psychology

The quest to relieve mental and emotional suffering is an ancient human enterprise. Twenty-five hundred years ago, the Buddha taught how suffering may be relieved through contemplation and meditation. His near-contemporary, the Greek philosopher Epicurus, proclaimed that any philosopher who did not reduce suffering was worthless. Residents of 8th century Islamic cities built asylums to care for the mentally ill. Shakespeare wondered how to “ease the anguish of a torturing hour.” In the shortest verse in the Bible, Saint John tells us that “Jesus wept,” in empathy with the grief of those around him. Muhammad, after conquering Mecca in a great *jihad* or struggle, then told his followers that the more difficult *jihad* now begins: the one to master our unruly inner states.

A great leap in understanding the persistence of human emotional suffering came to Europeans in the late nineteenth century when Sigmund Freud grasped and explained the significance of the unconscious mind. Ask your friends if they want to be healthy, wealthy, and wise, and they will assure you that they do. Yet we return again and again to behaviors, thoughts, and beliefs that perpetuate our suffering. Freud’s emphasis on the unconscious mind demonstrated that despite our attempts at change, there is a well of hidden mental material that may be quite at odds with our good intentions and may perpetuate old patterns of suffering.

Freud produced many brilliant insights, but he was quite incorrect in believing that “insight produces change.” Cognitive neuroscience has now shown us that conditions like phobias and PTSD are not simply “in the mind.” They produce conditioning in the brain that involves feedback loops that maintain the emotional problem by adding synaptic connections to oft-used neural pathways. Eric Kandel, who won the Nobel Prize for Medicine in 2000, showed that within just 1 hr of repeated stimulation, the number of synaptic connections in a neuronal pathway can *double*. Conversely, unused pathways can decay in as little as 3 weeks. The axon sheaths around brain neurons are

completely disassembled by the body and recreated every 10 min. Recent discoveries have upended the previous received wisdom in biology that human brains grow till about the age of 17 years and then become fixed anatomy. The brain and nervous system are dynamic structures boiling with change, rewiring themselves second by second on the basis of both internal and external stimuli. If hearts and minds are mesmerized by prolonged suffering, stress-modulating structures in the limbic system like the hippocampus actually shrink as this biological material is broken down and reused to bulk up the circuits of stress. So insight alone is not enough; the conditioned emotional responses that wire our brain physiology must somehow be interrupted.

In the second half of the 20th century, psychology turned from Freud’s emphasis on exploring the unconscious and took a more practical turn. Influenced by Ivan Pavlov’s experiments showing that conditioned responses could be induced in animals, B. F. Skinner emphasized that behavior can be altered by the appropriate stimuli. Rather than merely seeking insight into a client’s cognitive world, Aaron Beck and others experimented with methods to change those cognitions to produce healthier behaviors and developed cognitive behavioral therapy, or CBT. In the 1950s, psychiatrist Joseph Wolpe introduced the concept of counterconditioning, in which a conditioned fear response is paired with induced relaxation. Like Skinner, who broke complex behaviors into simple components, Wolpe had clients first “reciprocally inhibit” small traumatic cues and then, following modest improvements, larger ones. Such counterconditioning breaks the association between the fearful thought and the conditioned activation of the alarm response in the body. Wolpe also introduced the client-rated measure of SUD, or Subjective Units of Distress, using a scale to determine whether the counterconditioning therapy was indeed reducing the client’s fear. In this, he echoed Carl Rogers’s call for “client-centered therapy,” part of the great shift the profession took in the

second half of the 20th century with humanistic and transpersonal psychology. Abraham Maslow coined the term *self-actualization*—the full use of a human being’s talents and potentials—and placed it at the top of his “hierarchy of needs,” arguing that once lower-order needs like survival and reproduction are met, self-actualization is the ultimate human need.

In the 1960s and 1970s, pioneering clinicians such as Roger Callahan, John Diamond, George Goodheart, and Francine Shapiro provided a vital missing piece to the transformational puzzle. Long before the discoverers of cognitive neuroscience mapped the dance between cells and before feelings and epigeneticists revealed the interactions between emotions and gene expression, they realized that *the body plays a crucial role in psychological change* and *somatic stimulation* can influence cognition. By engaging the body during cognitive restructuring, they were able to quickly break the feedback loop that held old psychological problems in place. Their methods, such as Eye Movement Desensitization and Reprocessing (EMDR; Shapiro) and Thought Field Therapy (TFT; Callahan), were intriguing to the venturesome minority of a new generation of psychotherapists.

As clinicians began to experiment with methods like EMDR and TFT in their practices, innovations spread quickly. New methods such as Advanced Integrative Therapy (AIT; Asha Clinton), Emotional Freedom Techniques (EFT; Gary Craig), Energy Diagnosis and Treatment (EDx™; Fred Gallo), and Tapas Acupressure Technique (TAT; Tapas Fleming) were developed. Psychologist Fred Gallo coined the term “energy psychology,” or EP, to describe this large and growing family of therapeutic methods. Reports of rapid emotional and physical healing began to pour in from psychologists, psychiatrists, social workers, mental health counselors, nurses, life coaches, business trainers, and lay people using these methods.

Several seminal studies on energy psychology were published in the early years of the 21st century as the field progressed from clinical observation to empirical measurement. Jack Rowe assessed the breadth and intensity of psychological distress of participants in an EFT weekend seminar, as well as the presence of specific symptoms such as anxiety, depression, and paranoia, and found them to be significantly reduced. Not only did the workshop improve psychological functioning, but 3-month and 6-month follow-ups showed

the effect to hold over time. Steve Wells and colleagues performed a randomized controlled trial of EFT for specific phobias. Phobias—in which the stimulus of a thought about a feared object or situation produces a feeling of fear to which the body is conditioned to initiate an alarm response—are a classic Pavlovian reaction. While conventional therapies such as exposure therapy usually require several sessions to reduce a phobic response, and most cognitive arguments were powerless against phobias, Wells found that *a single 30-minute session of EFT* reduced symptoms significantly. At 6-month follow-up, most participant gains held. A replication was able to produce the same effect in *just 10 minutes of treatment*. By working from the established foundation of exposure and cognitive shift, but adding the innovation of somatic input, EP practitioners were able to produce more reliable results in shorter timeframes.

Other researchers used EEG readings to explore neural changes concurrent with the relief of emotional suffering during EP treatment. John Diepold and David Goldstein took qualitative EEG recordings of a participant recalling a traumatic memory. They compared these readings with baseline values and found that recall of an emotional trigger produced statistically abnormal EEG readings as the fear response was activated in the participant’s brain. After TFT treatment, the brain’s fear response was extinguished and stayed extinguished even when the participant recalled the same traumatic scene 18 months later. Lambrou, Pratt, and Chevalier used EEG to compare claustrophobics with a nonclaustrophobic population. They then gave the claustrophobics a 30-min EP treatment and found that their EEG readings had normalized. On follow-up 2 weeks later, the EEG readings were still normal. Swingle, Pulos, and Swingle took a group of auto accident victims with PTSD, measured their EEG readings, and then taught them EFT. After 3 months, Swingle and colleagues found that the EEG readings had improved, as had participants’ PTSD symptoms. It became apparent that once an emotional trigger had been neutralized using EP, the conditioned feedback loop was permanently broken. These promising outcomes led to clinical trials with highly traumatized and treatment-resistant groups, such as war veterans with PTSD. Even people traumatized by horrors such as Rwanda and Kosovo were able to put their suffering behind them after EP treatment, sometimes in as little as one session.

Thousands of practitioners began to learn EFT, the basics of which can be learned in a few hours.

A thousand years ago, Muslim physician Ahmed al-Bhakli observed that, “if the psyche gets sick, the body may also find no joy in life and eventually develop a physical illness.” Emotions and biology are inextricably linked, and many other authorities have since emphasized this relationship. Charles Darwin was interested in the role of emotions in natural selection, and he presented his observations in his 1872 book, *The Expression of Emotions in Man and Animals*. Freud’s near-contemporary, Willem Wundt, founded the first experimental psychology laboratory at the University of Leipzig in 1879. He grounded psychology firmly in physiology, and his students called his approach “holistic psychology.” South African President Jan Smuts argued for an integrative vision of biology in his 1926 volume, *Holism and Evolution*.

The holistic view came into prominence in the early 1980s with the founding of the American Holistic Medical Association in 1980 and the American Holistic Nurses Association in 1981. Such well-known leaders in the field of holistic health as Norman Shealy, Andrew Weil, Bernie Siegel, Christiane Northrup, Barbara and Larry Dossey, and Joan Borysenko were early contributors within these organizations. Complementary alternatives to conventional medicine moved into mainstream culture, as people increasingly recognized the interrelationship of physical wellbeing and emotional stress, lifestyle patterns, attitudes, spirituality, and belief.

In the 1990s, a dramatic example of the holistic link between emotional health and physical health arrived, this time from a huge epidemiological study of 17,421 adults. The Centers for Disease Control, in association with Kaiser Permanente, a health maintenance organization and hospital chain with 11 million members, examined the link between disease, and childhood trauma. Called the ACE (Adverse Childhood Experiences) Study, it found an association between traumatic childhood experiences and disease. Many diseases, including the top 10 killers of adults, correlated with unhealed emotional wounds. They included cancer, heart disease, diabetes, high blood pressure, obesity, hepatitis, sexually transmitted diseases, alcoholism, and bone fractures. The higher the number of adverse childhood experiences, the higher the likelihood of each of these diseases. Smoking, intravenous drug abuse, depression,

unintended pregnancy, and suicide attempts also correlated with higher ACE scores. Other studies have also found strong links between emotional trauma and physical disease. Particularly interesting are studies of identical twins. They are born with identical sets of genes, and when DNA microarrays are used to scan their 23,688 genes at birth, the genomes are indistinguishable. But by the time twins reach the age of 50, their DNA profiles have diverged. Epigenetic influences have set them on different courses, and on average, they die more than 10 years apart. One of the most important epigenetic influences is stress. The emotional trauma of stress is now known to affect the expression of over 1,000 genes, including many that influence aging and cell regeneration.

These data lead to the sober conclusion that time does not heal. The mean age of participants in the ACE study was 57 years old, and the emotional trauma they had suffered had occurred a half-century before. Results thus indicate that if emotional suffering is not addressed, it can wreak havoc on the body, even decades later. The relief of emotional suffering is not just a luxury for the elites of the world who can afford expensive courses of psychotherapy, it is a public health issue affecting rich and poor individuals and countries alike. The prestigious authors of the ACE study likened the efforts of the medical establishment to fire fighters pouring their water on the smoke (physical disease) while the flames (emotional trauma) rage unabated. Therapies that address the roots of emotional trauma give clinicians, for the first time in history, the means to douse the fire from which much ill-health springs.

While EP is today just a tiny part of medicine and psychology, it is destined to become a front-line intervention. In a few seconds, it is consistently able to extinguish the alarm response generated by highly triggering memories. I have lectured about EP and the epigenetics of stress at over 100 psychology and medical conferences, and I often perform demonstrations. In these EP demonstrations, I have watched scores of psychotherapists and physicians who have suffered with trauma their whole lives and been unable to budge their suffering despite all their professional training experience breakthrough after breakthrough.

I have witnessed a poignant story unfold in the eyes of an 86-year-old World War II veteran who had lived with PTSD symptoms for most of his adult life. The face of a child he accidentally killed

in a firefight had haunted him for 62 years, smiling at him in his dreams. I saw his eyes widen in disbelief as that intrusive memory lost its impact after a few seconds of EP, and the child smiled at him one last time, waved, turned, and walked out of his life forever, leaving him at peace. For the first time in decades, he was liberated from the suffering of this old experience. The look of utter astonishment in those eyes is unforgettable.

I have looked deep into the eyes of a brilliant female psychoanalyst who had had a string of disastrous relationships with men. When asked to recall her worst childhood memory, she remembered being beaten by her stepmother—and her father subsequently telling her that she was to blame for having provoked the beating. All of her training, therapy, and insight had been unable to liberate her from the anguish felt by that young version of herself. She could not imagine being free. Suddenly, after a few minutes of EP, her body convulsed, her face softened, she relaxed, and the intensity of the memory faded. No longer bound by the psychodynamics of her childhood trauma, she was launched onto a new path for her future relationships with men.

I have had physicians take an introductory EP course with me at a medical conference and then tell me a few months later that they now obtain informed consent and use EP, on intake, with every new patient. Once doctor and patient have removed the emotional aspects of disease, what is left are the organic realities of the body. They are often much more accessible for treatment without the contributing overlay of emotional trauma.

The studies of EP delivered to large groups of people are equally provocative and statistically significant. In a randomized controlled trial of EFT for sports performance, a group of championship basketball players performed 38% better at free throws than did a group that had received a placebo treatment. In a study of 216 healthcare professionals, including physicians, nurses, chiropractors, and psychotherapists, 2 hr of EFT was able to reduce psychological problems such as anxiety and depression by 45%, and the participants retained most of their gains at 3-month follow-up. Their physical pain was reduced by 68%, and their cravings were reduced by 83%. When a group of Kaiser Permanente patients in a weight loss class learned TAT, their cravings went down, as did their weight. All these improvements came in brief timeframes and were caused by fighting

the fire of emotional trauma, extinguishing the underlying root cause of much suffering in individuals and communities.

Take a moment and dream with me. Imagine large groups of people routinely using the tools of EP to reduce their current emotional upsets as well as to systematically take the sting out of early childhood wounds. What if humankind, as a species, suddenly discovered how to put out the fire of much emotional suffering quickly and reliably and committed itself to offering this endowment to a great many of its members? The changes might be profound.

Imagine if emotional traumas were rapidly resolved in medical patients at the start of treatment, and organic disease could be treated without the overlay of emotional wounding. What if hospital workers de-stressed themselves on and off the job, and medical patients had effective EP tools to reduce their anxiety about necessary procedures?

Imagine interpersonal relationships without the conditioned responses driven by habitual emotional patterns. Imagine EP in schools, reducing test anxiety, petty jealousies, and bullying. Imagine EP in businesses, reducing stress, improving health, and unlocking innovation and human potential. Imagine athletes reducing anxiety so that they bring their full abilities to bear on the performance demands at hand. Imagine EP in prisons, reducing aggression and defusing tense jail house emotions.

Imagine EP applied to conflicts between nations. While EP has already been used to ameliorate the consequences of conflicts such as those in Kosovo and Rwanda, we need to do more than address the dreadful human tragedies left in their wake. We need to be proactive in using emotional healing to *prevent* international conflicts. Social trauma is intertwined with the traumas of the individuals who constitute that society. Imagine if EP were part of the curriculum in Israeli and Palestinian schools, inner-city schools, or Indian and Pakistani schools. Individual trauma is a contributor to tribal, national, and international trauma. If large aggregations of people learn to heal their emotional wounds, they might be less inclined to make war on their neighbors.

Imagine the effect on productivity of thousands of workplaces in which workers had fast and reliable emotional tools to reduce their stress. Imagine if many employees had ways of defusing interpersonal conflicts. Imagine the competitive

advantage gained by the early adopters of such methods, whether companies or nations.

Imagine the degree of creativity and self-actualization possible if the time and consciousness currently absorbed by emotional misery were liberated. Self-actualized people might find better solutions to problems like global warming, poverty, species extinction, and malnutrition. They might collaborate on the big challenges facing the human species in a way that narrow national and commercial interests, driven by individuals stuck in a fear-driven, win-lose, zero-sum paradigm cannot.

The Buddha's dream of liberation from suffering comes closer with every advance we make in emotional self-management. EP can play an important role in our movement toward self-actualization, first as individuals, and eventually as an entire species. At that point, with human creativity and awareness interfacing with our great planetary challenges, we change the trajectory of evolution, opening up possibilities that not even the most expansive thinker of today can imagine.

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