ENERGY PSYCHOLOGY
Theory, Indications, Evidence

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Synopsis

In preliminary clinical trials involving more than 29,000 patients from 11 allied treatment centers in South America during a 14-year period, a variety of randomized, double-blind pilot studies were conducted. In one of these, approximately 5,000 patients diagnosed at intake with an anxiety disorder were randomly assigned to an experimental group (tapping) or a control group (cognitive behavior therapy /medication). Ratings were given by independent clinicians who interviewed each patient at the close of therapy, at 1 month, at 3 months, at 6 months, and at 12 months. The raters made a determination of complete remission of symptoms, partial remission of symptoms, or no clinical response. The raters did not know if the patient received CBT/medication or tapping. They knew only the initial diagnosis, the symptoms, and the severity, as judged by the intake staff. At the close of therapy: 63% of the control group were judged as having improved; 90% of the experimental group were judged as having improved. 51% of the control group were judged as being symptom free; 76% of the experimental group were judged as symptom free.

At one-year follow-up, the patients receiving the tapping treatments were substantially less prone to relapse or partial relapse than those with CBT/medication, as indicated by the independent raters' assessments and corroborated by brain imaging and neurotransmitter profiles. In a related pilot study by the same team, the length of treatment was substantially shorter with energy therapy and associated methods than with CBT/medication (mean = 3 sessions vs. mean = 15 sessions). If subsequent research corroborates these early findings, it will be a notable development since CBT/medication is currently the established standard of care for anxiety disorders and the greater effectiveness of the energy approach suggested by this study would be highly significant.

Introduction

Despite its odd-seeming procedures and eye-raising claims, evidence is accumulating that energy-based psychotherapy, which involves stimulating acupuncture points or other energy systems while bringing troubling emotions or situations to mind,[1] is more effective in the treatment of anxiety disorders than the current standard of care, which utilizes a combination of medication and cognitive behavior therapy. This paper:

1. Presents preliminary data supporting this assertion.
2. Discusses indications and contraindications for the use of energy therapy with anxiety as well as other conditions.
3. Speculates on the mechanisms by which
    a) tapping specific areas of the skin while
    b) a stimulus that triggers a disturbed emotional response is mentally accessed

    apparently alleviates certain psychological disorders.

A Winding Road to Effective Anxiety Treatment

The first author describes his initial encounter with panic disorder, in a crowded urban hospital emergency room, some 30 years ago: The patient was trembling, dizzy, and terrified, pleading, "Help me, Doc, I feel like I'm gonna die!" My medical training had not prepared me for this moment, and I emerged from it determined that I would have a better response the next time I was faced with a patient in acute panic.

This was the first step on a long and winding road. I studied with acknowledged experts on anxiety disorders, attended relevant professional meetings, talked with famous international specialists, read the books they recommended, did my own literature searches, prescribed medications, applied various forms of psychotherapy (from psychodynamic to Gestalt to NLP), learned acupuncture in China, made referrals to alternative practitioners (including those specializing in homeopathy, cranial sacral therapy, chiropractic, flower remedies, applied kinesiology, ozone therapy, and Ayurvedic), sent people on spiritual retreats, used all forms of machines from biofeedback to electric acupuncture, even resorted to sensory deprivation (confining a panic patient in a sensory deprivation tank is a distinguishing sign of a therapist's desperation).

The consistent finding: disappointing results. My colleagues and I were making a difference for perhaps 40 to 50 percent of these people, albeit with multiple relapses, partial cures, and many who never completed treatment. Later, we combined alprazolam and fluoxetine with cognitive behavior therapy, obtaining slightly better outcomes. But never were we able to reach the 70 percent in 20 sessions we had read about. Then came Eye Movement Desensitization and Reprocessing (EMDR), which we learned as an almost secret practice some friends were doing in an East Coast hospital. We began to get more satisfactory responses, yet along with them, disturbing abreactions.

We then learned about tapping selected acupuncture points while having the patient imagine anxiety-producing situations. It was a huge leap forward! We began to obtain unequivocal positive results with the majority of panic patients we treated. At first we used generic tapping sequences. Then tapping sequences tailored for panic. Then tapping sequences

based on diagnosing the energy pathways involved in each patient's unique condition. All of these strategies yielded good results, slightly better with diagnosis-based sequences, averaging about a 70 percent success rate.

We found we could further enhance these encouraging outcomes by limiting sugar, coffee, and alcohol intake and prescribing a physical exercise program. We emphasized the cultivation of enjoyment. We showed our patients how Norman Cousins used laughter in his own healing and encouraged them to engage in sincere laughter for five minutes twice each day. We introduced natural metabolic substances, such as L-tryptophan, L-arginine, and glutamic acid. For rapid symptom relief in severe cases, we found we could combine a brief initial course of medication with the tapping.

With this regime, we have been able to surpass the 70 percent mark. And we have gathered substantial experience indicating that stimulating selected acupoints is at the heart of the treatment and is often sufficient as the sole intervention. Over a 14-year period, our multidisciplinary team, including 36 therapists,[2] has applied tapping techniques (we also use the term "brief sensory emotional interventions") with some 31,400 patients in eleven treatment centers in Uruguay and Argentina. The most prevalent diagnosis[3] was anxiety disorder.[4] For 29,000 of these patients, our documentation included an intake history, a record of the procedures administered, clinical responses, and follow-up interviews (by phone or in person) at one month, three months, six months, and twelve months. We have also systematically conducted numerous clinical trials. Our conclusion, in brief: No reasonable clinician, regardless of school of practice, can disregard the clinical responses that tapping elicits in anxiety disorders (over 70% improvement in a large sample in 11 centers involving 36 therapists over 14 years).

Clinical Trials

The clinical trials were conducted for the purpose of internal validation of the procedures as protocols were being developed. When acupoint stimulation methods were introduced to the clinical team, many questions were raised, and a decision was made to conduct clinical trials comparing the new methods with the CBT/medication approach that was already in place for the treatment of anxiety. These were pilot studies, viewed as possible precursors for future research, but were not themselves designed with publication in mind. Specifically, not all the variables that need to be controlled in robust research were tracked, not all criteria were defined with rigorous precision, the record-keeping was relatively informal, and source data were not always maintained. Nonetheless, the studies all used randomized samples,[5] control groups,[6] and double blind assessment.[7] The findings were so striking that the research team decided to make them more widely available.

Over two dozen separate studies were conducted. In the largest of these (and some of the other studies were sub-sets of this study), approximately 5,000 patients were randomly assigned to receive CBT and medication or tapping treatments.[8] Approximately 2,500 patients were in each group, with diagnoses including panic, agoraphobia, social phobias, specific phobias, obsessive compulsive disorders, generalized anxiety disorders, PTSD, acute stress disorders, somatoform disorders, eating disorders, ADHD, and addictive disorders.[9] The study was conducted over a 5½-year period. Patients were followed by telephone or office interviews at 1 month after treatment, 3 months, 6 months, and 12 months. At the close of therapy, "positive

clinical responses" (ranging from complete relief to partial relief to short relief with relapses) were found in 63 percent of those treated with CBT and medication and in 90 percent of those treated with tapping techniques. Complete freedom from symptoms was found in 51 percent and 76 percent, respectively.[10] At one-year follow-up, the gains observed with the tapping treatments were less prone to relapse or partial relapse than those with CBT/medication, as indicated by the independent raters' assessments and corroborated by brain imaging and neurotransmitter profiles.[11]

The number of sessions required to attain the positive outcomes also varied between the two approaches. In one of the studies, 96 patients with specific phobias were treated with a conventional CBT/medication approach and 94 patients with the same diagnosis were treated using a combination of tapping techniques and an NLP method called *visual-kinesthetic dissociation* (the patient mentally plays a short "film" of the phobic reaction while watching it from a distance, and then rapidly rewinds and replays it, gradually entering the film, until a "dissociation" from the triggering event is effected). Positive results[12] were obtained with 69 percent of the patients treated with CBT/medication within 9 to 20 sessions, with a mean of 15 sessions. Positive results were obtained with 78 percent of the patients treated with the tapping and dissociation techniques within 1 to 7 sessions, with a mean of 3 sessions.[13] The course of treatment for tapping throughout all trials was generally between 2 and 4 sessions; the course of treatment for CBT/medication was generally between 12 and 18 sessions. Tapping patients were also taught simple sequences to apply at home.

Standard medications for anxiety (benzodiazepines, including diazepam, alprazolam, and clonazepan) were given to 30 patients with generalized anxiety disorder (the three drugs were randomly assigned to subgroups of 10 patients each). Outcomes were compared with 34 generalized anxiety disorder patients who received tapping treatment. The medication group had 70 percent positive responses compared with 78.5 percent for the tapping group. About half the medication patients suffered from side effects and rebounds upon discontinuing the medication. There were no side effects in the tapping group, though one patient had a paradoxical response (increase of anxiety).

Specific elements of the treatment were also investigated. The order that the points must be stimulated, for instance, was investigated by treating 60 phobic patients with a standard 5-point protocol while varying the order in which the points were stimulated with a second group of 60 phobic patients. Positive clinical responses for the two groups were 76.6 percent and 71.6 percent, respectively, showing no significant difference for the order in which the points were stimulated. In other studies, varying the number of points that were stimulated, the specific points, and the inclusion of typical auxiliary interventions such as the "9 Gamut Procedure" did not result in significant differences between groups, although diagnosis of which energy points were involved in the problem led to treatments that had slightly more favorable outcomes. The working hypothesis of the treatment team at the time of this writing is that for many disorders, such as specific phobias, wide variations can be employed in terms of the points that are stimulated and the specifics of the protocol. For a smaller number of disorders, such as OCD and generalized social anxiety, precise protocols must be formulated and adhered to for a favorable clinical response.

In a study comparing tapping with acupuncture needles, 40 panic patients received tapping treatments on pre-selected acupuncture points. A group of 38 panic patients received

acupuncture stimulation using needles on the same points. Positive responses were found for 78.5 percent from the tapping group, 50 percent from the needle group.

While it must again be emphasized that these were pilot studies, they lend corroboration to other clinical trials that have yielded promising results regarding the efficacy of energy-based psychotherapy, such as those conducted by Sakai et al. (n=714, representing a wide range of clinical conditions) and Johnson et al. (n=105, all PTSD victims of ethnic violence in Albania, Kosovo). Both of these studies were published in the October 2001 issue of the *Journal of Clinical Psychology*[14] and their full text, along with that of related studies, can be downloaded from www.tftrx.com/5ref.html. For an overview of current research in energy psychology, maintained by the Association for Comprehensive Energy Psychology, visit www.EnergyPsychResearch.org.

Indications and Contraindications

The follow-up data on the 29,000 patients coming from the 11 centers in South America included subjective scores after the termination of treatment by independent raters. The ratings, based on a scale of 1 to 5, estimated the effectiveness of the energy interventions as contrasted with other methods that might have been used.[15] The numbers indicate that the rater believed that the energy interventions produced:

1. Much better results than expected with other methods.
2. Better results than expected with other methods.
3. Similar results to those expected with other methods.
4. Lesser results than expected with other methods (only use in conjunction with other therapies).
5. No clinical improvement at all or contraindicated.

It must be emphasized that the following indications and contraindications for energy therapy are tentative guidelines based largely on the initial exploratory research and these informal assessments. In addition, the outcome studies have not been precisely replicated in other settings, and the degree to which the findings can be generalized is uncertain. Nonetheless, based upon the use of tapping techniques with a large and varied clinical population in 11 settings in two countries over a 14-year period, the following impressions can serve as a preliminary guide for selecting which clients are good candidates for acupoint tapping. There is also considerable overlap between these tentative guidelines and other published reports.[16]

Rating of 1—"Much better results than with other methods." Many of the categories of anxiety disorder were rated as responding to energy interventions much better than to other modalities. Among these are panic disorders with and without agoraphobia, agoraphobia without history of panic disorder, specific phobias, separation anxiety disorders, post-traumatic stress disorders, acute stress disorders, and mixed anxiety-depressive disorders. Also in this category were a variety of other emotional problems, including fear, grief, guilt, anger, shame, jealousy, rejection, painful memories, loneliness, frustration, love pain, and procrastination. Tapping techniques also seemed particularly effective with adjustment disorders, attention deficit disorders, elimination disorders, impulse control disorders, and problems related to abuse or neglect.

Rating of 2—"Better results than with other methods." Obsessive compulsive disorders, generalized anxiety disorders, anxiety disorders due to general medical conditions, social phobias and certain other specific phobias, such as a phobia of loud noises, were judged as not responding quite as well to energy interventions as did other anxiety disorders, but they were still rated as being more responsive to an energy approach than they are to other methods. Also in this category were learning disorders, communication disorders, feeding and eating disorders of early childhood, tic disorders, selective mutism, reactive detachment disorders of infancy or early childhood, somatoform disorders, factitious disorders, sexual dysfunction, sleep disorders, and relational problems.

Rating of 3—"Similar to the results expected with other methods." Energy interventions seemed to fare about equally well as other therapies commonly used for mild to moderate reactive depression, learning skills disorders, motor skills disorders, and Tourette's syndrome. Also in this category were substance abuse-related disorders, substance-induced anxiety disorders, and eating disorders. For these conditions, a number of treatment approaches can be effectively combined to draw upon the strengths of each.

Rating of 4—"Lesser results than expected with other methods." The clinicians' post-treatment ratings suggest that for major endogenous depression, personality disorders, and dissociative disorders, other therapies are superior as the primary treatment approach. Energy interventions might still be useful when used in an adjunctive manner.

Rating of 5—"No clinical improvement or contraindicated." The clinicians' ratings of energy therapy with psychotic disorders, bipolar disorders, delirium, dementia, mental retardation, and chronic fatigue indicated no improvement. While anecdotal reports that people within these diagnostic categories have been helped with a range of life problems are numerous, and seasoned healers might find ways of adapting energy methods to treat the conditions themselves, the typical psychotherapist trained only in the rudimentary use of acupoint stimulation should have special training or understanding for working with these populations before applying energy methods.

Other Guidelines. Even though the above guidelines are preliminary and heuristic, diagnosis is clearly a key indicator of how and when to bring energy-based psychotherapy into the treatment setting. As part of the diagnostic work-up, co-morbidities should also be carefully identified. Their presence of course influences the treatment strategy. Even in cases where energy interventions are not the treatment of choice, they can be used as a complement to other psychotherapies, drugs, and medical procedures. In these cases, it is useful to orient them around well-defined emotional issues and it is critical to keep other treatment team members informed about the energy treatment and its purpose. While interventions that tap acupuncture points appear to be effective in alleviating a wide range of physical disorders, much as acupuncture with needles can be applied to illnesses ranging from allergies to cancer, strong caution must be used when addressing physical diseases or undiagnosed pain. Medical examinations and the participation of medical personnel is indicated when addressing any serious medical conditions or symptoms that might prove to be the first evidence of a serious condition. One the potential hazards is that tapping acupoints may bring about subjective improvement that ultimately wastes life-saving time.

Joseph Wolpe's Seminal Contribution to Energy Psychology

When Joseph Wolpe developed systematic desensitization in the 1950s, he provided the next several generations of clinicians their most potent single non-pharmacological tool for countering severe anxiety conditions. Patients were taught how to relax each of the body's major muscle groups. With the muscle groups relaxed, they would bring to mind a thought or image that evoked an item from the bottom of a hierarchy of anxiety-provoking situations they had prepared earlier. They would learn to shift the focus between *holding* the thought or image and *relaxing* the muscle groups until the thought or image was progressively associated with a relaxed response. They would then systematically move up the hierarchy, reconditioning the response to each thought or image by replacing the anxious or fearful response with a relaxed response.

This process is the closest cousin energy therapy has among traditional psychotherapeutic modalities. Both approaches bring a problematic emotion to mind and introduce a physical procedure that neutralizes the emotion. But energy therapy also has a much older relative, whose lineage substantially expands the range of problems that may be addressed and the precision with which they may be targeted. That progenitor is the practice of acupuncture.

Rather than to relax the *muscle tension* associated with anxiety or fear, energy therapy corrects for a disturbed pattern in the specific *energy pathways* or *meridians* that are affected when the client is mentally engaged with a problematic situation. For this reason, one of the strengths of energy-based psychotherapy is the range of emotional conditions with which it is effective. Each of the body's major energy pathways is believed to be associated with specific emotions and themes. A stimulus that brings a meridian out of harmony or balance (while this is a complex concept, terms such as underenergy, overenergy, and stagnant energy might each apply) also activates the emotion associated with that meridian. The treatment pairs the stimulus with an energy intervention that rebalances the meridian, bringing it back into coherence and harmony with the body's overall energy system. A disturbed meridian response is replaced by an undisturbed response. Just as deep muscle relaxation can neutralize a specific fear in systematic desensitization, calming a disturbed meridian can disengage the emotional reaction associated with that meridian.

It is because of the wide spectrum of emotions that are governed by the meridian system[17] that tapping interventions have a greater power and applicability than systematic desensitization. Systematic desensitization can neutralize anxiety-based responses by countering them with deep muscle relaxation, but that is the only key on its keyboard. Interventions capable of restoring balance to any of the major meridians can address the entire scale of human emotions, from anxiety and fear to anger, grief, guilt, jealousy, over-attachment, self-judgment, worry, sadness, and shame. Note the spectrum of problematic emotions for which the raters in the South American studies found energy interventions to produce "much better results than other methods." These impressions are corroborated by reports from practitioners in numerous other settings who have been impressed by the speed with which a wide range of problematic emotions can be overcome by using energy interventions.[18]

Possible Mechanisms (see appendix B also)

While a framework that links specific emotions with specific energy pathways requires a paradigm-leap for most Western psychotherapists, the hypothesis is central to traditional Chinese medicine, a 5,000-year-old method that is currently the most widely practiced medical approach on the planet. Its venerable though sometimes quaint concepts are now being blended with modern scientific understanding and empirical validation, and an approach is developing that holds great promise for Western medicine as well as for psychotherapy.

The most controversial idea that emerges for psychotherapy is that the body is surrounded and permeated by an *energy field which carries information*[19] Disturbances in this energy field are said to be reflected in emotional disturbances. The concept of energy fields carrying information that impacts biological and psychological functioning is appearing independently in the writings of scientists from numerous disciplines, ranging from neurology to anesthesiology, from physics to engineering, and from physiology to medicine.[20] In energy psychology, this two-part formulation, in which biochemistry and invisible physical fields are believed to be working in tandem, has been used to explain the rapid changes that are often witnessed in long-standing emotional patterns. Changes in the energy field are understood as having the power to shift the *organization* of electrochemical processes.

Many of the electrochemical processes that are probably involved have been mapped.[21] When a person thinks about an emotional problem, activation signals can be registered by various brain-imaging techniques at the amygdala, hippocampus, orbital frontal cortex, and several other central nervous system structures. When tapping is simultaneously introduced, the receptors that are sensitive to pressure on the skin send an afferent signal, regulated by the calcium ion, through the medial lemniscus, that reaches the parietal cortex and from there is directed to other cortical and limbic regions. The interaction of these signals appears to cause a shift in the biochemical foundations of the problem.[22] One hypothesis is that the signal sent by tapping "collides" with the signal produced by thinking about the problem, introducing "noise" into the emotional process, which alters its nature and its capacity to produce symptoms. Enhanced serotonin secretion also correlates with tapping specific points.

Whether serotonin, the calcium ion, or the energy field (or some combination) is the primary player in the sequence by which tapping reconditions disturbed emotional responses to thoughts, memories, and events, early clinical trials suggest that easily replicated procedures seem to yield results that are more favorable than other therapies for a range of clinical conditions. Based on the preliminary findings in the South American treatment centers, new and more rigorous studies by the same team are planned or underway. Many are designed to corroborate the informal findings reported in this paper. Others will investigate new protocols for patients who have not responded well to more standardized energy interventions. Others will focus on the neurological correlates of energy interventions, using LORETA tomography and other brain imaging devices. While much more investigation is still needed to understand and validate an energy approach, early indications are quite promising.

Notes

1 “Energy psychology," "energy-based psychotherapy," and "energy therapy" all refer to the therapeutic modality represented, for instance, by the Association for Comprehensive Energy Psychology (www.energypsych.org). Earlier therapeutic modalities within psychology and psychiatry that focus on the body's energy systems extend back at least to Wilhelm Reich and are seen in contemporary practices such as bioenergetics and Gestalt therapy.

2 The initial group included 22 therapists. Of the 36 clinicians to eventually participate in the studies over the 14-year period, 23 were physicians (anxiety is typically treated by the primary care physician in Argentina and Uruguay; 5 of the 23 physicians were psychiatrists), 8 were “clinical psychologists” (in both countries, the use of this title requires the equivalent of a masters degree, substantial supervised clinical experience, and specialized credentials as a clinical psychologist), 3 were mental health counselors, and 2 were RNs. All of them had extended experience treating or assisting in the treatment of anxiety disorders. Their experience with energy psychology methods ranged from six months in the initial phases of the clinical trials to some who by the end had been using energy techniques for 14 years. Most were initially trained in Thought Field Therapy and later incorporated related techniques, generally customizing their approach as they gained experience. During the fourteen years, some of the 36 therapists were on staff the entire period, some on the initial team left, others came onto the team while the clinical trials were underway.

3 Various assessment instruments were used over the course of the 14 years. However, in each clinical trial, the assessment methods were standardized. Careful clinical interviews were always taken, physical exams were given when indicated, and interview data were supplemented by scores from assessment instruments such as the Beck Anxiety Inventory, the Spielberger State-Trait Anxiety Index, SPIN for social phobias, and the Yale-Brown Obsessive-Compulsive Scale for OCD. The most objective assessment tool that was used involved pre- and post-treatment functional brain imaging (computerized EEG, evoked potentials, and topographic mapping).

4 Anxiety disorders were defined as including panic disorders, post-traumatic stress disorders, specific phobias, social phobias, obsessive-compulsive disorders, and generalized anxiety disorders.

5 Over the 14 years, a series of randomization methods were used for assigning patients to a treatment group or a control group. Simple randomization tables were used initially; increasingly sophisticated randomization software was subsequently introduced.

6 Because the conventional treatment for anxiety—cognitive behavior therapy (CBT) plus medication—was already being used at the point the energy interventions were introduced to the clinical staffs, patients were randomly assigned for conventional CBT/medication treatment

(which constituted the control group) or for energy-based treatment (which constituted the experimental group).

7 The raters assessing the patient's progress at the close of therapy and in the follow-up interviews were clinicians who were not involved in the patient's treatment and were not aware of which treatment protocol had been administered. Both the patients and the raters were instructed not to discuss with one another the therapy procedures that had been used. The raters were given a close variant of the following instructions: "This patient was diagnosed with [detailed diagnosis, symptoms, and severity of the disorder as judged at intake] and a course of a given treatment was applied. Please assess if the patient is now asymptomatic, shows partial remission, or had no clinical response." Psychological testing and brain mapping were administered by still other individuals who were neither the patient's clinician nor rater.

8 The clinicians were generally proficient in both CBT and energy methods. A team approach was used in which non-medical therapists worked with physicians who prescribed medications for the CBT patients. Patients receiving energy treatments did not receive medication. There was advance agreement among the clinical staff about the nature of CBT and about the kinds of tapping protocols that would be used with any specific subset of patients. The same clinician might provide CBT for one patient and an energy approach for another, but the two approaches were not mixed.

9 In addition to clinical interviews and physical exams where indicated, the clinician would order specific assessment instruments that were judged as being most appropriate for measuring subsequent treatment gains based on the initial diagnosis. The Beck Anxiety Inventory was given to approximately 60% of these patients, but other scales, such as SPIN for social phobias or the Yale-Brown Scale for OCD were administered instead when these diagnoses were suspected based on the intake interview.

10 Clinical outcomes were assessed based upon interviews conducted by raters who were not involved in the therapy. These assessments were then compared with the pre- and post-treatment test scores and the pre- and post-treatment digitized brain mappings. Functional brain imaging was done with approximately 95% of the patients and can identify, for instance, excessive beta frequencies in the prefrontal and temporal regions, which is a typical profile of anxiety. Most recently, LORETA tomographies were introduced, allowing the identification of dysfunction in deeper structures, such as the amygdala and locus ceruleus.

While this aspect of the study could and will be the basis of future reports, in brief, the brain mapping correlated with other measures of improvement, specifically the psychological test data and the conclusions reached by the raters. The patients assessed as showing the greatest improvement also showed the largest reduction of beta frequencies.

The differences revealed by neuroimaging between the control group and the tapping group are perhaps the study's most provocative heuristic finding, and the research team is conducting further investigation into these differences. In brief, even when symptoms improved, the

neurological profiles for the control group were only slightly modified from the initial pathological indicies. In the tapping group, however, the amelioration of symptoms *ran parallel* with modifications in the neurological profiles toward the normal reference range. The hypothesis now being investigated is that the tapping procedures somehow facilitate a deep, systemic homeostasis, as if the effect is not "suppression-augmentation" but rather a homeodynamic adaptation.

11 Approximately 90% of the patients participated in follow-up interviews at one year. This high proportion is attributed to the relatively low mobility of the populations served, the intimate quality of the doctor-patient relationship in Uruguay and Argentina, and the persistence of the research team. Also, the follow-up interviews were most frequently conducted over the phone, with patients encouraged to come in for a more in-depth interview when relapses were reported.

Relapse or partial relapse was found more frequently in the control group than in the tapping group at each post-therapy assessment (3, 6, and 12 months). Partial relapses at one-year follow-up were 29% for the control group and 14% for the tapping group. Total relapses were 9% for the control group and 4% for the tapping group. This data is contaminated, however, by the administrative policy of inviting participants back for further treatment if the 3-month or 6-month follow-up interviews indicated relapse. Because both groups were given the opportunity for further treatment, the differences between the groups may, however, still be significant. The relapse data also varied depending on diagnosis. Disorders such as OCD and severe agoraphobia, for instance, were far more prone to relapse under either treatment condition than specific phobias, social phobias, learning disorders, or general anxiety disorder.

Differences in the stability of treatment gains between the groups were corroborated by electrical and biochemical measures. Brain mapping revealed that the tapping cases tended to be distinguished by a general pattern of wave normalization throughout the brain which, interestingly, not only persisted at 12-month follow-up but became more pronounced. An associated pattern was found in neurotransmitter profiles. With generalized anxiety disorder, for example, norepinephrine came down to normal reference values and low serotonin went up. Parallel electrical and biochemical patterns were not found in the control group.

12 Results in this sub-study were assessed as in footnote 10. The number of sessions was determined by mutual agreement between the therapist and the patient that further treatment was not indicated.

13 While in this particular sub-study the addition of the NLP technique may have skewed the results in favor of the tapping techniques, the overall findings with the 29,000 patients suggest that similar results are gained without the inclusion of the NLP technique.

14 Although these articles were published along with scathing editorial critiques of the assessment techniques, case selection, data analysis, and overall design, others have found that despite these flaws, they are "fascinating preliminary reports from a clinical standpoint" (Hartung, J., and Galvin, M. *Energy Psychology and EMDR: Combining Forces to Optimize Treatment.* New York: Norton, 2003, p. 59).

15 While subjective ratings of this nature certainly fall short of being established assessment instruments, the purpose of the ratings was to help the South American clinics generate guidelines for the use of energy interventions. The staff reports that these guidelines have proven administratively useful and clinically trustworthy, although the degree that they might generalize to other settings is unknown.

16 Hartung & Galvin, *op. cit. 16*, pp. 31 - 33.

17 In the time-honored and strikingly sophisticated "five element theory" of traditional Chinese medicine (known as wu zing and probably conceived around 400 B.C.), each of five basic "elements" is associated with a primary impulse or rhythm found in nature (represented by the metaphors of water, wood, fire, earth, and metal). These impulses (a more precise translation than elements is "phases in dynamic motion") have two distinct varieties, one being more active and outwardly focused (yang), the other being more passive and inwardly focused (yin). Each of twelve major energy pathways or meridians is associated with one of these primary impulses in its more active or more passive state.

The characteristics of each meridian and its functions reflect the characteristics of its element. When an imbalance arises in the energies of a meridian, this may be a precursor to physical illness related to the meridian's element and function, but it is also often expressed more immediately through the activation of a specific emotion. For instance, the "water element" meridians, not surprisingly, are kidney and bladder. The emotions that are associated with water element fall along the continuum from fear to intelligent caution. Imbalances in the kidney meridian, which is the yin aspect of water element, lead to an internal fearful state. Imbalances in the bladder meridian, which is the yang aspect of water element, lead more to reactive fears as events unfold.

Each meridian governs a specific emotion derived from its element and energetic (active or passive). While the form and expression of that emotional impulse may vary considerably as it interacts with the many other factors making up a human personality, the basic relationship that is of concern within energy psychology is that a disturbance in a meridian's energies tends to evoke a specific emotion. Treating the energy disturbance deactivates the emotion.

For a list of the emotions associated with each meridian, in both its balanced and reactive states, see the "Meridian Emotions and Affirmations" table on the CD. For further discussion of "five element" theory, see Chapter 7 of Donna Eden's *Energy Medicine* (New York: Tarcher/Penguin Putnam, 1999).

18 This statement is based on informal interviews with over 30 practitioners of energy psychology, including many of the field's recognized pioneers and leaders, conducted by the second author while developing the *Energy Psychology Interactive* program.

19 Feinstein, D. Subtle Energy: Psychology's Missing Link. Paper submitted for publication.

20 References can be found in David Feinstein's At Play in the Fields of the Mind, *Journal of Humanistic Psychology,* 1988, *38*(3): 71-109. The entire text of this article is on the CD.

21 See, for instance, Kerry H. Levin and Hans O. Luder's *Comprehensive Clinical Neurophysiology* (London: W B Saunders, 2000).

22 [See Appendix Two for a recent version of this note] One of the unsolved puzzles within energy psychology is the observation that different tapping practitioners, using *different* techniques, points, and methodologies, get similarly strong results with most anxiety disorders. This impression was corroborated in the South America studies. What is the underlying mechanism that accounts for the positive outcomes being witnessed regardless of how the components of the approach were mixed and matched? The proponents of the various approaches tend to claim that the strong results they report are a function of the specifics of their particular technique. The common element for all of them, however, is that they stimulate *mechanoreceptors* in different parts of the body.

Mechanoreceptors are specialized receptors that respond to mechanical forces such as tapping, massaging, or holding. Among their types: Meissner corpuscles, Pacini corpuscles, Merkel discs, and Ruffini corpuscles. They are sensitive to stimulation on the surface of the skin anywhere on the body. The acupuncture points, called *hsue* in traditional Chinese medicine ("hollow" rather than "point" is actually the correct translation from the Mandarin), are loci that have a particularly high concentration of mechanoreceptors, free nerve endings, and neurovascular density. The signals that are initiated when tapping *hsue* travel as afferent stimuli that are capable of reaching the cortex, the amygdala, and the hippocampus.

So a possible explanation for the puzzle of why stimulating different points yields the same results involves the simple fact that mechanoreceptors are distributed all over the skin surface. Regardless of where you tap, you are likely to stimulate mechanoreceptors. The signal that is generated travels via large myelinated fibers, ascends ipsilaterally through the medial lemniscus, and triggers the somato-sensory cortex at the parietal lobes and the prefrontal cortex. >From there, the signal reaches the amygdala, hippocampus, and other structures where the emotional problem has neurological entity, and the signal apparently disrupts established patterns. In theory, you can tap anywhere and impact emotional problems. Non-*hsue* skin areas, or "sham points," also have mechanoreceptors. But because they are not as dense as in *hsue*, the effect of tapping them is not as intense. Also, since different *hsue* send convergent signals that can release one or more neurotransmitters, the same effects may be obtained from stimulating different points.

Apppendix One: A Note on Treating Anxiety

During any six-month period, nine percent of Americans are afflicted with an anxiety disorder-panic disorder, post-traumatic stress disorder (PTSD), specific phobias, social phobias, obsessive-compulsive disorder, or generalized anxiety disorder (background information for this section was drawn from the website of the American Psychiatric Association, www.psych.org).

While anxiety is an emotion designed to cause us to either flee from danger or to be fully focused and motivated in situations that demand effective action, if the mechanisms that control this process become impaired and anxiety will not turn off or goes into overdrive for no detectable reason, the experience is hard to bear. In addition to psychic distress that can be overwhelming, anxiety disorders often interfere with a person's ability to function. They not only occupy the mind with panic, consuming fears, excessive worry, terrifying flashbacks, or horrific scenarios, they can permeate the body with shakes, nausea, a racing heart, stomach upset, aching muscles, fatigue, numbness, restlessness, or insomnia. In the circular grip of chronic anxiety, fear of the next episode becomes yet another source of anxiety. People cannot usually just *will* themselves out of this condition, however strong their desire.

Helping people suffering with anxiety disorders has been one of psychotherapy's partial success stories. Exposure therapy, stress inoculation therapy, and EMDR (eye-movement desensitization and reprocessing therapy) are on a list, generated by the American Psychological Association, of "empirically validated treatments" for PTSD. Phobic patients who can cooperate with a cognitive behavioral treatment approach and conscientiously comply with back-home assignments are helped in 65 percent of the cases. [*From the website of the American Psychiatric Association, www.psych.org <http://www.psych.org>, specifically <http://www.psych.org/public_info/anxiety_day.cfm#1#1>*.] A 22 to 18-month course of medication will help panic patients well over half the time, though relapse rates are estimated to be between 55 percent and 70 percent after the medication is discontinued. [<*http://www.psych.org/clin_res/pg_panic_1.cfm*>] Combining medication and cognitive behavior therapy (CBT) increases the durability of treatment gains. [<http://www.psych.org/public_info/anxiety_day.cfm#1#1>.] A cognitive behavioral approach includes methods such as shifting breathing patterns at the first sign of panic, cognitive restructuring to correct for catastrophic misinterpretations of bodily sensations or events, detailed recording of one's thoughts and behaviors along with attempts to shift them, and exposure to fear-inducing cues while maintaining a state of relaxation in the body.
Many of these interventions require invasive measures such as medication or aversion techniques. Others require persistent back-home application. Even in successful cases, it often requires eight to twelve weeks of compliance before significant gains are enjoyed. This was the state of the art when well-publicized claims about "five-minute phobia cures" with patients who had not responded to other treatments began to appear in the media. While making dramatic public claims in lieu of controlled research was not the most auspicious entry for getting the psychotherapeutic establishment to take an impartial look, this approach-which has come to be known as energy psychology or energy-based psychotherapy or simply energy therapy-is nonetheless rapidly gaining acceptance among growing numbers of seasoned clinicians. [*While we do not know of formal studies supporting this claim, it is a widely held impression among practitioners, and it is backed by an emerging clinical literature typified, for instance, by the Energy Psychology Series launched by Norton Professional Books.*]

Apppendix Two: NEURO-HUMORAL MODEL of Joaquín Andrade

What follows is the translation to English of a chapter of the book on anxiety disorders published in Spanish around [2003] July.

Joaquín Andrade provides this **NEURO-HUMORAL** model of the mechanisms of effectiveness of therapies**.** [first sent 2003 January 28 from Joaquín Andrade, M.D. to the "Energym" discussion group.]

"There are different metaphors that try to explain why tapping works.We prefer to call tapping 'Brief Multi Sensory Emotional Interventions.'

"Brief, because rapid responses are one of its characteristics.

"Multi Sensory, because most systems use at least three senses: somato sensory and kinesthetic, when we tap, hold, rub or adopt certain positions and do some movements of limbs and trunk and do some breathing, visual, external or internal and auditory, also external or internal when we hum, count, do affirmations, etc. Recently, we have started to experiment with smell and taste, which are so related to memory recall and emotional states.

"Emotional, because those sensory stimulations are aimed at treating emotions, and

"Interventions, because there are intention driven maneuvers that we do to the patient or teach her/him to do to him/herself."

"This [2004 22 March posting to the "Energym" discussion group list] is an updated version of Neurohumoral Mechanism of Tapping [first posted to the "Energym" discussion group list on 2003 January 28 from Joaquín Andrade, M.D.]. At a recent international meeting, I gave it to four Professors of Neurology, one neuroscientist and one Ph.D. specializing in emotions. All of them said that it was perfectly verifiable and in accord to present knowledge."

"However, I think it's just one more metaphor. Here's for you to judge and make it better..."

1. Introduction

"Many clinicians have observed that different sensory stimulation yields some results on some persons and some disorders."

"Sensory stimulations used are mostly kinesthetic, either external or internal (tapping, massaging or holding certain loci on the skin, adopting certain positions of the body, arms and legs, breathing, etc.), visual, external and internal, different protocols that include eye movements, blinking, etc.) and auditory-verbal, also external or internal, (counting, chanting, doing affirmations, talking about something, etc.). We have also explored the use of two additional senses, taste and smell as extra ways of inducing sensory overload."

"Absolute requisite for results, is that a very specific representation of the problem (the core issue, as memory, sensation, emotion, imagination, etc.) is clearly present at the conscience at the same time that stimulations are made."

"As most emotional disorders are vulnerable in a short time to these techniques, we have proposed the conceptual name of 'Brief Multi Sensory Emotional Interventions.'"

2. Different Metaphors to Explain "Why"

"The obvious clinical results of tapping have been explained by many theories and metaphors, most of them never verified. The existence of so called 'meridians' and 'points,' the flow of an 'energy' along them, the 'chakras,' the existence of 'disbalances' in the network, or 'perturbations,' etc."

"So what do we really have, and what can we really verify?"

"The 14th century British philosopher, theologian and Franciscan monk, William of Occam (1285-1349), frequently used, in his arguments against papal power, the so called Principle of Parsimony or Simplicity: 'Plurality should not be assumed without necessity'. The principle is used as a logical tool to eliminate pseudo-explanatory excesses and decide among explanations, one should always choose the explanation of a phenomenon that requires the fewest assumptions or leaps of logic. In any given explanation, 'Occam's razor' helps us to 'shave off' the concepts, variables or constructs that are not really needed to explain the phenomenon."

"Being reasonably updated with the tremendous amount of information that the neurosciences offered us in the last ten years, and applying 'Occam's razor', along with the Principle of Uncertainty Maximization, widely used in the field of mathematical modeling of systems, which states that in inductive reasoning, 'use all, but no more than the available information,' the mechanism of tapping can be explained with enough scientific rigor in about 80% of the cases."

3. Afferent Sensory Stimulations

"These techniques use the somato-sensory system, known for fifty years. Distributed all over the extension of the skin, but with different concentrations in different areas, there are sensory receptors specialized in receiving, transducing and sending to the CNS [Central Nervous system] all kinds of mechanical stimuli: the mechano receptors (Pacini, Meissner, Ruffini, Merkel's discs, free nerve endings, etc.)."

"Mechanical stimuli on those areas (tap, touch, hold, rub, etc.) is transduced into digital signals mediated by the Ca [calcium] ion (Guo, Miao, Shang, etc.) that travel by the afferent somato sensory pathways to the brain."

"Mediation of Ca ion in signal transduction can be demonstrated by the suppression of signal registration after the local injection of a chelating agent (Andrade et al, preliminary studies).One thing we can be sure about is that every time we tap or do any other kind of mechanical stimuli to any area of the skin, we are involving the mechano receptors."

"In other type of interventions, such as collar bone breathing, excess of energy correction and Wayne Cook posture, there are also involvement of muscle Golgi-Mazzoni proprioceptors and joints uncapsulated receptors."

4. The Pathway

"Traveling by regional nerve trunks, A Beta myelinated axons, that end in dorsal roots and ganglia (I neuron), the signal reaches the medulla. Due to upper and lower, intra and inter dermatomic bifurcations, stimuli initiated in different anatomical localizations can end on the same pathway, which could partially explain why different protocols get similar results...The signals travel upward through the medulla, contralaterally following the median lemniscus (II neuron) and ipsilaterally along the dorsal medulla and reach the thalamus, where they synapse in the anteroposterior lateral nuclei and finally ascend by the cortico-thalamic neurons to the somato sensory cortex at the parietal lobe, the four Brodman areas: 3b, 3a, 1 and 2."

"The thalamus modulates the afferent sensory inputs, widening or narrowing the focus to increase the transmission in relevant areas and to inhibit the non relevant signals under those particular circumstances. From the thalamus, particularly from its auditive area (LeDoux, Woodson) neurons are sent to the amygdala, that synapse with GABAergic inhibitory interneurons of the lateral nuclei of the amygdala."

5. At the CNS

"From there, signals travel to cortical areas of higher hierarchy, including the prefrontal cortex, and to deeper limbic structures that have high significance in emotional modulation."

"Several studies of functional brain imaging (Hui et al, Andrade et al, preliminary report) have repeatedly demonstrated that when different types of mechanical stimuli are applied to the skin, fluctuation of signals can be registered at least at two different cortical areas distinct from the somatosensory cortex:"

"INCREASE OF ACTIVITY in the orbito frontal regions at the base of the prefrontal cortex and at the posterior thalamus; and"

"DECREASE OF ACTIVITY in at least ELEVEN deep structures, some of them strongly involved with emotional processing: Hyppocampus, para-hyppocampus, hypothalamus, amygdala, putamen, caudate nucleus, anterior insula, cyngulated anterior gyrus, ventral-tegmental area, nucleus acumbens and temporal pole."

"The amygdala acts as a parallel processor, receiving, in one of its subsystems, the baso-lateral nuclei, (where the stimuli that condition the fear response are stored ...), mono-synaptic projections from the dorsal hippocampus, the thalamus and the cortex. The other important subsystem of the amygdala is the central nucleus, efferent, that sends signals to different brain areas involved in the autonomic and behavioral responses to fear."

"Ruden notes that as the central nucleus of the amygdala projects fibers to different CNS structures related with stress, trauma, mood disorders and addictive behavior, functional actions of tapping interventions on them can be predicted, strictly based on the existence of those neural paths."

6. Experiencing Emotions

"Actually experiencing an emotion, or recalling a past emotional memory as we do when tuning with the problem, INCREASES the activity at the amygdala and other limbic structures, as can be easily demonstrated with different imaging equipments."

"Just recalling a traumatic memory (which includes a superposition of visual, kinesthetic, auditory, smell and taste perceptions) places that memory in a labile state which is sensitive to disruption, as have been suggested four years ago by a group of fear researchers at Prof. LeDoux's lab at NYU (Muller, Izquierdo, Brioni, Nader, Schafe, Debiec and others). To retain the memory's consolidated state, protein synthesis at the LBA, or lateral basal nuclei of the amygdala is required. So, reconsolidation after reactivation and consequent lability to disruption, is a protein synthesis dependent state. The researchers injected the protein synthesis blocker anisomycin (aniso) to prevent reconsolidation, and the memory, in its labile state, was disrupted."

"Then, recalling a traumatic memory that is capable of producing anxiety symptoms, and of INCREASING the activity at the amygdala and other structures, and while holding this 'increased activity state,' I send to these same areas emotionally neutral sensory perceptions (like tapping on the skin) these neutral sensory signals that are capable of DECREASING the activity at the amygdala, act on the not so neutral sensory perceptions that are an important part of the traumatic memory and probably by synaptic inhibition (DECREASE of the activity) disorganize, interfere and add entropy to the previous increased-activity emotional state, collapsing its symptoms-generating ability. Bandler's empirical work on sub modalities suggests that when we change the sensory perceptions of a traumatic memory, its symptoms-generating power also weakens...sometimes, almost instantly. [Garry] Flint also suggests that sensory stimuli and other interventions, like [his] Process Healing, act by generating a learning process, which in part is also neurologic, that changes the relation between traumatic memory and emotions."

"The lability and vulnerability to distortion that memories exhibit when retrieved has probably two evolutionary purposes: first, the possibility of the progressive generalization of the response, as new associations can be made, which improves the probability of surviving, and two, the possibility to direct attention to relevant aspects of the environment, which also helps to avoid or neutralize dangers (Ekman, Frijda, Izard, Derryberry and Tucker) It is not that memories (traumatic memories to our effects) are being erased, which, as suggested by recent research by Lattal, Abel et al at Penn's Dept. of Biology, rarely happens. It's more that they remain stored but have lost the power to generate symptoms i.e. disruptions."

7. The Interventions

"From a neurohumoral perspective, all tapping systems have two distinct components: 1. Reactivation of the memory to make it vulnerable to distortion, and 2. Simultaneous sensory overload, that sends, afferently, modulated signals also sensory in nature, but with zero emotional meaning. Those signals probably disorganize, overload, interfere, and add entropy to the memory [see M.E. Furman and F.P Gallo], which loses its power to generate symptoms, even when is never deleted."

"Different eye movements, auditive and verbal inputs, as well as olfactory and gustatory signals follow a similar model, traveling by shorter and less complicated neural paths."

"Ruden suggests that the sensory interventions distort signal transmissions between the amygdala basolateral and central nuclei, blocking the generation of fight and flight symptoms."

"It is possible that the neurotransmitters GABA, serotonin and the intraneuronal second messenger nitrous oxide play critical roles in this mechanism, through complex feedback and feedforward functional interconnections. Maybe that's why lab tests in several anxiety disorders show elevated norepinephrine and low GABA and serotonin."

"The GABA system in particular, plays a crucial role in anxiety control. It is known that benzodiazepines link to specific sites of the GABA receptors and enhance its mutual affinity, which results in an activation of the Cl [chlorine] ionic channels, and that the GABA agonist muscimol inhibit the fear response (Muller, Izquierdo, Brioni, Stork)."

"As most functional events in the CNS are at the same time or sequentially ionic or chemical, in which depolarizations are almost always accompanied by ionic movements of Cl [chlorine], Na [sodium], K [potassium], Ca [calcium], and elevations or decreases in neurotransmitter concentrations, this mechanism is called neurohumoral."

8. What For?

[from the 2003 post] "This model is not better than others. It simply describes events that actually happen and can be demonstrated and replicated by others...which is not so with other models. No doubt it represents a partial explanation of clinical results, [but it] has plenty of potenetial for future research and is easily accepted by mainstream health professionals. My guess is that in the future there will be many efforts in this direction. This is already happening with acupuncture."

"The neurohumoral theory of tapping mechanism is no more than another metaphor. It doesn't exclude other explanations. It also has six distinct advantages:"

"1.- It's based on classical concepts and updated research on CNS.

2.- Speaks the language of science and is perfectly well accepted by MD's, Ph D's and other scientists.

3.- Follows Occam razor, tries to have logical coherence.

4.- Offers many lines to research.

5.- Gives logical explanation for relapses.

6.- Same with non respondents."