



OVERVIEW DOCUMENT

Energy Psychology and EFT/Tapping

2022



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CURRENT STATUS OF RESEARCH

Over 300 research studies, review articles and meta-analyses have been published in professional, peer-reviewed journals.

This includes:

- 50+ randomised controlled trials
- 50+ pre-post outcome studies

98% of the above 100+ studies document EP effectiveness

- 5 meta-analyses
- 6 systematic reviews
- Hundreds of case studies

Growth:

2000–2012	18 randomised control trials
As of 2020	50+ randomised control trials
2014–2016	2 meta-analyses show energy psychology effective for depression and anxiety
2017	Meta-analysis shows EFT effective for PTSD
2019	Meta analysis shows tapping on the acupressure points is an active ingredient in the process (changes not due to the therapeutic relationship, other factors such as deep breathing etc)
2018–2019	Two studies on DNA changes after EFT
2019	First fMRI study on EFT published
2019	Blue Knot Foundation for (trauma) includes EFT in PTSD clinical guidelines in Australia
2020	EFT approved under the National Insurance Disability Scheme (NDIS) for therapy in Australia
2020	Australian Psychological Society features EFT during National Psychology Week as emerging approach for pain
2020	APA journal (USA) published EFT cortisol replication study
2020	A major review of psychological treatments for PTSD – Energy psychology (combined somatic/cognitive therapies) was the 2nd most effective at reducing PTSD symptoms at the end of treatment to waitlist (after EMDR which was found to be most effective) Further, energy psychology had the greatest cost savings over no treatment, followed by EMDR, trauma-focused CBT and then other treatments
2021	APA approved EFT to be reviewed for trauma and PTSD and inclusion on the evidence based psychological treatments list.

WHY IS A 4th WAVE OF BODY BASED APPROACHES EMERGING? AND HOW IS EFT PART OF THIS?

EFT enjoys three features that distinguish it as a fourth-wave therapy: It is a true mind-body approach in that it includes direct interventions at the level of the body; it changes brain activity very rapidly; and it has special advantages in quickly and permanently shifting outdated emotional learnings. Let's look at these features in depth.

- **A Somatic Intervention.** Therapists who are effective in working with people who have been traumatised have long recognised that talk therapies are not enough for healing the damage that is caused by abuse and catastrophe. The title of an influential paper and subsequent book, *The Body Keeps the Score*, by Dr. Bessel van der Kolk underlines this point. The physiological changes to the body and brain following trauma become “encoded in the viscera” and require treatments that “engage the safety system of the brain before trying to promote new ways of thinking.” Effective therapies for severe trauma must address the body as well as the mind, and being able to do so is a great strength of somatic therapies.

It is not just tapping on the skin that makes EFT a somatic intervention. Tapping initiates a cascading series of events in the brain and body that, as you will see below, impact hormone production, brain waves, blood flow within the brain, and gene expression in ways that enhance emotional health. And tapping has this impact not just for treating trauma but also in addressing everyday anxieties, upsets, and goals.

- **Rapid Results.** A decade-long research program at Harvard Medical School looking at what happens in the body when various acupoints are stimulated found that certain points almost instantly decrease the activation of the stress response in the brain. This research is described in more detail below, but suffice it to say that with elevated stress responses being part of many emotional disorders, the capacity to rapidly reduce them is a cornerstone in the speed and effectiveness of EFT. You will also see that EFT seems to require fewer sessions than more conventional therapies for equivalent outcomes.
- **Enhanced Information Processing.** David Feinstein's paper “How Energy Psychology Changes Deep Emotional Learnings” builds on the way the speed with which tapping (a central feature of “energy psychology”) sends deactivating signals to the brain. This rapid response combines with the brain's capacity to reprogram itself through a process called “memory reconsolidation.” The outcome is that unhealthy responses to triggers, such as to the tone of your boss's voice, can be rapidly and permanently eliminated. Because much of the human experience involves responding to what life presents, being able to make shifts that promote healthier emotional responses and behaviours helps in overcoming a broad spectrum of emotional problems and also helps you to live a more successful and fulfilling life.

These three qualities come together to make EFT unusually rapid and effective in comparison with first-, second-, and third-wave therapies.

EFT AND PHYSIOLOGICAL CHANGES

Cortisol

In one study, 83 adults were randomly assigned to either a single hour of EFT (this means they didn't get to choose the treatment option), a psychotherapy group receiving a supportive interview (SI), or a no treatment (NT) group who just rested. All adults had their cortisol tested (measured in their saliva) immediately before and 30 minutes after the intervention.

The EFT group showed clinically and statistically significant improvements in anxiety (approximately 58 percent) and depression (49 percent improvement). They also reported an overall reduction in the severity of symptoms (by 50 percent) and the range of their symptoms (by 42 percent, $p=0.001$).

Now, there were no significant changes in cortisol levels between the group who received the supportive interview and the no treatment (resting) group, but the cortisol in the EFT group dropped by 25 percent, which was significant. You might recall that I said the treatment was only one hour, so the speed at which EFT works can be breathtaking. What else was quite extraordinary was that the improvements in mental-health symptoms after therapy were also reflected in the reduced levels of cortisol. This tells us that the mind and body are most definitely in tune and interconnected.

2019 – In a direct replication of Church et al. 2012, a Bond University study examined changes in stress biochemistry and psychological distress symptoms in 53 participants randomly allocated to one of three 60-minute group interventions: Emotional Freedom Techniques (EFT), psychoeducation (PE), and no treatment (NT). Salivary cortisol assays were administered 30 minutes pre and post-intervention to test cortisol levels. Church's original study indicated the EFT group showed statistically significant improvements in anxiety (-58.34%, $p<0.05$), depression (-49.33%, $p<0.002$), the overall severity of symptoms, (-50.5%, $p<0.001$), and symptom breadth (-41.93%, $p<0.001$). They also experienced a significant decrease in cortisol (-24.39%) compared to PE group (-14.25%) and NT (-14.44%). The present results indicated the EFT group experienced a significant decrease in cortisol greater than the original study (-43.24%, $p<0.05$) but were not mirrored by subjective reports of psychological distress. The EFT group reduction in cortisol was significantly different to the PE (-19.67%), and as expected the post-treatment cortisol level detected among the EFT group was lower than the NT group (+2.02%). Findings support the original study indicating EFT to be an efficient and effective brief treatment for reducing biological markers of stress.

EFT and Claustrophobia

We have just begun to see research emerging about how EFT and somatic tapping changes the brain. A small study with four people with claustrophobia (the fear of being enclosed in a small space or room and having no escape) showed that along with reductions in anxiety symptoms, a 30-minute tapping session brought elevated theta brain wave levels down to those of four non-clinical control participants. They also had significantly reduced anxiety scores.

A quick note on brain waves: We have five different types of electrical patterns or “brain waves”: gamma, beta, alpha, theta, and delta. These can be observed with an EEG (an electroencephalograph), which was used in the study. Each electrical pattern serves a purpose to help us cope with various situations. Theta waves are involved in daydreaming and sleep that results in feeling truly restored. Too much theta activity may make people feel depressed, but it can also help improve intuition and creativity.

EFT and Trauma Symptoms

In 2004 researchers looked at EEG patterns after the tapping technique in 10 people who had been involved in car accidents and were still suffering trauma symptoms. They were brain mapped at the start and also completed questionnaires about their anxiety, depression, and avoidance of driving behaviours. They all received two EFT sessions and completed the same assessments, including the brain mapping.

All of the participants reported positive change after the EFT sessions, although four showed negative or no change when their brains were scanned again. Those who did improve showed increased regulation of the sensory motor cortex, decreased right prefrontal cortex arousal, and more changes in the occipital area of the brain. The researchers did say they believed the people who improved were the ones who were more compliant with the treatment. This first brain mapping study did show EFT was capable of producing brain changes, albeit not in every person.

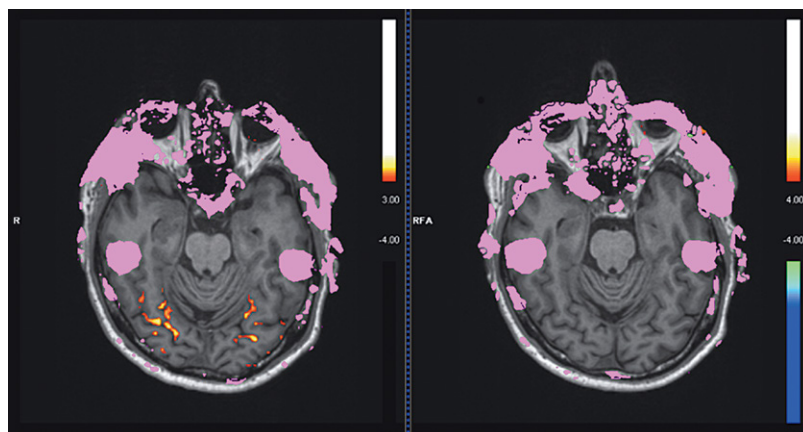
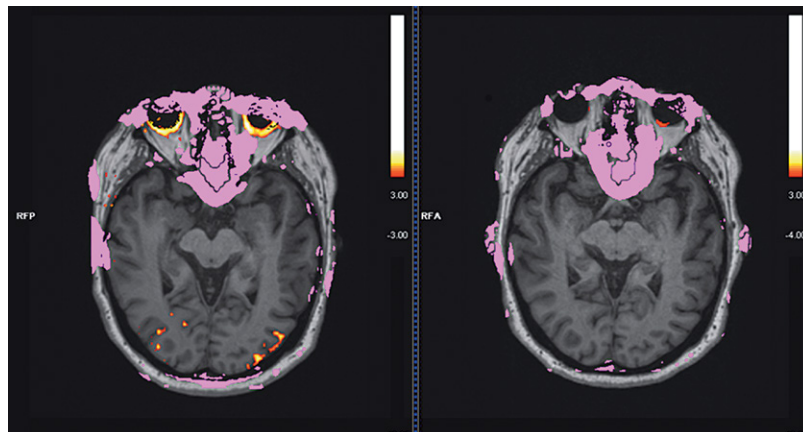
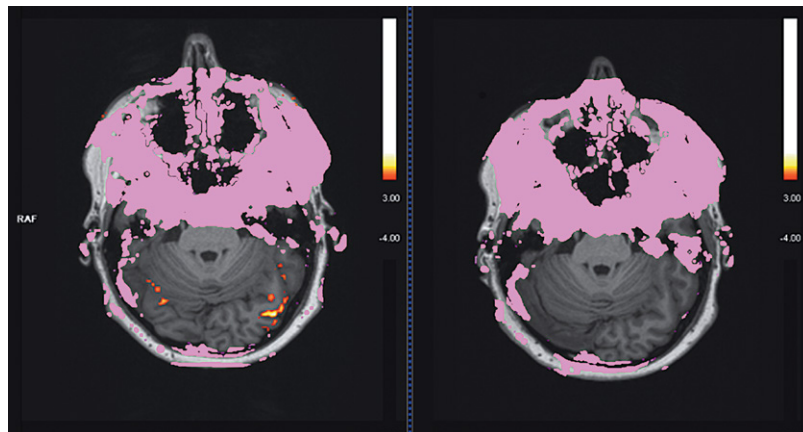
“In several EFT studies, favourable post-treatment changes have been found in biological indicators such as cortisol levels and the expression of genes that are involved with stress”

- DR. PETA STAPLETON

EFT and Food Cravings

Brain imaging is a powerful technique that is now enhancing neuroscience research. Two ways this is done is through functional magnetic resonance imaging (fMRI) and positron-emission tomography (PET) scans. Both of these have been investigated by Harvard Medical School for more than 10 years for acupuncture. Their experiments have consistently shown that needling acupoints results in decreases of activation in the amygdala, hippocampus, and other brain areas associated with fear and pain.

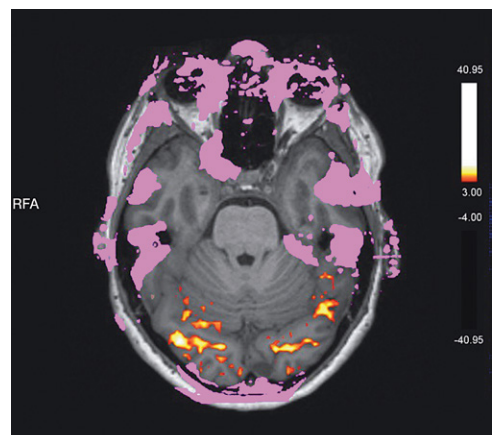
We now have studies emerging using fMRI, which is widely used to map brain activity, that show brain change after EFT. Here is what happened: We had 15 obese adults in total; 10 were allocated to an EFT treatment, and 5 to a control group (where they received no intervention for their cravings). They were all scanned using fMRI before and after a four-week EFT treatment phase. While they were in the machine, we showed images of high-calorie food (e.g., chocolate cookies, burgers and fries, ice-cream sundaes) and recorded what parts of their brains activated.



After the four-week EFT treatment, all adults were scanned again, and we showed the same images of food to see if anything changed. We saw a significant decrease in the activation in the EFT participants; and in some of them, there was no activation at all! This was amazing even for us to see. The control group still had activation in the parts of the brain associated with reward and loss.

NB: yellow, orange and red areas show activation.

Left: fMRI scans, recorded pre (left) and post (right) a 4-week EFT treatment phase. Below: Control group scan (no intervention).



EFT and Gene Expression

Finally, EFT has been researched at a physiological level, including its effects on genes. A pilot study compared an hour-long EFT session with a placebo session (where subjects thought they were getting a treatment, but it did not have an active component) in four participants. What this small study found was incredible. After the EFT session, differential expression in 72 genes associated with the suppression of cancer tumours, protection against ultraviolet radiation, regulation of type 2 diabetes insulin resistance, immunity from opportunistic infections, antiviral activity, synaptic connectivity between neurons, synthesis of both red and white blood cells, enhancement of male fertility, building white matter in the brain, metabolic regulation, neural plasticity, reinforcement of cell membranes, and the reduction of oxidative stress occurred. This was a profound outcome and the first of its kind in this field.

There has since been another study that examined the regulation of six genes associated with inflammation and immunity after EFT treatment. In a study of 16 war veterans with PTSD who received 10 hour-long EFT sessions, interleukins, which are responsible for the regulating our body's inflammation response, decreased significantly in expression. And "good" genes associated with improved functioning of the immune system were upregulated (or turned on). There was also a significant association between improvement in the veterans' mental-health symptoms and positive changes in the expression of their genes related to stress hormones.

EFT and the Central Nervous System

Exciting EFT research has been conducted on heart rate variability and heart coherence, the circulatory system using resting pulse rate and blood pressure, the endocrine system using cortisol, and the immune system using salivary immunoglobulin A.

All of this added up to being one extensive measurement of the central nervous system (CNS). The CNS controls most functions of the body and mind and consists of two parts: the brain and the spinal cord. So basically this study was looking at the impact of EFT on all of this. The study also looked at changes in the psychological symptoms of anxiety, depression, PTSD, pain, cravings, and happiness.

The 31 participants were attending a five-day workshop and being taught 16 modules of EFT in a group, with 12 hours of practice. All of those measurements mentioned were taken at the start and end of the workshop, and the participants reported reductions in these areas:

- Anxiety (39 percent)
- Depression (46 percent)
- PTSD (32 percent)
- Pain (66 percent)
- Food cravings (80 percent)

They also reported their happiness increased (by 13 percent) as did their immune system (by 61 percent). They also had significant improvements in their resting heart rate (by 8 percent), their stress hormone cortisol levels (by 49 percent), their systolic blood pressure (by 6 percent), and diastolic blood pressure (by 11 percent). Systolic

blood pressure refers to the pressure inside your arteries when your heart is pumping; diastolic pressure is the pressure inside your arteries when your heart is resting between beats.

These were some impressive gains over the five days. A downward trend was observed for heart rate variability, along with an upward trend for heart coherence, suggesting an improvement in cardiovascular health and function. Although the trend was not statistically significant, the authors determined that an additional 13 participants would have impacted the statistical significance of those measurements. What was exciting was that 60 days later when the researchers followed up with the attendees, everyone indicated they had maintained the gains in their psychological symptom improvements.

“Tapping’s not a placebo or a distraction, you’re actually changing your body’s chemistry.”

- DR. PETA STAPLETON

Length and Results of EFT Treatment as Compared to Other Therapies

Many research trials have now compared EFT to traditional and gold standard approaches. Invariably, EFT treatments achieve similar or identical outcomes in fewer sessions.

A large-scale study of 5,000 patients seeking treatment for anxiety allocated patients to cognitive behavioural therapy (CBT) that included medication if needed or acupoint treatment (Thought Field Therapy, the EFT precursor) with no medication. Complete remission was reported by 76 percent of the patients in the acupoint group and 51 percent of the CBT group ($p < .0002$). Some improvement to complete remission was reported by 90 percent of the patients in the acupoint group and 63 percent of the CBT group ($p < .0002$). Those 90 percent of acupoint patients improved in an average of three sessions, compared with an average of 15 sessions for the CBT patients.

A pilot study of test anxiety in university students compared EFT to a Wholistic Hybrid derived from EMDR and EFT (called WHEE) and CBT and found significant reductions in test anxiety were observed for all three treatments. However, more rapid benefits were observed in the experimental treatments (WHEE and EFT): both WHEE and EFT achieved in two sessions the same benefits CBT did in five, potentially suggesting EFT and WHEE to have more rapid treatment effects. (This is discussed in more depth in Chapter 8.)

This does raise the question, how can EFT achieve these same results as other approaches in less time? The somatic aspect of tapping is the clear answer. I briefly mentioned that Harvard Medical School conducted research over a period of more than 10 years into the mechanisms of acupuncture. It was these studies that indicated stimulating selected acupoints sends deactivating signals to the amygdala. Harvard's studies included brain imaging and indicated that the stimulation of certain points with acupuncture needles consistently produced prominent decreases of activity in the amygdala, hippocampus, and other brain areas associated with fear. If someone is aroused or distressed and repeatedly engages in a somatic activity such as EFT while bringing that to mind, it sends a conflicting signal to the limbic areas. The stress response becomes permanently altered when a process such as tapping deactivates the emotional centres of the brain. This then results in a calm state during any recall of those previously distressing thoughts, which brings us to how this then lasts over time.

Based on a special facility for bringing about memory reconsolidation, a unique feature of EFT is that the benefits appear to last well into the future without further treatment. Typically, we might expect that when exposed to the same situation in the future (e.g., seeing a spider), we would have to engage in tapping again to send the deactivating signal back to the brain. Dr. Feinstein has rightly proposed that the common belief among neuroscientists has been that once a new learning is consolidated into long-term memory, it is permanently installed. It may respond to extinction training for example, but ultimately it is always at risk of reactivation.

However, new research on memory reconsolidation shows that despite a lifetime of deep emotional learnings, the brain has a mechanism for "updating existing learnings with new ones," and core beliefs from childhood can be modified, strengthened, changed, or even erased! Neural pathways appear able to change, and three conditions have been proposed to facilitate this process:

- The emotional memory or learning must be vividly accessed.
- The client must experience both the situation they want to change as well as the contrary. This is called a “juxtaposition experience.”
- The juxtaposition pairing must be repeated several times.

In EFT step 1 occurs when the person states their concern in the setup statement. Tapping often results in an expression of the problem at a thought, feeling, or body-sensation level. Historical contributions to the problem might come to mind as memories from the past, giving access to the root cause.

In step 2, the somatic tapping reduces the emotional distress, and the brain therefore experiences a contradictory situation. An image or thought that was previously distressing is now no longer felt this way, and thus the neural pathway maintaining the old learning appears transformed by the new experience.

Step 3, the repetition phase, is vital for the contradiction phase to become permanent. In EFT the repeated rounds of tapping serve to identify additional aspects of the issue and process historical contributions.

At no point is it suggested that tapping changes or erases any learnings. Nor does it transform what actually happened. But the deactivating signal it sends to the emotional centres of the brain allow someone to remember what happened without distress. And the research is indicating these changes last over time.

So it may actually be that not all therapies are created equally, and there is no dodo bird. But there is a fourth wave—and it could be a tsunami. Before discussing how best to understand the research, let’s briefly consider the populations and conditions where EFT has been studied.

Populations that have been studied with EFT include:

- College students
- Veterans
- Pain patients
- Overweight adults
- Hospital patients
- Athletes
- Health-care workers
- Gifted students
- Chemotherapy patients
- Phobia sufferers.

Disorders and conditions that have been studied with EFT:

- General anxiety
- Test anxiety
- Phobias
- Obsessive-compulsive disorder
- PTSD
- General trauma
- Stress
- Depression
- Addiction
- Pain, including fibromyalgia and tension headaches

- Frozen shoulder
- Psoriasis
- Insomnia
- Seizure disorders
- Sporting / athletic performance
- Learning disabilities / educational challenges
- Epigenetic and physiological functioning
- General psychological functioning.

The American Psychological Association's Division 12 Task Force on Empirically Validated Treatments created standards for evaluating psychological therapies. While they have recently been revised, the standards that were in place while most of the tapping studies were conducted have been summarised and include these requirements;

- That a sufficient sample size be used for statistically significant effects ($p < .05$ or better)
- That valid and reliable assessment tools be used to measure change
- That treatment samples are assessed or diagnosed by qualified clinicians
- That random allocation to the active treatment and a control condition be used
- That interviewers be blind to group assignment in studies using interviews for subject selection
- That treatment manuals are utilised, or in the case of simple treatments, full descriptions within the study are provided
- That sufficient information be included so the study's conclusions can be reviewed for appropriateness, including sample sizes, use of assessment tools that identify targeted outcomes, and the magnitude of statistical significance.

A paper published in 2014 by EFT researchers Dr. Dawson Church and colleagues found that more than half of the published EFT studies at the time, met these criteria.

The Translational Gap - Where is the Acceptance?

There is what is called a "translational gap" where any new therapies take some time before they are considered standard care. The American Institute of Medicine (the Health and Medicine Division of the National Academies of Science, Engineering, and Medicine) says this takes about 17 years, and only 20 percent of new therapies are accepted in mainstream.

Landmarks for EFT now include:

- 2017. The US Veteran's administration added EFT to a list approving it as a 'generally safe therapy'
- 2018. The National Institute for Health and Care Excellence (NICE) acknowledged the EFT research and for the first time in world history, this government agency has officially recommended EFT as worthy of government research funds for trauma/PTSD
- 2018. The College of Registered Psychotherapists of Ontario, Canada included EFT (Tapping) as a somatic approach which is credible and effective for their registered psychotherapists
- 2019. The Australia Allied Health Awards give Psychologist of the Year to Dr Peta Stapleton for her research and work in EFT.

WHAT MAKES EFT WORK? THE DISMANTLING STUDIES

Dismantling studies are those that tease apart different aspects of a strategy, to see what the active ingredient really is. With EFT, often critics are interested in sham acupoint treatment and this is where these studies focus. The first dismantling study done for EFT compared EFT points, sham points, and tapping on a doll, and also included a control group who did nothing. There were 119 university students allocated to one of those four conditions, and all were assessed for fear and anxiety levels.

The authors reported significant reductions in self-reported fear for all three tapping groups but not the control group. They stated that any effect from EFT was due to distraction or desensitisation, rather than acupoint tapping. But there were some issues.

In the sham-point and doll-tapping groups, the students used their forefinger to tap, which inadvertently stimulated an acupoint there. The groups were effective, but ultimately all were using acupoint stimulation. The authors did not use valid

“The most popular variation of energy psychology - Emotional Freedom Techniques (EFT) and Thought Field Therapy (TFT) - combined the stimulation of electrochemically-sensitive points on the skin by tapping on or holding them during imaginal exposure and other cognitive activities. The points used in these protocols correspond with points used in acupuncture.”

- DR. PETA STAPLETON

assessments in their measurements nor full randomisation to the groups. In the EFT group, they used acupoints not even included in the standard process, and omitted others. It is difficult to draw any solid conclusions about this dismantling study, but it did start the process.

The next study to dismantle the aspects of EFT randomised university students into an EFT group or a control group who received mindful breathing exercises instead of tapping. The students who did EFT reported more significant increases in enjoyment, hope, and pride and more significant decreases in anger, anxiety, and shame than did the breathing control group. The only problem with this study was that the mindful breathing control group did not use the EFT setup or reminder statements; so while the actual tapping was the major difference from the control group, it was not the only difference.

The next study involved 56 university students who were assessed for stress symptoms and randomly allocated to an EFT group or a control group who tapped on sham points. The students in the EFT group reported a 39.3 percent reduction in stress symptoms, while the sham tapping group only reported an 8.1 percent decrease. While this study supported EFT, it was limited in that the stress questionnaire used had not been validated, and one of the investigators led both the experimental and control groups, possibly contaminating the results.

A 2015 study involved 126 school teachers (assessed for burnout risk) and is possibly the most effective dismantling study to date. The authors used two different schools that were similar demographically, to minimize any contamination, and allocated the teachers to an EFT group or a control group who tapped on sham points on the body in an otherwise identical protocol. They were all asked to focus on situations that contributed to burnout and stress while tapping. The control group tapped on the left forearm, about an inch above the wrist, with the underside of the fingers of the open right hand. This was important because no finger points were used or unintentionally activated (as in the first study discussed). Everything else was identical.

The results showed the EFT group was superior to the sham points group on the three indicators of burnout being tracked (emotional exhaustion, depersonalisation, and personal accomplishment). And it was statistically significant.

So in summary, one study did not use a reliable and valid assessment; another did not provide enough information to obtain an effect size (for clinical significance), one did not adhere to the manualised EFT protocol, and others did not randomise the groups. The one study that was well designed and executed actually showed EFT to be superior to sham points. There is of course a need for further studies; however, given the nature and placement of acupoints on the body, the studies need to be well designed and completed.

About the Author

Peta Stapleton, PhD, has 25 years of experience as a registered clinical and health psychologist in Queensland, Australia. Peta has also spent the last 15 years in academia and is associate professor in psychology at Bond University. She is a published author, certified practitioner of Neuro-linguistic Programming, Timeline Therapy, and Emotional Freedom Techniques (and an EFT Trainer). Peta is the Hay House author of *The Science Behind Tapping: A Proven Stress Management Technique for the Mind and Body*, and is Australasia's leading EFT researcher and academic.

Peta is a world leader and researcher in EFT. In 2014, she was awarded the Harvey Baker Research Award for meticulous research in Energy Psychology and also became a Gold Coast Business Events Ambassador for Gold Coast Tourism. In 2015, she received the Global Weight Management Congress Industry Professional Award of Excellence, and was named the Gold Coast Women in Business–Woman for Change Winner. In 2016, she was awarded the greatest contribution to the field of Energy Psychology by the Association of Comprehensive Energy Psychology. In 2018 Peta was named the Gold Coast Women in Business Innovation and Technology winner for her online therapy trials and work. In 2019 she was named Psychologist of the Year by the Australian Allied Health Awards.

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Dr. Stapleton's clinical food craving program based on research trials: <http://www.weightmanagementpsychology.com.au/onlinecourses/tappingforweightmanagement>

