

Emotional freedom techniques in mental health care: evidence review, gaps, and future directions

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Abstract

Clinical Emotional Freedom Techniques (EFT) is an evidence-based, self-help, and cost-effective therapy used by millions worldwide since its development in the 1980s. It integrates energy psychology, acupressure, exposure therapy, and cognitive-behavioral elements to treat various psychological and medical conditions. Like other fourth-wave or mind–body therapies incorporating somatic components, such as eye movement desensitization and reprocessing (EMRD), EFT has gained popularity among practitioners in the last two decades for the treatment of somatic symptoms of stress, anxiety, depression, childhood trauma, and adult survivors and caregivers during natural and human-made disasters, including post-traumatic stress disorder (PTSD). Despite over 100 published studies reporting its efficacy, EFT has historically been controversial and, to date, has faced opposition to its adoption by the scientific community in clinical settings for various reasons, including concerns about its efficacy, alleged rapidity, and questioned mechanisms. This inconsistency in the literature creates gaps in conceptual, theoretical, empirical, methodological, and practical bases. This review addresses these gaps by providing a critical and balanced overview of current EFT research from a scientist–practitioner perspective. PubMed, PsycINFO, and Google Scholar databases were used to search the literature. Findings outline EFT’s emerging concepts, recent developments, and latest criticisms. Conclusions propose a potential research agenda and future practical applications of EFT within the current global mental health crisis (GMHC) context.

Keywords: *emotional freedom techniques, clinical EFT, acupoint stimulation, energy psychology, tapping, mental health, global mental health crisis*

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1. Introduction

Clinical Emotional Freedom Techniques (EFT) is an evidence-based, self-help, and cost-effective fourth-wave therapy practiced by several million people worldwide since its development in the 1980s and the introduction of an EFT standardized treatment manual in the early 1990s. Fourth-wave therapies include the latest psychotherapies from psychoanalysis, behavioral, humanistic, experiential, and cognitive therapies [1]. They include brief mind–body interventions incorporating cognitive and somatic components [2].

Considering that trauma is more than a mental event only but rather an embodied experience that remains encoded in the nervous system and physical sensations, somatic approaches are more effective than traditional talk therapies, which, while valuable, often fall short in addressing trauma stored in somatic memory, and the body’s biological stress responses [3]. Therefore, mind–body therapies constitute trauma-informed, evidence-based treatments that are effective in treating psychological, emotional, cognitive, and somatic symptoms of stress, childhood trauma, and adult survivors and caregivers during natural and human-made disasters [4], including post-traumatic stress disorder (PTSD) [3]. Eye movement desensitization and reprocessing (EMDR), which has been recognized as an empirically validated treatment for anxiety, depression, and PTSD, is arguably one of the most popular examples of a fourth wave of psychotherapy [5].

The current global mental health crisis (GMHC) calls for more innovative treatments to transform mental health (MH) by reaching those most needed [6]. This entails reducing the excessive reliance on specialists to deliver MH interventions [7] while simultaneously relieving mental health professionals (MHPs) from overwhelming workloads [8]. As self-help and cost-effective options, mind–body interventions have become an increasingly popular option to tackle these needs. EFT, for example, has been progressively promoted by many MH-related websites, including membership associations, self-help magazines, online personal growth videos and podcasts produced by independent practitioners, and other related social media networks. Many of these platforms promote EFT as a disaster relief and humanitarian aid to assist in the quick stabilization of people in the aftermath of disasters and as a means of avoiding the development of PTSD for survivors [9, 10]. Not surprisingly, today millions worldwide use EFT [1].

EFT has been validated as an “evidence-based” practice using criteria published by the American Psychological Association (APA) Division 12 Task Force on Empirically Validated Treatments [11] and enjoys a significant and growing body of over 100 peer-reviewed articles reporting its efficacy [12]. Despite this evidence, EFT has historically been controversial and has faced opposition to its adoption by the scientific community in clinical settings for various

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reasons, including concerns about its efficacy, alleged rapidity, and questioned mechanisms [13]. This tension creates theoretical, empirical, methodological, practical, conceptual, and knowledge gaps, leaving unanswered questions and precluding clear conclusions about EFT, warranting further investigation. This review addresses these gaps, controversies, and the clinical applicability of EFT by synthesizing the existing body of knowledge, including key findings from various studies, to provide a clear, critical, balanced overview of current EFT research, taking a scientist–practitioner stand. This training philosophy, also known as the Boulder Model [14], underscores the integration of scientific research in counseling and clinical psychology training and professional practice, advocating for practitioners to be knowledgeable in both areas and to use research to inform their practice. The significance of this study lies in clarifying the EFT’s current status within the scientific and practitioner communities and its potential to catalyze research advancement, as well as gaining a clearer understanding of how EFT may contribute to the current GMHC, which poses unprecedented MH challenges—particularly considering the prevalence of mental illness in growing populations of traumatized and displaced people (e.g., mass disaster survivors, refugees, and asylum seekers) living with untreated psychological injuries.

The remainder of this review is organized as follows: To begin, the method used is presented. Next, the theoretical background of EFT, including its foundations, key concepts, and assumptions, is outlined. The EFT standard protocol is described next. A synthesis of EFT’s effectiveness and outcomes follows. Further, the various proposed mechanisms of action of EFT are explained. The criticisms and controversies surrounding EFT are explored next.

An integrated discussion of the topics raised follows, along with a proposed research agenda and potential future directions. Finally, a summary and concluding remarks are offered.

2. Materials and methods

A critical review of the extant literature on EFT, following best-practice recommendations [15], was conducted to reveal weaknesses, contradictions, controversies, inconsistencies, and other important issues relating to methods and results. The search strategy involved examining English-language articles from PsycINFO, PubMed, and Google Scholar databases. The search terms were “Emotional Freedom Technique” (singular), “Emotional Freedom Techniques” (plural), “clinical EFT”, “acupoint stimulation”, “tapping”, “energy psychology”, and “EFT and mental health”. These combinations were created using the Boolean operators ‘AND’, ‘OR’, and ‘NOT’. The inclusion criteria included peer-reviewed articles reporting outcome studies, systematic reviews, meta-analyses, randomized controlled trials (RCTs), commentary articles, scholarly books, and relevant websites. Articles “in press”, editorials, the gray literature, conference papers, and dissertations were excluded. Returns on allied and hybrid methods such as Thought Field Therapy (TFT) and Spiritual EFT (SEFT) were also excluded. The first search was conducted on 2024 Dec 6, and the second on 2025 Mar 23. Final search results yielded 680 records for consideration. After all duplicates were removed and a quality assessment was conducted, 31 final publications from 2009 to 2025 were included in this review (**Figure 1**).

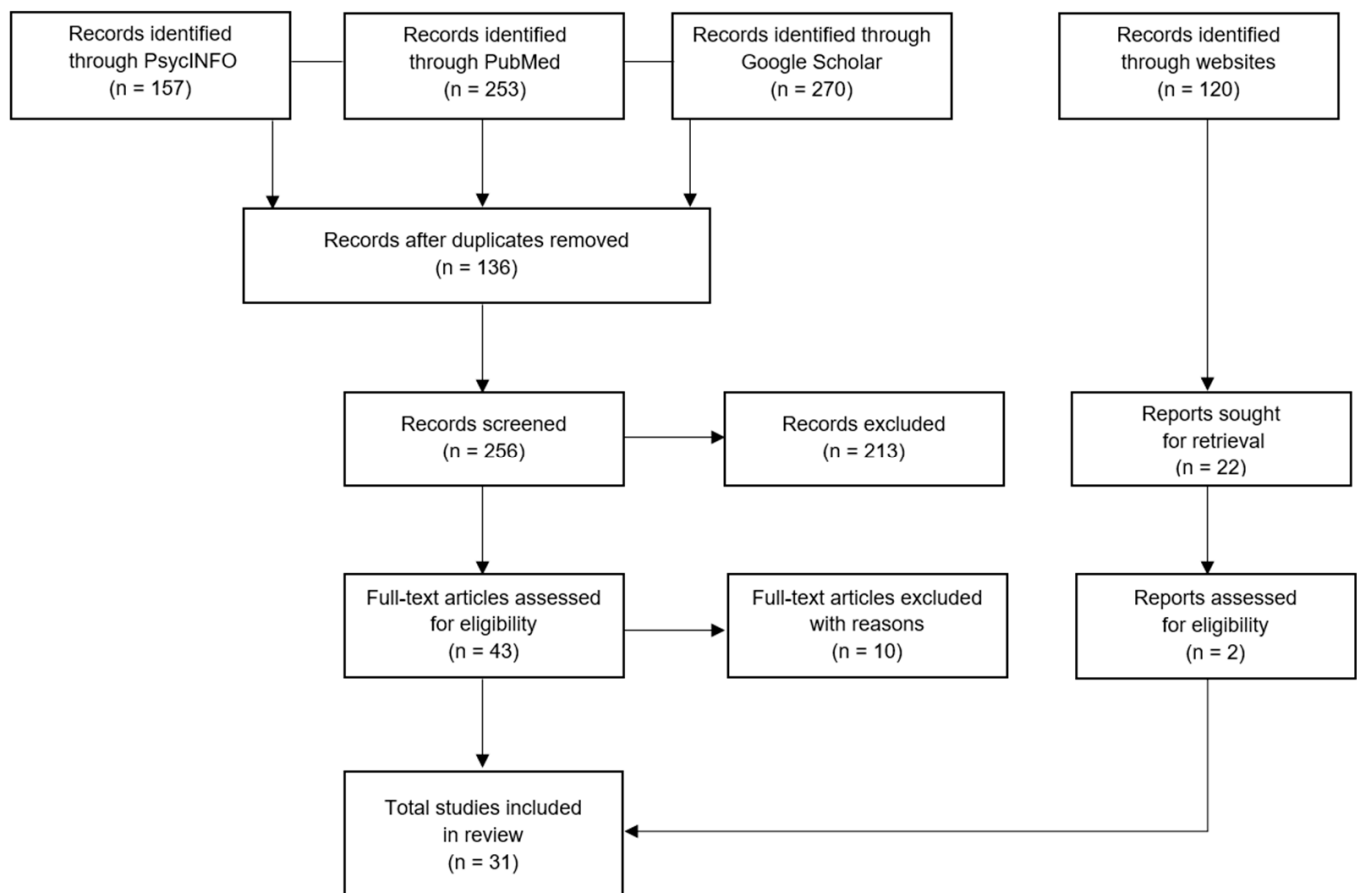


Figure 1 • Flowchart of literature search and study selection.

3. Theoretical background: foundations, key concepts, and assumptions

EFT is rooted in Eastern philosophies, especially acupuncture [1, 16–18]. As a result, EFT integrates acupressure or acupoint, the manual stimulation of acupuncture points, with cognitive restructuring, imaginal exposure, and other evidence-based psychotherapeutic procedures for treating multiple MH and medical conditions [1]. EFT is the most generally practiced form of energy psychology. That is, the branch of psychology that investigates the effects of energy systems on emotions and behavior, which is used as an umbrella term for treatment approaches that incorporate an energetic component into the psychotherapeutic process. The term commonly refers to a self-help therapeutic modality combining verbal and physical procedures to effect positive change [17]. Energy psychology draws on traditional Chinese medicine and acupuncture—the needling of specific body surfaces for therapeutic purposes [16]. Acupuncture posits that the body’s energy flows along specific pathways known as meridians, which inform the needling of specific points that, when needled, produce extensive deactivation of the limbic–paralimbic–neocortical system [18]. Instead of needles, EFT’s distinct feature entails stimulating acupuncture points using gentle self-fingertip percussion on the face and upper body. For this reason, EFT is popularly referred to as “tapping,” thus describing the technique itself [1].

Energy psychology rests on six empirically supported premises. The first three relate to EFT’s efficacy, speed, and durability: (1) acupoint tapping protocols are effective in treating a range of clinical conditions; (2) they are rapid compared to conventional treatments; and (3) they lead to long-term benefits. The other three relate to the physiological effects of the procedure: (4) tapping produces changes in biologic markers that corroborate clients’ subjective assessments; (5) it is a critical ingredient for the demonstrated clinical effects; and (6) stimulating selected acupoints sends signals that can increase or decrease arousal in specific areas of the brain [19].

4. Standard protocol

Since its outset in 1995, EFT has been a manualized-based treatment that uses a standardized tapping protocol or “basic recipe” comprising the following five steps and tapping points (**Figure 2**), as described by Stapleton [1]:

1. Identify an issue/problem to work on, and rate its intensity using a subjective unit of distress (SUD) scale, as developed by Wolpe [20]. This is an 11-point Likert-type scale, ranging from 0 to 10, where 0 indicates no distress or neutrality, and 10 represents the maximum level of distress. This first step establishes a baseline from which to work. It creates a fear/anxiety hierarchy, which serves as a starting point to measure the effectiveness of the therapy over time.
2. Write up a “setup statement” that comprises two sentences. The first sentence captures the client’s presenting problem. The second sentence is a statement of self-acceptance. This is a complete setup statement. An example is “Even though I

[insert your feeling/issue here], I deeply and completely accept myself” ([1] p. 4). The individual repeats the statement aloud three times while simultaneously tapping gently on the side of the hand point. This step initiates the exposure component of EFT, while pairing the memory with emotionally neutral statements (the cognitive reframing component). Both key mechanisms of EFT will be discussed later.

3. Tap through all eight EFT points (top of head; start of eyebrow; side of eye; under eye; under nose; chin; collarbone; and under arm), while repeating a “reminder phrase”—that is, a word or shortened phrase that describes the feelings related to the setup statement, which is designed to reinforce exposure by evoking the maximum affect (e.g., “anxious,” “nervous,” “angry,” or “sad”). In EFT language, this is referred to as completing a “round”. This step continues the exposure and cognitive reframing mechanisms by working up through the scale via exposure.
4. Take a gentle breath, and re-rate the SUD. After the completed round of tapping, reassess the intensity of discomfort by noticing any cognitive, sensory, emotional, and/or somatic changes. Depending on the shifts in the SUD score, the wording can be adjusted for subsequent rounds. An example is the statement “Even though I still have some [insert your issue/feeling here], I deeply and completely accept myself” ([1] p. 4). The individual repeats this statement aloud three times while gently tapping on the side-of-the-hand point. Follow the sequence using the “reminder phrase” (e.g., “this remaining stress”) while tapping the remaining eight points. This step reassesses the type of exposure required to continue the process, considering the clients’ reported changes while working up through the scale via exposure.
5. Keep tapping additional rounds until the SUD rating is very low (0 or 1). This step indicates when the exciton related to the problem or symptom is completed.

The empirical efficacy of this protocol has been validated in studies investigating the treatment of PTSD in multiple demographic groups, such as war veterans, victims of sexual violence, hospital patients, and survivors of natural and human-caused disasters [21].

5. Effectiveness and outcomes

Systematic reviews using the hierarchy of evidence for psychotherapies report that EFT enjoys a significant and growing body of peer-reviewed articles, including 15 systematic reviews, 13 meta-analyses, 69 randomized controlled trials (RCTs), 56 clinical trials using standardized outcome measures (without using a control group), 24 case studies, 26 reports describing systematic observations, 17 mixed-method clinical trials, and 88 articles addressing clinical procedures, theory, mechanisms, or related issues [2, 22]. Systematic reviews and meta-analyses since 2012 show a consistent trend indicating that EFT is an effective treatment that improves both physiological and psychological symptoms [11] when treating various conditions such as anxiety [23], depression [24, 25], PTSD [2, 26], and pain [26] with significant treatment effects observed in multiple studies.

Figure 2a: Tapping point on side of the hand.

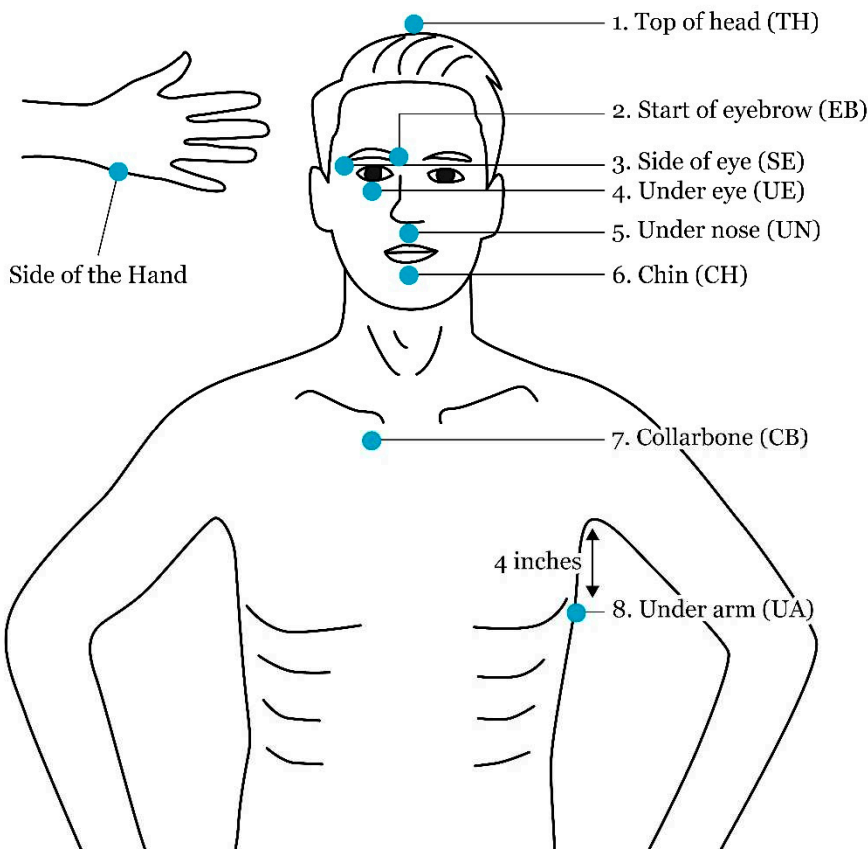


Figure 2b: The 8 EFT points on the face and upper body.

Figure 2 • EFT tapping points: Figure 2a (side of the hand), Figure 2b (face and upper body).

Further, a 2016 meta-analysis of studies using EFT for anxiety [23] included 14 RCTs (N = 658, with 293 in the experimental groups and 365 in the control groups) ranging from 2003 to 2016 and assessing anxiety as an outcome measure. The study found a large effect size of 1.23 with Cohen's $d = 1.23$ ($p < 0.001$), indicating significant reductions in anxiety symptoms post-intervention. Another 2016 meta-analysis of 20 studies (12 RCTs and 8 outcome studies) from 2005 to 2015 [24] evaluated the use of EFT to alleviate depression. The results reported a significant effect size (Hedges' $g = 1.31$). EFT was comparable or superior to treatment as usual (TAU) and other active treatment controls, suggesting that EFT is an effective intervention for reducing depression in a variety of populations and settings. Moreover, a 2024 meta-analysis of 18 RCTs from 2008 to 2023 [25] explored the effectiveness of EFT in reducing depressive symptoms as the primary outcome. Sample sizes ranged from 9 to 384, with the most common size being 26–30 participants per group. Control groups included no treatment, TAU, or waitlist controls. The study showed a significant overall effect size of 1.268 for EF, especially in group format settings and for people with moderate depression.

Regarding the use of EFT for the treatment of PTSD, results of a 2023 updated systematic review and meta-analysis [2] that searched 10 databases for quantitative reviews that included seven RCTs reported that treatment with EFT, when compared to TAU, waitlist, or no treatment controls, had significant and large effect sizes, ranging from 1.38 to 2.51. Compared to controls, effect sizes ranged from -0.15 to 0.79 , producing treatment results like other evidence-based therapies. Furthermore, a 2017 meta-analysis of seven RCTs of EFT for the treatment of PTSD [26], for example, reported a large significant treatment effect, with a weighted effect size Cohen's $d = 2.96$ (95% CI: 1.96–3.97, $p < 0.001$) for the

studies comparing EFT to TAU or a waitlist. Studies demonstrated that between 4 and 10 sessions were effective in treating PTSD in various populations, without adverse effects, and safe to be used as a self-help technique and primary evidence-based intervention for PTSD. Comparisons used CBT and EMDR, indicating no clear advantage over either method. In sum, using EFT for PTSD produces the following nine outcomes: (1) relatively short-term successful treatments ranging from 4 to 10 sessions; (2) the simultaneous improvement of comorbid conditions such as anxiety and depression; (3) the effectiveness of group therapy formats; (4) a low risk of adverse reactions; (5) psychological and physiological gains; (6) the durability of these gains over time; (7) cost-effective treatment; (8) the regulation of biomarkers such as stress genes and hormones and genes; and (9) the adaptation of the treatment to online applications [21].

6. Mechanisms of action

Various plausible evidence-based mechanisms of action have been proposed for EFT, which have been investigated by correlating multiple physiological markers of health with subjective measures of MH. EFT appears to share the same mechanisms of acupuncture, exposure therapy, acceptance and commitment therapy (ACT), and memory reconsolidation (MR).

6.1. Mechanisms of physiological action

In EFT, the physiological mechanisms involved in stimulating acupressure points through tapping may lead to reduced levels of stress hormones, improved brain regulation, and changes in

biomarkers such as heart rate and blood pressure, potentially influencing both emotional and physical well-being [12, 27, 28]. A study involving 203 people who attended six clinical EFT four-day training workshops in various locations demonstrates how pre- and post-test physiological markers of health can be linked to self-reported psychological indicators [12]. Markers of health included heart rate variability (HRV) and heart coherence (HC); the cardiovascular system using resting heart rate (RHR) and blood pressure (BP); the endocrine system using cortisol; and the immune system using salivary immunoglobulin A (SigA). MH indicators included psychological measures of depression, anxiety, PTSD, pain, cravings, and happiness. Objective post-tests showed that RHR (-8% , $p = 0.001$), cortisol (-37% , $p < 0.00000$), systolic BP (-6% , $p = 0.00001$), diastolic BP (-8% , $p < 0.00000$), and SigA ($+113\%$, $p = 0.017$) all significantly improved. Positive trends were observed for HRV and HC. Subjective post-test MH measures returned significant decreases in anxiety (-40%), depression (-35%), PTSD (-32%), pain (-57%), and cravings (-74%)—all $p < 0.000$. Happiness increased by 31%, with a statistical significance of $p = 0.000$. These results indicate that EFT has both positive health and MH effects. This study used power analysis to detect a medium effect size change for HC and HRV at a significance level of 0.05, and 90% power would require a minimum of 44 participants. The return rate of post-take assessments was 44%, which may not have been representative of the sample. Due to the small sample size, statistical significance was not achieved for HC or HRV. A major limitation of this study is that it did not use a control or comparison group. The results could have been partially due to nonspecific factors inherent in any therapy, demand characteristics, or the social support provided by the group.

6.2. Mechanisms of acupuncture

The mechanisms of action of acupuncture include mechanotransduction and neural mechanisms.

6.2.1. Mechanotransduction

Mechanotransduction, or mechanosensory transduction, relates to a cell's conversion of a mechanical stimulus into electrical impulses and/or biochemical intracellular signals [29, 30]. At its core, mechanotransduction encompasses a diverse range of molecules and cellular structures of vertebrates' skin whose activity can be directly influenced by applied mechanical forces, including gentle touching [30]. Mechanosensory cells transduce these mechanical stimuli and carry this sensory information to the brain [31]. The sense of touch, for example, conveys critical information about the physical surroundings by transforming mechanical energy into electrical signals [32].

In EFT, the mechanical stimulus is the gentle touch involved in the tapping sequence previously described in the EFT protocol. Tapping on these acupoints enables certain types of proteins in skin cells to convert mechanical stimulation into electrical signals (mechanotransduction). These signals can then travel through the connective tissue to different body parts via meridians or energy pathways embedded in the body's interstitial connective tissue, through which energy flows [31]. Due to the high concentration of the semiconductor collagen within this tissue, the transmission of these electrical signals to the brain is direct and almost instantaneous [2, 31]. More specifically, the mechanosensory cells prioritize speed and sensitivity, as mechanical forces are directed

to specific ion channels that can open rapidly, amplifying signals by allowing the entry of large amounts of ions. As a result, transduction channels open extremely fast, within microseconds of a stimulus [29]. Piezo2, for example, is a mechanosensitive ion channel that performs a vital function in transducing mechanical forces, particularly in touch sensation and proprioception (the awareness of movement, action, and location) [32, 33].

6.2.2. Neural mechanisms

Neural mechanisms relate to the electrical signals generated by tapping, which change the brain's activity. Like acupuncture, EFT's acupoint tapping regulates the limbic system's activity [18]. For example, tapping decreases arousal in the amygdala and subcortical gray structures of the brain, which are linked to negative behavior and emotion [29], such as irrational fear or food cravings [34]. These mechanisms have been investigated by measuring neurological shifts across the central nervous system (CNS), following acupoint stimulation, using functional magnetic resonance imaging (fMRI) and positron emission tomography (PET) scans—neuroimaging and molecular imaging techniques used to map regional changes in brain activity [35]. The results of these methods are consistent with those of acupuncture [16, 18]. Harvard Medical School conducted research [36] using fMRI, for example, and found that acupuncture modulates the activity of the limbic system and subcortical gray and white matter structures of the brain, such as the nucleus accumbens, corpus callosum, hippocampus, amygdala, thalamus, and putamen and insula—structures that regulate emotional and social functions. Other studies [37] have also supported the finding that tapping acupuncture points significantly reduces arousal levels in the limbic system. In addition, acupuncture enables the release of various neurotransmitters that inhibit pain (e.g., endogenous opioid peptides and norepinephrine), which induce synergic analgesic effects [38]. Recent research [39] concludes that acupuncture regulates bodily functions, positively affects different neural circuits, and modulates neurotransmitters that reduce pain.

6.3. Mechanisms of exposure and cognitive reframing

EFT comprises essential elements of exposure therapy, detailed as follows by Stapleton et al. [2]. As a gold-standard treatment for anxiety-related conditions, exposure therapy is rooted in Wolpe's systematic desensitization [20], which, based on principles of classical or Pavlovian conditioning, postulates that individuals cannot simultaneously feel relaxed and anxious or fearful (reciprocal inhibition). The mechanisms of exposure in EFT are embedded within the protocol itself, which comprises a sequence that begins in Step 2 of the above-described protocol. Step 2 creates reciprocal inhibition by simultaneously initiating the exposure and the competing response (tapping). Step 3 reinforces the reciprocal inhibition as the individual repeats the reminder phrase eight times while simultaneously tapping through the remaining eight points. Steps 4 and 5 constitute the desensitization proper by eventually confirming the extinction. The pairing of the negative stimuli/memory with the statement of self-acceptance (emotionally neutral), from steps 2 to 5, constitutes a form of cognitive reframing [27]. As a staple of CBT, cognitive reframing deliberately challenges and replaces clients' irrational self-belief (negative or maladaptive cognition) with an adaptive self-belief (positive cognition) [40].

6.4. Neural mechanisms of acceptance and commitment therapy

Recent research [41] has identified ACT [42] as a potential mechanism of exposure therapy. As a core component of ACT, acceptance/self-acceptance, in EFT, is introduced and reinforced in step 2 of the protocol, when the individual repeats three times the second sentence of the setup statement: “Even though I [insert your feeling/issue here], I deeply and completely accept myself” ([6] p. 4). Long recognized as a transdiagnostic behavioral intervention for MH and medical conditions, self-acceptance encourages clients to accept their thoughts and feelings without judgment [42]. Similarly, EFT emphasizes clients’ self-acceptance by reducing self-criticism, shame, and self-judgment [2]. Like self-compassion [43], self-acceptance is associated with decreased depressive symptoms. Research using fMRI data from before and after ACT interventions and changes in functional connectivity [44] indicates that the default mode network (which handles sociocognitive processing), the salience network (which handles emotional processing), and the frontoparietal network (which handles cognitive control) were all less active in the brain. Such changes in connectivity strength conclude this study, reduce depression and pain interference, and increase sociability.

6.5. Memory reconsolidation

MR is another proposed EFT action mechanism [35, 36]. MR relates to “the brain’s ability to delete a specific, unwanted emotional learning, including core, non-conscious beliefs or schemas, at the level of the physical, neural synapses that encode it in emotional memory” ([45]. p. 13). Emotional learnings constitute long-term memories that remain housed at the cellular and synaptic levels in the brain (schemas) as they enter memory during intense emotional experiences, particularly in childhood and/or during traumatic experiences. Therefore, these implicit, non-declarative, automatic, or unconscious memories function beyond conscious awareness, influencing problematic thoughts, emotions, and behaviors, which is a primary reason why individuals seek psychotherapy. In coherence therapy [45], permanently eradicating such symptoms requires deleting or erasure of their underlying emotional learnings. The memory erasure protocol of MR in coherence therapy comprises three experiential steps, as described by Ecker et al. [45]:

1. Reactivation of the target memory/schema: This first step entails re-evoking, re-triggering, retrieving, or accessing the original experience or knowledge by introducing a relevant cue linked to the original learning.
2. Juxtaposition or mismatch experience: Concurrently with the reactivation, this step requires creating a contradictory experience—that is, an experience that contradicts what the client expects (prediction error) based on the original implicit learning model. This experiential mismatch creates a form of neuroplasticity by unlocking synapses and making memory circuits labile (ready to be rewired with new learning).
3. Erasure or revision via new learning: The unlocking of synapses in the previous step creates an approximate five-hour reconsolidation window, after which they re-lock. Then, a new learning experience that contradicts or supplements the labile target knowledge must be created. The complete erasure

or nullification of target learning requires repetitions of mismatches, whether the mismatches are the same or different from the initial mismatch. Hence, the juxtaposition must be repeated during multiple sessions.

7. Criticisms

Despite the effectiveness and outcomes of research evidence documented in the previous section, EFT has historically been controversial and has faced opposition to its adoption by the scientific community in clinical settings for various reasons, including skepticism about its assumptions on energy psychology, concerns related to its efficacy, alleged rapidity, questioned mechanisms, and methodological flaws [19, 46–52].

The criticisms encountered by the scientific community in accepting EFT are severalfold. The first involves the apparent simplicity of tapping on someone’s face and body while repeating utterances, which looks counterintuitive compared to traditional psychological treatments [22]. As a result, EFT has generated significant controversy, ridicule, and accusations of pseudoscience. Similarly, the fact that EFT is based on energy psychology, a modality viewed by some researchers as controversial because it integrates ideas and techniques from ancient healing traditions, such as acupuncture and acupressure, has been described as based on implausible theoretical foundations, thus representing a pseudoscientific movement [47, 51, 52]. Other authors [48] assert that EFT is simply a rebranding of Thought Field Therapy (TFT), which researchers have discredited due to the lack of scientific evidence supporting its effectiveness.

Methodological criticisms of the quality of studies cited in this review include the following: Stapleton et al.’s 2023 updated systematic review and meta-analysis for PTS [2] included a modest number of studies and small sample sizes, thus yielding larger effects than if larger studies had been included. Feinstein’s 2023 systematic review [22] did not conform to the most rigorous guidelines available for assessing findings, such as the GRADE System: Classification of Quality of Evidence and Strength of Recommendation [53]—one of the most rigorous frameworks used to assess the quality of evidence and the strength of recommendations in clinical practice guidelines to assist practitioners make informed decisions.

Furthermore, two recent commentary articles [51, 52] also criticize these two systematic reviews, adding to the claims of previous works, by asserting that EFT is pseudoscientific, as well as multiple methodological limitations and breaches of ethics, including the absence of meaningful corrections to the original incorrect reported results. More specifically, in criticizing Feinstein’s 2023 systematic review [22], Boness et al. (2024) [51] assert that the rationale for energy psychology is based on premises that are not supported by reliable evidence; the claim that tapping on acupuncture points is an active ingredient in energy psychology is based on insufficient evidence; the quality of efficacy evidence is low; and the approach is not compatible with ethical practice. While Feinstein’s 2024 rejoinder article [54] acknowledges the validity of some of these criticisms, the author also provides evidence refuting each of the assertions, which he labels as misconceptions about energy psychology and EFT and a product of his critics’ indifference to the compelling efficacy evidence published in the recent decade. Similarly, Pfund et al.’s 2024 study [52] denounces Stapleton

et al.'s 2023 [2] updated systematic review and meta-analysis of making several inaccurate statements about EFT and its evidence base, that the proposed EFTs do not resemble elements from Cognitive Behavioral Therapy (CBT) and Prolonged Exposure Therapy (PE), and that EFT does not meet the APA Division 12 (Society of Clinical Psychology) standards for empirically supported treatments.

Moreover, Spielmans et al. [49] and Spielmans and Rosen [50] challenge Church et al.'s meta-analysis [27], which was also included in the present review, claiming evidence of acupressure as an active ingredient on methodological and statistical grounds. The meta-analysis in question comprised three studies that supposedly isolated acupressure, thus concluding that acupressure was an active ingredient of EFT and that EFT outcomes were "not due solely to placebo, nonspecific effects of any therapy, or nonacupressure components" (p. 783), and reported an overall effect size of Hedges' $g = -0.45$ (95% confidence interval [CI], -0.91 to 0.00). More specifically, Church et al.'s meta-analysis [27] included the following: (a) the overall effect as significant when the confidence interval included zero; (b) two studies that failed to isolate the effect of acupressure; (c) comparison groups that were based on sound psychological principles; and (d) controls for researcher allegiances. To address these concerns, Spielmans et al. [49] re-analyzed Church et al.'s [27] data and found Hedges' $g = -0.38$ (95% CI, 0.10 to -0.87), $p = 0.12$, which is a nonsignificant effect for EFT. In response to Spielmans et al. [49], Church et al. [27] published a corrigendum in which they claimed that they clarified the methodological critiques and corrected the standard deviations errors identified by Spielmans et al. [49], reporting a new Hedges' g value of 0.74 (95% CI = 0.34 – 1.13 , $p < 0.0001$) and concluding "... the present revised analysis supports the original conclusion that the acupressure component of the EFT protocol is an active ingredient that contributes to the method's favorable health effects" (p. 632). In this corrigendum, however, Church et al. [27] analyzed follow-up data rather than the original post-treatment endpoints used initially by Church et al.'s meta-analysis [27]. Consequently, the concerns that Spielmans et al. [49] raised were never addressed in Church et al.'s [27] corrigendum or later replies.

Finally, Boness et al. [51] evaluated the quality of the evidence of three meta-analyses of EFT for anxiety [23], depression [24], and PTSD [26], which were also included in the present review and cited in the previous section as reported studies related to the effectiveness and outcome of EFT using the Assessing the Methodological Quality of Systematic Reviews 2 (AMSTAR 2) [55, 56]. This instrument is a widely used 16-item checklist for assessing the quality of systematic reviews of healthcare interventions, which identifies seven critical domains influencing review validity. Boness et al.'s [51] evaluation results of the three meta-analyses indicated a "critically low" quality of evidence. Each study suffered from the same weaknesses, including using unsuitable statistical procedures to analyze the combination of results, failing to account for the risk of bias in interpreting results, and failing to explain or discuss discrepancies in effect sizes. Not surprisingly, Boness et al.'s [51] expressed concern that the proponents of EFT will continue to promote unfounded claims related to the purported benefits of acupoint tapping.

8. Discussion

EFT's current theoretical, empirical, and practical status is at odds with multiple issues. This tension includes differences about EFT's effectiveness between growing recent research, anecdotal evidence, mainly from practitioners and the public, and another significant body of scientific evidence. Arguably, the clearest example of this lightning rod for this controversy is the exchange of views that reflect a paradigmatic and research-based clash about energy psychology between the scientific and practitioners' communities. As a fourth-wave therapy, EFT aligns itself with the growing body of clinical research that has led to various evidence-based mind-body or somatic therapies as effective alternatives or adjuncts to conventional talk therapies for trauma treatments [3, 4, 57, 58]. This movement has gained momentum within the current GMHC, calling for more innovative MH treatments [4] and reaching those who need them most [6].

From a theoretical perspective, the overlap among theorized mechanisms of action of EFT with those proposed for EMDR [5, 59–61], as well as other more traditional approaches such as exposure [62, 63] and cognitive therapies [64, 65], is particularly noticeable. As noted by Benito [31], much of the research in this area has aimed to identify single theory-based mechanisms and/or compare theoretical perspectives against one another. This approach, however, may risk overlooking the existing overlap across theories and/or relationships among different mechanisms, as well as any parallel and successive mechanisms. For example, the initial reactivation, measuring distress using SUDs, and the subsequent reinforcement of exposure to the problem or feared stimuli are common to EFT, exposure therapy, and EMDR. Similarly, the tapping used in EFT and the bilateral stimulation (typically eye movements) in EMDR appear to be equivalent mechanisms, as they both create the reciprocal inhibition that increases parasympathetic activity and decreases psychophysiological arousal.

Further, step 4 of EFT has clients re-rate their SUDs after noticing any changes in their cognitive, sensory, emotional, and/or somatic changes. This step corresponds to phase 4 (desensitization) of the EMDR protocol, where clients are instructed to "just notice what's coming up" or "let whatever happens, happen" between passes of rapid eye movements and then rate their SUDs again [59]. In both protocols, rounds/passes are repeated until very low or no distress is reported by clients. The therapists' request to clients to "simply notice" what spontaneously emerges or changes for them between rounds aligns with the principles of acceptance and mindfulness, which aim to help clients become aware of their sensations, feelings, or thoughts without judgment. Such instructions are also designed to minimize demand characteristics—subtle cues that might suggest to clients what therapists expect from them as a therapeutic outcome [66].

The mechanism of action of systematic desensitization, which employs reciprocal inhibition or juxtaposition experience, resembles the techniques used to achieve extinction in EFT and exposure therapy and MR or erasure in coherence therapy [45]. In EFT, therapists create the juxtaposition by pairing activation (repeating the "setup statement") with tapping and the self-acceptance phrase. Furthermore, variations in cognitive reframing are also present

in EFT and EMDR (phase 5–installation), where therapists assist clients in identifying and strengthening the desired, positive self-belief that they wish to have about the disturbing memory. This positive self-belief counterbalances the negative thoughts associated with the distressing memory. This process facilitates the integration of the memory into adaptive memory networks.

From a historical development perspective, EMDR is also a good example of a breakthrough therapy that the scientific community first dismissed as pseudoscientific, attributing its popularity to exaggerations and clever marketing [67], only to vindicate it more than 20 years later [5]. Early reviews of the EMDR outcome literature questioned its efficacy, considering methodological limitations in studies that claimed to show clinical effects. The evidence base for EMDR has increased in quantity and quality since its introduction [68], and this therapy is now regarded as efficacious and evidence-based in the treatment of PTSD [5]. Hence, EMDR's dynamic evolution provided extraordinary opportunities for healing many [61]. EMDR's example highlights the challenges of accepting paradigm-shifting therapies and the lengthy gestation periods required before the scientific community fully accepts them. The greater the threat of the new psychotherapy to the established paradigm, the greater its resistance.

Skepticism and controversy are key features of scientific progress, and pseudoscientific claims concerning psychological treatments of all types are common [69]. Recognition and acceptance, however, arrive in due course—an example concerning EFT follows. Professor Peta Stapleton, Chair of Graduate Research at Bond University, Queensland, Australia, recently received the Australian Psychological Society's Distinguished Contribution to Psychological Science Award for advancing the EFT field through rigorous research and establishing a robust evidence base [70]. Another example relates to the controversy of energy psychology and the contended implausibility of mechanotransduction—a cell's conversion of a mechanical stimulus into electrical impulses and/or biochemical intracellular signals [29, 30], as highlighted previously. In 2003, Roderick MacKinnon received a Nobel Prize in Chemistry for discovering the transportation of charged ion channels or pathways through the outer walls of a living organism's cells. These pathways are critical to signal transfers in muscles and nerves [65, 71]. About a decade later, neuroscience research confirmed these findings [32, 33]. Thus, EFT's mechanotransduction appears more plausible when considering this evidence from the broader scientific literature by shedding light on a complex phenomenon from various research domains. This observation suggests that the researchers' criticisms of this mechanism of action could stem from their ideological differences rather than scientific evidence.

Surely, EFT's most significant concerns are the adverse findings related to the lack of methodological rigor identified in the literature. These findings include methodologically flawed designs and statistical errors in various systematic reviews. Such errors point out authors' biases, which shape their narrative and affect how information is conveyed and understood. From an empirical perspective, and considering that systematic reviews provide the highest level of evidence by increasing precision and addressing questions that individual studies alone cannot answer and that the exchange of articles related to methodological issues raised is more than a clash of paradigms, this situation is concerning as it creates tension and confusion, particularly among practitioners concerned

about the scientist–practitioner gap. It is important to remember that, as Cuijpers et al. [72] point out from an applied clinical perspective, ascertaining that a therapy works differs significantly from exploring how it works. While the first inquiry is clearly in the domain of practitioners, the latter is likely more relevant to scientists' interests.

Regarding identifying gaps and opportunities for future research, the lack of mixed methods designs investigating the mechanisms of action of EFT [73] is particularly noticeable. Mixed methods are essential in mental health service research [74, 75]. Combining qualitative and quantitative research, the mixed-method approach offers a comprehensive understanding of psychotherapy mechanisms by exploring the “what” and “why” of therapeutic change. It goes beyond either approach alone while adhering to the principles of scientific rigor. Hence, it is highly recommended that mixed-method designs be adopted to further elucidate EFT's mechanisms of action. Similarly, as highlighted above regarding the mechanotransduction mechanism of action, drawing from the broader scientific literature of various research domains has benefits. Hence, applying greater theoretical integration could be powerful and is strongly recommended as a future direction for EFT research.

Considering the above findings, the current widespread practice of EFT is unlikely to change. If anything, the use of EFT will likely grow, considering its potential future applications within the current context of the GMHC. EFT is an easy-to-learn, low-risk, and safe self-help approach. EFT is safer than, for example, the emerging trend in the US of using generic artificial intelligence (AI) chatbots for mental health support. Consequently, the APA has expressed concerns about the perils and unintended consequences to the public, especially vulnerable populations (e.g., children and adolescents) of underregulated generative AI technologies, thus urging the Federal Trade Commission to take action to protect the public from deceptive practices [76]. EFT's potential benefits could extend to the general population and clinicians, who can utilize it as an adjunctive therapy to alleviate the pressure of excessive workloads, poor work–life balance, and emotional exhaustion. These benefits outweigh the low risks of EFT and cannot be ignored. Finally, EFT has the potential to be integrated with existing therapeutic approaches by enhancing the flexibility of multimodal treatments, including trauma-focused treatment [77], to overcome barriers to mental healthcare within the current GMHC.

This review has several limitations. It only included English-language studies of EFT. Publication biases may have occurred due to the self-reporting nature of many outcome measures studies included in this review. Finally, this author's biases could have affected the accuracy and objectivity of this review's interpretation of the findings, discussion, and conclusions.

9. Conclusions

This review addressed EFT's conceptual, theoretical, empirical, methodological, and practical gaps in the literature from a scientist–practitioner perspective. Based on the existing evidence to support its effectiveness, and notwithstanding criticisms indicating that it has not been proven beyond doubt, EFT appears to be a non-invasive, safe self-help and promising integrative somatic approach for the treatment of PTSD, anxiety, depression, phobias, and other conditions.

Given that various inconsistencies still exist, including serious methodological issues, definitive claims would be premature. Further research is needed to test EFT's effectiveness, speed, mechanisms of action, and durability to validate acupoint tapping protocols more conclusively. To this end, EFT's new research should include greater theoretical integration, mixed-method designs, large-scale randomized trials, and more stringent systematic reviews by independent investigators.

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