# Assessment of the Emotional Freedom Technique An Alternative Treatment for Fear

#### Authors:

Wendy L. Waite - Department of Psychology and Neuroscience, University of Lethbridge Mark D. Holder - Department of Psychology, Okanagan University College

Author Note: Correspondence concerning this article should be addressed to Mark D. Holder, Department of Psychology, Okanagan University College, 3333 College Way, Kelowna, BC, Canada, V1V 1V7. E-mail: <u>mholder@ouc.bc.ca</u>

#### Abstract:

The effectiveness of the Emotional Freedom Technique (EFT), a treatment for anxiety and fear, was assessed. One hundred nineteen university students were assigned and tested in an independent four-group design. The groups differed in the treatment each received: applied treatment of EFT (Group EFT); a placebo treatment (Group P); a modeling treatment (Group M); and a control (Group C). Participants' self-reported baseline and post-treatment ratings of fear were measured. Group EFT showed a significant decrease in self-report measures at post-treatment. However, Group P and Group M showed a similar significant decrease. Group C did not show a significant decrease in post-treatment fear ratings. These results do not support the idea that the purported benefits of EFT are uniquely dependent on the "tapping of meridians." Rather, these results suggest that the reported effectiveness of EFT is attributable to characteristics it shares with more traditional therapies.

## Introduction

Anxiety disorders are the most common major psychiatric disorders, affecting 16% of the American population (Walley, Beebe, & Clark, 1994). In the United States, approximately twice as many people experience an anxiety disorder as depression or similar disorders (Carpenter, 1990). The most common type of anxiety disorder, specific phobia, has an estimated lifetime prevalence of 10-11% (American Psychiatric Association, 1994, as cited in Öst, 1996). Specific phobia involves an overwhelming, irrational fear of an object or situation (Saul, 1993). Those who suffer from specific phobia realize that their fear does not correspond to any real potential danger, but their attempts to avoid the object or situation may disrupt their lives (Williams, Kinney, Harap, & Liebmann, 1997). Most phobics will never seek treatment, however, and may simply learn to avoid the object or situation. Phobics who do seek treatment generally do so because they are unable to avoid their fears, resulting in chronic distress and life disruption.

Exposure-based treatments, such as systematic desensitization and distraction, are effective techniques in the treatment of fear (Haw & Dickerson, 1998; Walley, Beebe, & Clark, 1994). Systematic desensitization requires that the patient relax while being exposed to the feared object or situation (Walley et al., 1994). For therapy to modify emotional responses to feared stimuli, the therapy must elicit the fearful response (Rothbaum, Hodges, Watson, Kessler, & Opdyke, 1996). Exposure to feared stimuli is often difficult to achieve in clinical settings (Rothbaum et al., 1995). Therefore, imaginal exposure is commonly used to treat phobics. Alternative forms of exposure, such as virtual reality, have also proven effective in the treatment of some phobias (Carlin, Hoffman, & Weghorst, 1997; Rothbaum et al., 1995).

Recently, alternative therapies have been used in the treatment of fears (Eisenberg et al., 1998) and the reported results are sometimes astounding (Swenson, 1999). Alternative therapy is defined as a nonscientific holistic approach to medicine that promotes selfhealing (Eisenberg et al., 1998). Visits to alternative therapists increased almost 50% from 1990 to 1997 (Eisenberg et al., 1998), alternative therapies are and gaining considerable popularity in the treatment of fear (Gaudiano & Herbert, 2000). Despite extraordinary claims, the efficiency and mechanisms of action of many alternative therapies have not been rigorously determined (Lilienfeld, 1998; Marano, 1994; Swenson, 1999).

An alternative therapy for fear, Thought Field Therapy (TFT), was developed by Roger Callahan (Pulos, 1999). TFT is based on traditional Chinese medicine, claiming to access alleged meridians that carry the energy and well-being of animals, including humans (Maxwell, 1997). Callahan (1997) developed TFT while treating a patient for water phobia. Drawing on accupuncture practices, Callahan instructed his patient to tap on a specific area of his body, which apparently led to an immediate cessation of the phobia. Callahan claims that a blockage or disruption of energy flow results in negative emotions that are the cause of all psychological disorders, including phobia (Gaudiano & Herbert, 2000). Callahan (1999) proposed that a brief treatment procedure involving tapping mav be successfully used to treat almost any emotional disorder. There are a variety of these procedures, each tailored to a specific problem (Hooke, 1998). Following a diagnosis, the procedure involves tapping on specific meridian points on one's body while focusing on the source of the distressing situation. The tapping is purported to create energy, thereby restoring the energy flow and eliminating or reducing negative emotions.

The Emotional Freedom Technique (EFT), developed by Gary Craig, evolved from TFT (Pulos, 1999). Craig (2001b) claims that EFT takes TFT a step further by using a comprehensive procedure, thus eliminating the need for a complicated diagnosis. Supporters of EFT allege that, by tapping on all the meridian points, problems associated with the misdiagnosis of underlying emotional distress due to poor or ambigious definitions are eliminated. Craig states that successful treatment of patients, even when the order of the tapping was changed, is proof that the diagnosis of a particular disorder is unnecessary and even problematic for treatment effectiveness.

A main concern in the acceptance of such claims of "innovative" therapies is the lack and of experimental studies. limitations For example. studies of Eve Movement Desensitization and Reprocessing (EMDR) (e.g., Feske & Goldstein, 1997; Shapiro, 1989) and TFT (e.g., Carbonell & Figley, 1999; Leonoff. 1995) have methodological limitations and problems. Furthermore, TFT research has not been subjected to peer review. EFT's effectiveness and the mechanism for its purported effectiveness have not been experimentally assessed. Support for EFT's effectiveness consists of testimonials.

Problems associated with the assessment of alternative therapies include lack of control groups for placebo effects and nonspecific effects (e.g. passage of time), nonrandom subject selection and assignment, experimenter bias, and demand characteristics. Many of these methodological problems are exemplified in a study by Carbonell and Figley. In this study, the effectiveness of four types of alternative therapies, including EMDR and Alhough all four TFT. was assessed. treatments were associated with a significant reduction in fear, the results were inconclusive because the study did not incorporate appropriate control groups, random subject selection, or controls for certain demand characteristics.

The only research on EFT to date is an unpublished study (Wells, Polgase, Andrews, & Carrington, 2001). This study lacks controls for placebo effects, the passage of time, and demand characteristics. Both the EFT group and the placebo group showed significant improvement, but the researchers did not discuss the possibility that this improvement was due to either placebo effects, distraction, relaxation (e.g. a breathing technique was used), or imaginal exposure.

If EFT and TFT are shown to be effective, the effectiveness may be attributable to elements of more traditional approaches to fear (Haw & Dickerson, 1998), which effectively treat phobias. Alternative therapies often share components with more traditional therapies that use distraction and desensitization paired with exposure. For example, during EFT persons are instructed to focus on their fear while they tap different parts of their body.

Focusing on fear and tapping are akin to imaginal exposure and distraction, respectfully.

The present study was designed to assess the efficacy of EFT and to determine whether such efficacy, if present, was best attributed to the alteration of energy through the tapping of meridian points. Volunteers with self-reported phobias were exposed to EFT or one of three control conditions. In one control condition, the volunteers received the EFT treatment except that they tapped locations on their body that are not the traditional meridian points identified by EFT. A second control group performed EFT but tapped locations on a doll's body that were analogous to the meridian points. If EFT is effective, self-report measures of fear should decrease following EFT. If the effectiveness of EFT is attributable to the manipulation of meridian points, as EFT practitioners purport, then tapping nonmeridian points on oneself or a doll should be less effective. The effectiveness of all three treatment groups can be compared with a third control group, in which participants rated their fear but did not participate in tapping.

#### Method

## Participants

One hundred twenty-two undergraduate students from Okanagan University College with self-reported specific phobias participated in the study. Following the required APA format of informed consent, the participants were recruited through the Psychology Department's volunteer subject pool and through in-class presentations of the research. Contact with individual prospective participants was made via telephone. At this time participants were asked whether they had any specific fear(s). Those participants who gave an affirmative answer were then asked to identify their fear. The participants were then asked if they had ever sought or received treatment for an anxiety or mood disorder. The interview was continued only with those who answered no to this question. A time was then scheduled for participants who both agreed to be part of the study and could identify a specific fear. Prior to being assigned to a group, each participant was required to read and sign an informed-consent form. One

hundred nineteen participants were included in the data analyses. Three participants were not included in the data analyses: 2 reported 0 base ratings, and 1 was interrupted by noise.

## Design

A pretest post-treatment comparison with a four-group design was used. The treatment group (Group EFT) received EFT therapy. The placebo group (Group P) received the same procedure as Group EFT, but the tapping points were located along each participant's arm, away from the areas identified as meridian points. As a further control for possible unforeseen benefits of tapping regardless of the location, a third group (Group M) modeled the EFT treatment by tapping a doll instead of themselves. To ensure that the effective element was not simply a result of exposure alone, a no-treatment control group (Group C) was incorporated. Group C controlled for the effects of repeated testing, the passage of time resulting in natural desensitization, and the possible enhanced attention to fear created by exposure (Feske & Goldstein, 1997). Group C did not receive any initial treatment. Having Group C receive no initial treatment, while maintaining the same procedures for rating their fear as the three treatment groups, controlled for placebo effects and other nonspecific effects such as attention and certain demand characteristics (Wilson, Becker, & Tinker, 1995).

Group EFT followed the treatment procedures outlined in the EFT manual (Craig, 2001a). The treatment consists of several stages: focusing stage, set-up stage, sequence stage, gamut stage, and breathing stage. Briefly, in the focusing stage participants were asked to focus on their fear and rate the intensity of fear on a scale of 0-10 (0=no fear at all and 10=intense fear). This was followed by the setup stage, in which participants were instructed to use their preferred hand to rub their chest just below the clavicle while repeating an affirmative sentence three times. For example, if participants had identified a fear of snakes, they would repeat the phrase "I deeply and completely accept myself even though I have this fear of snakes." Next, in the sequence stage, participants tapped approximately seven times on each of 12 meridian points while restating their fear once at each tapping

location. For example, participants who had named spiders as their fear would simply repeat "fear of spiders" while tapping each meridian point. This was followed by the gamut stage, in which participants tapped continuously on a spot located below the knuckles of their index and middle fingers. The participants then repeated the sequence stage. The participants then reassessed their fear ratings as outlined in the focusing stage.

Initially, participants who failed to report a minimum 2-point reduction in their fear ratings advanced to the breathing stage. However, due to the large number of participants requiring this treatment, the last 73 participants were all advanced to the breathing stage. In the breathing stage, participants were instructed to place their middle and index fingers just below their clavicle and, using the opposite hand, tap continuously below the knuckles of these fingers while following a deep-breathing exercise. After the breathing exercise was completed, participants repeated the entire EFT procedure.

Group P followed the same procedures as Group EFT, except that the tapping points were not located on meridian points. Instead, Group P tapped the same number of times on the same number of points as Group EFT, but the 12 points were located at intervals along the participants' arms. Group M also followed the same procedure as Group EFT, except that the tapping technique was performed on a doll. Group C constructed a paper toy as instructed by the researcher. Self-reported fear levels were obtained for all groups using a subjective unit of disturbance score (SUDS) before and after treatment (Kaplan, Smith & Coons, 1995).

## Procedure

Participants were assigned to one of five fear categories depending on the type of fear they had identified during the telephone interview: heights (e.g., fear of ladders or tall buildings), enclosed spaces (e.g., fear of being in a closet or elevator), animals and insects (e.g., a fear of spiders, snakes, or dogs), public speaking (e.g., a fear of talking in front of crowds), and other (e.g., a fear of moving platforms, danger to oneself or loved ones). Participants from each category and gender were then assigned to one of the four treatment groups by rotating group assignment. Thus the assignment of participants ensured that each group was similar with respect to the number of participants of each fear category and gender.

In the first phase, the baseline phase, participants identified and rated their own fear. In the treatment phase each group received one of the four treatments and then rated their own fear again (post-treatment 1). This phase was followed by the application of the breathing technique and then by a third fear rating (post-treatment 2).

In the baseline phase a SUDS was obtained by asking participants to evoke an image of their feared object/situation. Participants were then asked to rate the strength of their fear while evoking the image. All groups followed the same procedures in the baseline phase.

In the treatment phase, Group EFT followed the EFT procedures. At the end of the procedures, ratings of perceived fear were again scored following the same procedures as in the baseline phase. Most participants then received the breathing technique. Upon completion of the breathing exercise, the treatment phase was repeated, obtaining a posttreatment 2 fear rating.

With the exception of the location of the tapping points, Group P and Group M followed the same procedures as Group EFT. Group P controlled for the alleged effectiveness of "meridian points" alone. Group M controlled for the possibility of inadvertently tapping on a "meridian" site. As well, Group M controlled demand characteristics. for treatment expectancy, and other nonspecific effects. Group C also followed the same procedures during the baseline phase. In the treatment phase Group C was asked to construct a paper toy, following the researcher's demonstration. The duration of this task was the same as the duration of the treatment procedures of the other groups. As with the other groups, Group C reassessed their fear after performing the simple task, and again after performing the breathing exercise. Group C controlled for placebo effects, demand characteristics, and

certain nonspecific effects, such as the passage of time.

# Results

#### **Baseline Comparisons**

The groups did not differ in their fear ratings prior to treatment (see Figure 1). A one-way ANOVA revealed no difference in mean baseline ratings of fear across groups, F(3,115)=.34, p=.795.

## **Treatment Effectiveness**

Some of the treatments reduced fear ratings. A repeated-measures ANOVA showed а significant phase by group interaction (baseline versus post-treatment 1), F(3,115)=3.61, p=0.16, partial  $c_{2}=.09$ . This interaction is attributable to the finding that the three groups that received treatments (Group EFT, Group P, and Group M) showed a reduction in fear ratings from baseline to post-treatment 1, but Group C did not (see Figure 1). However, the uneven sample sizes of the four groups made interpretation of two-way analyses problematic because of an increase in the probability of a Type I error (Howell, 1999). Therefore, a oneway ANOVA was conducted using the difference scores between individual baseline and post-treatment 1 fear ratings. This ANOVA of the difference scores showed a significant effect of group, F(3,115)=3.61, p=0.16. Using the LSD to adjust for multiple comparisons, Group P (p = .003) and Group M (p=.008) differed from Group C. The difference between Group EFT and Group C approached, but did not quite reach, traditional levels of significance (p=.061). There were no differences between the three treatment groups, *ps*>.05. Paired-samples of t-tests on each group were performed to test whether there was a significant treatment effect (adjusted alpha=.0125). Fear ratings decreased from baseline to post-treatment 1 for Group EFT (p=.003), Group P (p<.001), and Group M (*p*<.001), but not Group C (*p*=.255).

A one-way ANOVA was also conducted on the difference scores between individual baseline and post-treatment 2 fear rating scores to assess the effects of repeated treatment and the breathing technique. Only those 98 participants who received the breathing technique were included in this analysis. The difference scores were similar across groups, F(3,94)=2.06, p=.11 (see Figure 2).

#### Discussion

The results of the present study indicate that EFT was effective in decreasing fear in a nonclinical population. However, EFT was no more effective than either a placebo or modeling control procedure. Participants who were instructed to tap on various locations of their arm reported similar reductions in fear as those participants who were instructed to tap on meridian points. The location of the points did not play a measurable role. Furthermore, participants who tapped on a doll also reported similar decreases in fear ratings. Overall, these findings suggest that certain components of EFT were effective, but not dependent on meridian points, as EFT supporters contend (Pulos, 1999). It is possible that systematic desensitization and distraction are mediators of EFT's apparent effectiveness.

EFT incorporates the same fundamental components as systematic desensitization and distraction. First, persons are required to focus on their fear (imaginal exposure) while tapping on specific locations, which is akin to distraction. Therefore, a decrease in SUDS ratings by Group EFT may be due to a combination of exposure and distraction, rather than to the specific tapping locations (meridians).

The present research was based primarily on the contention that meridian points are the fundamental factor in EFT's effectiveness (Pulos, 1999). However, EFT also incorporates a breathing technique followed by a repetition of the treatment procedures when initial posttreatment scores are less than 2 points lower than baseline scores (Craig, 2001a). Although the breathing technique does not utilize meridian points, the apparent efficacy of EFT may be due, in part, to the second application of the procedure. Group C's results demonstrated that the breathing technique alone was effective and, therefore, may be an important component of EFT's effectiveness.

The reported effectiveness of EFT and related therapies may also be attributable to demand characteristics (Swenson, 1999). Participants may feel compelled to respond to the perceived expectancy of treatment effectiveness. The nonsignificant difference between baseline and post-treatment 1 scores for the control group does not support this contention, however. Furthermore, it is unclear why tapping on a doll would produce demand characteristics whereas making a paper toy would not. Therefore, the diminished fear ratings for Group M but not Group C suggests that characteristics demand alone are not responsible for the reduction.

The effect of the breathing technique may be due to relaxation resulting from the participant performing a number of deep-breathing exercises. This would explain the decrease in self-reported fear ratings across all groups at post-treatment 2. Alternatively, repeating the fear rating process may increase exposure time, resulting in a further reduction in fear ratings. Although the present study was designed primarily to test the efficacy of purported meridian points and not the effectiveness of the breathing technique, these findings may be relevant to the overall effectiveness of EFT and should be noted in future research.

The present study has several limitations. First, the findings may not generalize to clinical populations. Furthermore, even generalizing to populations must be nonclinical done cautiously, as the study did not incorporate a standardized assessment of specific phobia. However, EFT claims to successfully treat any emotional distress and, therefore, the limits in generalizability do not negate the present assessment of EFT as a treatment. Second, the present study assessed fear ratings using only the SUD scale. This limitation may be problematic as there is a potential for inflated or ambiguous fear ratings. Interpretations of the results in the present study should be attentive to these limitations.

In summary, the present study establishes that certain techniques used by EFT may be useful in the treatment of fear. However, this effectiveness appears unrelated to the unique features of EFT and instead derives from components shared with more traditional therapies already established as effective treatments for specific phobia. The clinical significance of EFT, including the duration of treatment effectiveness, still needs to be ascertained.

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