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Theoretical and Methodological Problems in Research on
Emotional Freedom Techniques (EFT) and
Other Meridian Based Therapies

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ABSTRACT -Controlled research into Emotional Freedom Techniques (EFT) and
other
meridian-based therapies is at its beginnings. We examined several issues facing
EFT
researchers, including: the number and type of dependent measures; expectancy
effects;
the need for follow-up assessment; a newly proposed procedure for keeping
participants
blind; the duration of the intervention; the value of treating the hypothesized
Energy
Meridian System and EFT's operations as separate constructs; and the possibility
that
EFT's efficacy is mediated by processes long known to be associated with
psychotherapy. Such issues are considered in the context of three recent EFT
studies:
Waite and Holder (2003); Wells et al. (2003); and Baker and Siegel (2005). Some
limitations of these studies are delineated and guidelines on EFT research are
suggested.

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motional Freedom Techniques (EFT) (Craig, 1995, 1999, 2002, 2006) and its

precursor, Thought Field Therapy (TFT) (Callahan, 1985) are relatively new approaches to treating psychological problems. Each features the tapping of various acupuncture meridian endpoints while repeating certain verbal phrases.

Although these approaches are attracting attention in the fields of mental health and traumatology (e.g. Oschman, 2006; Ruden, 2005), there is a dearth of controlled research in the field. To our knowledge, no studies have been published in peer-reviewed journals assessing the effectiveness of TFT by using an appropriate comparison/control condition, and only two published studies in peer-reviewed journals have investigated EFT in this manner. This paper refers to controlled studies on EFT, although our comments should apply to any meridian based therapy.

As it is relatively early in the development of EFT research, it would seem that now is the time to identify theoretical and procedural questions frequently encountered by those engaged in such investigations and to clarify the concepts to be explored.

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Theoretical Underpinnings of the Meridian Based Therapies

The theory that inspired both EFT and TFT is based on the Energy Meridian System (EMS) postulated by ancient Chinese medicine -- the same theory that shaped the practice of acupuncture. According to this theory, a vital energy known as Qi flows through pathways in the body designated as energy meridians. If this flow is blocked,

it is said to cause dysfunction, disease, or, in the event of massive blockage, death.

We

will refer to this postulated flow of Qi through energy meridian pathways as the EMS.

The founders of both EFT and TFT claim that all emotional problems reflect an imbalance in the EMS, and that stimulating the end points of various acupuncture meridian points serves to redress this imbalance (Callahan, 1985; Craig, 1995; Gallo, 1999).

It should be noted, however, that the theory behind both EFT and TFT is still only a theory. Although there is some scientific evidence indicating that acupuncture is an effective analgesic (e.g. Levine, Gormley, & Fields, 1976) and anti-anxiety agent (e.g., Lo & Chung, 1979; Roccia & Rogora, 1976), we know of no accepted body of scientific

studies which has as yet demonstrated the existence of the putative EMS and Qi.

A stumbling block to conducting research on EFT (and by implication on any other meridian based therapy) is that it is all too easy to assume that EFT's effectiveness, if

demonstrated, would constitute in and of itself proof of the existence of the EMS; or conversely, that if EFT's effectiveness was disconfirmed, that this would disprove the

existence of the EMS. In order to avoid confusion in this area of research, we recommend

that these two questions be conceptualized separately whenever studies in this field are

undertaken. We will elaborate on this point later.

EFT Operations and Procedures

A single round of the standard EFT procedure involves eight steps (Craig, 1995, 1999): Step 1 - The participant is asked to imagine himself or herself experiencing the disturbing affect or situation to be addressed. Step 2 - The person is asked to rate his or her negative affect, "as it exists NOW" as you think about it" (Craig, 1995, p.28)

on a 0 to 10 point Subjective Units of Discomfort Scale (SUDS), where zero denotes 'none' and 10 denotes 'maximum intensity.' Step 3 - The participant uses a standard setup

phrase (e.g., 'Even though I have this fear of rats, I deeply and completely accept myself') which is repeated three times out loud while she or he taps on a specific location

at the side of the hand, or simultaneously rubs two specific locations on the chest.

Step 4

- The participant then taps five to seven times on each of seven different acupuncture

points on the face and upper body while repeating a short reminder phrase at each location (e.g., 'fear of rats') to maintain focus on the issue being addressed. Step 5 -

The

same thing is done on five locations on one hand, while again repeating the reminder

phrase once at each location. Step 6 - The person then performs nine activities (called

'the nine gamut procedure') consisting of tapping on a location on the back of one hand

while engaging in a series of eye movements and vocalizations. Steps 7 and 8 consist of

repeating Steps 4 and 5. The entire procedure takes an average of two to three minutes.

When using EFT with clinical patients, a typical treatment session consists of multiple

rounds of treatment, lasting usually about 45 minutes. It should be noted that the short

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form of EFT, which omits Step 6 in each round, is most often used today for clinical purposes.

Controlled Studies on EFT

In the first controlled and published study of EFT, Waite and Holder (2003) explored whether EFT is efficacious in decreasing a single specific fear, and whether the efficacy of EFT, if any, is attributable to the manipulation of meridian points (Waite & Holder, 2003, p. 21).

In the first phase of their study, Waite and Holder (2003) employed four conditions:

1. "EFT" - a participant underwent one round of the full EFT procedure described above, tapping with the tips of his/her index and middle fingers (personal communication from M. Holder, June 21, 2004) on locations on his/her body.
2. "Placebo" - a participant used the tips of her/his index and middle fingers to tap on 12 points on the arm that are not used in EFT. Except for the locations, the full EFT procedure was followed.
3. "Modeling" - instead of tapping on 12 locations on his/her own body during Steps 4 and 5, a participant tapped on 12 corresponding locations on the body of a doll, using the same two fingertips. During Step 3 (see EFT description above), participant tapped on the doll's chest rather than on his/her own chest. During Step 6, participant tapped on the doll's hand rather than on his/her own hand while performing the 9-gamut procedure.
4. A "Control" condition where participant constructed an origami toy out of paper. Only Step 2 of the EFT procedure (fear level assessment using SUDS) was included. No other components of EFT were present in this condition. Except for the locations upon which the participant tapped, each of the first three conditions included all the other aspects of EFT: focusing on the feared object or situation, the use of standardized EFT verbalizations, the 9-gamut procedure, and fear level assessments. The control group did not employ any aspects of EFT, but received the same fear level assessments as the other conditions.

Fear level was assessed using SUDS, once at baseline, and again after the intervention (post-treatment 1). No objective (i.e. behavioral or physiological) measures of fear were used. This study also included a second phase involving a breathing and tapping technique which was administered equally to participants in all conditions. There were no significant findings for this second phase and the authors almost completely ignore it in discussing their study. We emulate them here and focus all our attention on the first phase of the study.

Waite and Holderís (2003) findings showed significant decreases in fear from baseline to post-treatment 1 for each of the three treatment conditions (EFT, Placebo and Modeling), and no significant decrease in fear for the control (toy-construction) condition (see Fig. 1 in Waite & Holder, p.23). It is important to note that their EFT, Placebo, and Modeling conditions included all components of the EFT procedure and differed only in the location that was tapped. Waite and Holder concluded that the efficacy observed for the EFT, Placebo, and Modeling conditions (a) "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" such as systematic desensitization or distraction (p.24), and (b) "[does] not support the idea that the

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purported benefits of EFT are uniquely dependent on the 'tapping of meridians' (p. 20).

Wells, Polglase, Andrews, Carrington, and Baker (2003) explored whether EFT can reduce specific phobias of small animals under laboratory-controlled conditions. Randomly assigned participants were treated individually for 30 minutes with EFT (n = 18) or with Diaphragmatic Breathing (DB) (n = 17). The DB condition was devised to serve as a comparison treatment condition relative to the EFT condition. Duration of treatment, number of rounds of treatment, demand characteristics, attention paid by the experimenter to the participant, time spent focusing on and imagining the feared object, etc., were very similar in both conditions. The number of assessments of SUDS level was also equal for EFT and DB, since more frequent assessment of SUDS for one condition might produce different demand characteristics for that condition.

The results were positive for EFT: ANOVAS revealed that EFT produced significantly greater improvement than did DB behaviorally and on three self-report measures, although not on pulse rate. The greater improvement for EFT was maintained, and possibly enhanced, at 6 - 9 months follow-up on the behavioral measure. These findings suggest that a single treatment session using EFT to reduce specific phobias can produce valid behavioral and subjective effects.

We will now look at the methodological and practical problems illustrated by the above two published studies and one additional study (Baker & Siegel, 2005).

Methodological and Practical Problems

Measuring Dependent Variables

In the Waite and Holder (2003) study, only a single self-report dependent measure (SUDS) was employed at pre-intervention and post-intervention, whereas in Wells et al.

(2003) and in an unpublished replication and extension of Wells et al., Baker and Siegel

(2005), multiple self-report measures, a behavioral measure and a physiological measure

were used. When only a single self-report dependent measure is employed -- especially one that repeatedly and directly assesses the target behavior, as SUDS does -- we suspect that there is greater possibility that demand characteristics will affect the outcome. When using SUDS, it is much easier for the participant to become aware that the experimenter desires a decrease in self-reported fear. A more robust array of dependent measures would be advisable, preferably to include psychometrically valid self-report measures of the targeted symptom, general measures of psychological health, and objective or behavioral measures that assess the targeted symptom(s). Two examples of this are found in (a) Baker and Siegel's use of the Fear of Specific Animal Questionnaire (Baker, Quiatchon, & Putilin, in preparation) as well as a behavioral task involving a graduated approach to the feared animal, with assessments of discomfort at each step, and (b) Rowe's (2005) finding of decrease in long-term psychological symptoms assessed by the short form of the SCL-90-R (SA-45) in a group of participants at an EFT training workshop.

There is an additional limitation in the use of SUDS as a dependent measure of outcome. As Pignotti (2005) points out, mainstream psychology regards and uses SUDS as a "process measure" and not as an "outcome measure". In both of the TFT and EFT procedures, SUDS is used as both a process measure (to monitor the person's progress throughout the session), as well as an outcome measure (treatment on a specific aspect of

the client's issue is concluded when SUDS reaches 0). Although this latter usage of SUDS is common and convenient in a clinical setting, it is inadequate as evidence of treatment efficacy when EFT or TFT are studied in the laboratory. No matter how highly significant the outcomes are as assessed by SUDS, these findings need to be corroborated by credible self-report and behavioral outcome measures to be acceptable to the psychological scientific community.

In addition to recommending multiple measures at the time of the original intervention, there is great value in assessing the long-term effects of the intervention by bringing in participants for a follow-up session consisting of only assessment without preceding treatment or other manipulation. In this way, one can distinguish between transient and long-term effects.

Control for Expectancy Effects

Expectancy effects have been known to affect psychotherapy outcomes (e.g., Weinberger & Eig, 1999) as well as a variety of other psychological phenomena (e.g., Kirsch, 1985; Kirsch & Lynn, 1999). In the Waite and Holder (2003) study, participants in each intervention condition were told, prior to the intervention, that the particular intervention might possibly help them to decrease their fear. However, no measures were used to assess and/or control for expectancy.

In the Wells et al. (2003) study, expectancy effect was assessed by asking participants during the pre-treatment phase how confident they were that their as-yet-identified treatment would work. These ratings constituted a global rating of confidence that any treatment would help their condition. Since the two treatment conditions (EFT and DB) had not yet been described to participants, it is not possible to determine whether the two groups differed in expectation of help once they became familiar with a description of the treatment procedure to which they were to be exposed. Therefore, although the two

groups did not differ in terms of their general ratings of confidence that any treatment would help, expectation regarding the particular treatment to which they were exposed was not assessed.

It is only in the Baker and Siegel study (2005) that there was (a) a demonstration of the treatment procedure to which the participant had just been randomly assigned, (b) a systematic assessment of pre-treatment expectancy regarding that participant's treatment procedure, and (c) statistical control for any possible effect of expectation on outcome.

We recommend that measures of expectancy for EFT be standardized to the degree possible, and that these measures be administered before the experimental intervention, to control for expectancy effects. Researchers would be well advised to consider the measures of therapeutic expectancy proposed by Borkovec and Nau (1972) or Devilly and Borkovec (2000).

A Suggested Procedure for Keeping Participants Blind to Condition

Christoff (2004) has described a procedure that can be used to keep a participant blind regarding whether or not she/he is receiving a real treatment or a placebo/control condition. For example, if fear is being studied, a naive participant can be informed that he/she will be receiving either an established treatment for fear, a new experimental treatment for fear, an established psychological treatment that is not for fear, a placebo

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treatment (appropriately defined for the participant), or no treatment. In this blind procedure, no subject is ever informed regarding what type of condition he/she is in at

least until the study is completed. If there is a possibility that participants may communicate with each other regarding the condition that the participant has experienced, then (a) the nature of the condition is never revealed to the participant (and

the Consent Form forewarns the participant that this will be the case), and (b) experimenter(s) are trained to never reveal condition type to the participant.

Christoff

(2004) suggested that one can couple this procedure with a brief questionnaire afterward,

listing each one of the possible condition types listed above, to determine to what degree

the participant believes he/she was exposed to that type of condition.

If this procedure is rigorously executed, a participant can be kept blind regarding what type of condition he/she has been exposed to. Additionally, this procedure creates

the possibility of both assessing and controlling for participant's perceptions of the intervention.

Length of Exposure to Intervention

In the three controlled studies of EFT described above, markedly different exposure times to EFT were used. Waite and Holder (2003) presented participants with a single

round (about 2 to 3 minutes in length) of EFT, while the participants in the Wells et al.

(2003) study were subjected to a 30-minute EFT session, and Baker and Siegel (2005)

used a 45 minute session. Thus, Waite and Holder were putting EFT to a much more stringent test by posing the question: does very brief and atypical participant exposure to

EFT (as compared to the much longer sessions routinely used in clinical practice) show

any effects? It is likely that the very short duration of their intervention coupled with the

use of only a single-item self-report dependent measure substantially increased the possibility that their outcomes were influenced by demand characteristics. We

would

recommend that an EFT session of 30-45 minutes, at the minimum, be employed.

‘Energy Meridians’ and ‘Operations’ as Separate Constructs

The creators of both TFT and EFT (e.g., Callahan, 1985, Craig, 1995) regard stimulation of the energy meridian system as the central feature of their methods. Thus, most of the operations of EFT have the stated aim of affecting the EMS so as to release blocked energies. Waite and Holder (2003) shared this perspective, as evidenced by their comment that ‘the present research was based primarily on the contention that meridian points are the fundamental factor in EFT’s effectiveness’ (p.24).

From this perspective, if one could produce evidence that direct physical stimulation of the putative energy meridian system is not a necessary condition for producing the efficacy observed for EFT, then there would be reasonable grounds for contending that EFT does not either entail or implicate unique processes, but instead produces efficacy through processes long known to occur in various forms of psychotherapy such as desensitization or distraction (as suggested by Waite & Holder, 2003). Believing that they had ruled out all direct physical stimulation of the EMS in their modeling condition, Waite and Holder thus concluded that although EFT was clearly efficacious, its beneficial effects were not due to stimulation of the EMS, and therefore EFT did not represent a new therapeutic process. From this perspective, Waite and Holder’s reference to their

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condition which involved tapping on twelve non-meridian points on one's arm as a placebo condition is reasonable, despite the fact that all the other components of the EFT procedure were included in this condition.

However, one can construe EFT's operations and the theory regarding the energy meridian system as separate entities, and thus generate two different hypothetical questions: First, are the operations involved in EFT (i.e. hand movements, verbalizations, etc.) efficacious, regardless of the underlying mechanism of action? Second, do the effects of EFT depend on influencing an energy meridian system? We offer these dual hypotheses because prior research has shown that EFT is efficacious (Waite & Holder, 2003; Wells et al., 2003; Baker & Siegel's [2005] replication of Wells et al., 2003), and thus far, there is no acceptable scientific evidence establishing the existence of the EMS.

This raises the possibility that the creators of meridian-based psychotherapies serendipitously came upon a set of operations all or part of which are efficacious whether or not the EMS exists. From this perspective, a failure to find any support for the existence of the EMS would simply provide a basis for rejecting a particular theory of why EFT works but would not, by itself, provide a basis for rejecting EFT-as-a-set-of-operations or for concluding that EFT-as-a-set-of-operations does not constitute an effective or novel therapeutic approach. As applied to the Waite and Holder (2003) study, this perspective does not justify referring to the arm-tapping condition as placebo, i.e., a psychologically inert treatment, since the mechanism of action responsible for the observed efficacy of EFT has not yet been identified.

We strongly recommend that these two issues, the operations involved in EFT and the theory of EMS, be treated as separate entities, and that research on EFT and other meridian based therapies be conducted and interpreted with a clear differentiation between the two. If this is done, unwarranted conclusions are much less likely to be drawn and results can be more clearly delineated.

Appropriate Control Conditions

There are two pitfalls that may face investigators attempting to clarify the role of EMS in producing the observed efficacy of meridian based therapies. The first deals with an overly restrictive conceptualization of what is involved in stimulation of the EMS. Physical stimulation of the EMS and tapping on meridian endpoints are not synonymous, although Craig (e.g. 1995) often writes as if they are. If one adopts this perspective, one might conclude that by eliminating tapping, one has eliminated all stimulation of the EMS. Yet, tapping is only one way to physically stimulate the EMS. For example, no tapping whatsoever would occur if acupuncture needles were used instead of tapping, and yet similar results should be produced if the EMS hypothesis is valid.

The second pitfall involves failing to recognize that the act of tapping is bidirectional: in tapping, the fingertips stimulate the surface being tapped and the surface being tapped simultaneously stimulates the fingertips. It is easy to fail to notice this, as happened with Waite and Holder (2003). They believed they had eliminated all direct physical stimulation of the EMS in their modeling condition, in which participants tapped on various locations of a doll. They failed to recognize, however that there are acupuncture points in the fingers that were, in fact, being stimulated repeatedly as their

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participants tapped on the doll using the tips of their index and middle fingers (M. Holder, personal communication, June 21, 2004). Traditional Chinese acupuncture identifies an important meridian point at the tip of the middle finger (Pericardium 9) (Worsley, 1975; O'Conner & Bensky, 1981). The index finger also has two meridian points on it: one located on the radial side of the finger at the corner of the nail, and the other on the radial side of the index finger distal to the joint of the finger (O'Conner & Bensky, 1981). The modeling condition of the Waite and Holder study thus contained the exact same frequency of EMS stimulation as did EFT (that is, the number of tappings were identical), but the total quantity of physical activation of the EMS was substantially less in this modeling condition (only the fingertips were stimulated but not the 12 meridian end points used in EFT).

Future research can clarify the role of the EMS in producing the effects of EFT by employing a control condition in which meridian stimulation is completely eliminated, while retaining all the other features of EFT. If such a condition produced results comparable to those of EFT, it would present conclusive evidence that direct physical stimulation of the EMS does not constitute a necessary condition for the effects observed with EFT. Furthermore, when attempting to eliminate stimulation of the EMS in a comparison condition, researchers must ensure that all means of stimulation ñ whether by tapping, acupuncture, or other means ñ are eliminated.

Relationship Between Processes Long Known to Occur with Psychotherapy and Processes which may Mediate EFT's Efficacy

Based on their erroneous belief that they had eliminated all stimulation to the putative EMS in their modeling condition, while obtaining the same efficacy as in their EFT condition, Waite and Holder (2003) dismissed EFT as reflecting only nonspecific effects. Even if they had eliminated all EMS stimulation as intended, and obtained the same results, their conclusion would still be logically unwarranted. It is important to consider the possibility that even if it is empirically demonstrated that stimulation of the EMS is

not a necessary condition for observing efficacy with EFT, it is still possible that one or more aspects of EFT offers therapeutic value that is equivalent to, or an improvement upon, well-established psychotherapies. For example, EFT may activate more readily, more quickly and/or more intensely one or more of the processes long known to occur in psychotherapy. Even though the process(es) activated may be inherent in traditional therapies, an easier, more rapid or more intense activation would be therapeutically valuable and specific to EFT.

Consider Waite and Holderís (2003) conclusion that the process that mediates the efficacy of EFT may be desensitization. In fact, desensitization or counter-conditioning may well be one of the processes elicited by EFT (see comments by Wells et al. [2003] to the effect that the combination of relaxation, which many participants and patients report after an EFT session, with frequent focusing on the feared object might be classified as a novel form of desensitization [p. 959]). This conclusion need not result in dismissing EFT as having certain properties of its own that could be therapeutic in their own right. The fact that desensitization is a process long known to occur in psychotherapy does not bear on this issue directly, for more than one process may be involved. For example, if EFT induces desensitization more rapidly, more intensely, or both, that could constitute

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something new and useful ñ even though the process itself (desensitization) is one long known to psychologists.

In order to identify any potentially unique therapeutic characteristics of EFT, we suggest a two-pronged approach. First, by comparing characteristics such as efficacy and rate of therapeutic change in EFT with those of well-established therapies, future research may find indications that EFT offers advantages that cannot be attributed to shared aspects between EFT and the established therapies. Second, future research can be directly aimed at identifying the mechanism of action in EFT.

The Rapidity of the Effects of EFT Needs to be Determined

It is essential to investigate the rapidity of the occurrence of the effects of EFT and of other meridian based therapies as compared to that of traditional therapies, because this might be one of its most valuable features. For example, a striking finding of the Waite and Holder (2003) study was that significant decreases in fear occurred after only one round of each of their three intervention conditions. A single round of EFT was administered in "just a few minutes" in their study (M. Holder, Personal communication, June 21, 2004). We know of no laboratory controlled study in the literature using a traditional psychotherapeutic modality that has produced such a rapid statistically significant effect. The Waite and Holder study indicates that in the EFT condition, mean SUDS level decreased by approximately 18% (our estimate: see Fig 1 of their study) in only a few minutes, with similar decreases observed for the other two experimental conditions, but not for the no treatment condition. This is an impressive decrease for so short a duration of treatment.

If future research confirms that this is a real effect intrinsic to one or more operations involved in these interventions, and does not simply reflect demand characteristics, response tendencies, expectations, or other methodological artifacts, then this rapidity would be noteworthy whether or not energy meridians are responsible.

We suggest that experimentally comparing EFT with traditional psychotherapies, giving special attention to the rapidity of the effects of each and their duration over time, is the best way to answer this question.

Therapist Allegiance Effects

In psychotherapy research, a strong correlation has been observed between the therapist/researcher's allegiance and the outcome of the study (Luborsky et al., 1999). This suggests that if the person who interacts with the participant has an allegiance to the particular form of psychotherapy under study, he/she may influence the participant to produce results that support the efficacy of that particular form of treatment

Parsimony and logic suggest to us that the therapist allegiance effect, if any, would most clearly be evident in the observed efficacy of the specific condition to which positive or negative allegiance is directed. EFT was found to decrease fear from pre- to post-intervention assessments in both the Wells et al. (2003) study and the Baker and Siegel (2005) study. The possible role of therapist allegiance in producing this observed efficacy could not be ruled out since each of these research teams had a positive allegiance to EFT.

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It would therefore be of great interest to find a study which demonstrated efficacy for an EFT condition conducted by someone with no prior allegiance to EFT. We believe Waite and Holder (2003) have produced such a study. They were "... relatively neutral about whether EFT would work or not at the outset of the study..." (Holder, M., Personal communication, June 21, 2004). When attention is restricted to their EFT condition only, Waite and Holder (2003) report a decrease ($p = .003$) in fear level from baseline to posttreatment 1 (after a single round of treatment, lasting a few minutes only). In this restricted sense, their finding for their EFT condition is parallel to those of Wells et al. (2003) and Baker and Siegel (2005) who also found a significant decrease in fear for their EFT conditions from pretest to posttest. For the first time in a laboratory controlled study, therefore, there is evidence that there is a significant decrease in fear for an EFT condition in a study where it is quite unlikely that the possible role of therapist allegiance has contributed to this outcome.

We recommend that future studies of EFT be conducted, when at all possible, by researchers who have little formal allegiance to EFT, or where the experimenter(s) administering conditions to participants assume equal efficacy of EFT and the comparison condition(s) being used. While this requirement is admittedly not easy to meet, efforts should be made to at least approximate it.

Legitimate Issues Raised by TFT and EFT Critics

Given that the present authors are favorably disposed to the possibility that EFT possesses true efficacy, it is important that we take cognizance of certain limitations of studies that we have here construed as supportive of EFT (viz., Wells et al., 2003; and Baker & Siegel, 2005).

Critics of TFT and EFT (e.g., Herbert & Gaudiano, 2001; Lohr, Lilienfeld, Tolin, & Herbert, 1999) make a persuasive case that before accepting any form of psychotherapy

as constituting a new and efficacious form of treatment, one must rule out the possibility that the observed efficacy simply reflects non-specific factors known to be common to many forms of psychotherapy.

Although Wells et al. (2003) and Baker and Siegel (2005) each made an attempt to rule out such factors, no claim can be made that all such factors were successfully ruled out. Indeed, it is difficult to design a single study that can successfully do that. However, the Wells et al. and the Baker and Siegel studies each offer some evidence that the efficacy observed with EFT does not reflect only non-specific factors. In Wells et al. (2003), both conditions (EFT and Deep Breathing) entailed approximately equal amounts of imagined exposure to the feared animal and assessments of SUDS. The finding that EFT showed significantly greater decrease in fear can thus not be explained as reflecting either greater imagined exposure to the feared animal or greater exposure to assessment of SUDS. To the degree that both EFT and deep breathing showed some shared degree of decrease in fear, this shared decrease may well reflect the operation of non-specific factors. But to the degree that EFT showed significantly greater decrease in fear than deep breathing, this difference in decrease in fear cannot reflect a general non-specific factor common to both conditions.

In Baker and Siegel (2005), EFT was compared to a supportive interview. There was no significant difference in expectation of help before treatment between these two

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conditions and the finding that EFT produced significantly greater decrease in fear whereas the interview did not help at all held up even after statistically controlling for expectations. Thus, any general non-specific factor which holds true for both EFT and the supportive interview cannot account for EFT's efficacy here. However, without providing direct empirical evidence as to what specific mechanism or process that is at least relatively unique to EFT leads to its efficacy, one cannot logically rule out the possibility of the operation of one or more non-specific factors. This is a limitation of both the Wells et al. (2003) and the Baker and Siegel studies.

Summary and Conclusions

In summary, we have focused on some problems involved in research into EFT. We have argued for a need to assess and control for participant expectancy effects, the need for a follow-up assessment, and the value of keeping participant blind to the nature of the condition he/she is in. We have contended that in planning studies and interpreting results from studies, the constructs of 'energy meridians' and 'operations involved in EFT' should be treated quite separately. In addition we have argued that it is quite possible that EFT involves processes that are therapeutically valuable and relatively unique to EFT, and that simultaneously its efficacy may be mediated by processes long known to occur with psychotherapy. We have also taken cognizance of the important issue raised by TFT and EFT critics that before accepting any form of psychotherapy as constituting a new and efficacious form of treatment, one must rule out the possibility that the observed efficacy simply reflects non-specific factors known to be common to many forms of psychotherapy.

Research into EFT is still in its infancy, and the methodological problems in the studies published thus far have sometimes offered contradictory possibilities for interpretation. For example, in Waite and Holder (2003), it is not clear to what extent the

observed effects reflect artifact (i.e. demand characteristics) or real effects of treatment.

In this paper, we have considered the implications that each of these possibilities raise.

However, only future research using more robust methodology will be able to definitively resolve these ambiguities.

In our view, both the critics and supporters of meridian-based therapy tend to draw conclusions that go beyond what the available research data will support. In the three

EFT studies reviewed here, there is agreement that EFT is efficacious. While supporters

of EFT may prefer to argue that this efficacy reflects a relatively unique and/or superior

therapeutic process, in the absence of studies delineating the mechanism of action of EFT, this conclusion cannot be reached. On the other hand, critics have argued that, since

EFT's efficacy does not appear to depend on meridian stimulation, its efficacy must therefore reflect only non-specific factors common to most psychotherapies (e.g.

Waite &

Holder, 2003). This conclusion is similarly premature, whether or not the EMS exists,

especially given the rapidity with which Waite and Holder's effects were obtained. If EFT and other meridian-based therapies are to gain acceptance in the mainstream psychological community, controlled research must demonstrate that their efficacy is at

least comparable to that of well-established therapies for a given psychological condition.

Whether or not the mechanism responsible for the efficacy observed with EFT thus far is

found to implicate energy meridians, acceptance of EFT would be facilitated by

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understanding what mechanism mediates that efficacy. Therefore, two critical areas for future research on EFT and other meridian-based therapies would be to delineate the mechanism of action that produces EFT's observed efficacy and to compare outcomes of EFT treatment with those of more traditional psychotherapies.

References

Baker, A. H., & Siegel, L. S. (2005, April). Can a 45 minute session of EFT lead to reduction of intense fear of rats, spiders and water bugs? A replication and extension of the Wells et al. (2003) laboratory study. Paper presented at the Seventh International Conference of the Association for Comprehensive Energy Psychology, Baltimore, Md.

Borkovec, T. D. & Nau, S. D. 1972. Credibility of analogue therapy rationales. *Journal of Behaviour Therapy and Experimental Psychiatry*, 3, 257-260.

Christoff, K. (2004). Treating specific phobias with Be Set Free Fast: A meridian based sensory intervention. Doctoral dissertation submitted to Trinity College of Graduate Studies, Orange, California.

Callahan, R. (1985). Five minute phobia cure. Wilmington, DE: Enterprise.

Craig, G. (1995, 1999). *Emotional Freedom Techniques: the Manual*. The Sea Ranch, California: Author.

Craig, G. (2002). *Steps toward becoming the ultimate therapist*. The Sea Ranch, California. Author.

Craig, G. (2006). *The EFT Manual*. (6th ed.). Retrieved July 19, 2006, from <http://www.emofree.com/freestuff.htm>.

Deville, G. J. & Borkovec, T. D. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry*. 31(2), 73-86.

Gallo, F. P. (1999). *Energy psychology: Explorations at the interface of energy, cognition, and health*. New York: CRC Press.

Herbert, J.D., & Gaudiano, B.A. (2001). The search for the holy grail: heart rate variability and thought field therapy. *Journal of Clinical Psychology*, 57(10), 1207-1214.

Kirsch, I. (1985). Response expectancy as a determinant of experience and behavior. *American Psychologist*, 40, 1189-1202.

Kirsch, I. & Lynn, S. J. (1999). Automaticity in clinical psychology. *American Psychologist*, 54, 504-515.

Levine, J. D., Gormley, J., & Fields, H. L. (1976). Observations on the analgesic effects of needle puncture (acupuncture). *Pain*, 2(2), 149-159.

Lo, C. W., & Chung, Q. Y. (1979). The sedative effect of acupuncture. *American Journal of Chinese Medicine*, 7(3), 253-258.

Lohr, J. M., Lilienfeld, S. O., Tolin, D. F. & Herbert, J. D. (1999). Eye movement desensitization and reprocessing: An analysis of specific versus nonspecific treatment factors. *Journal of Anxiety Disorders*, 13(1-2), 185-207.

Luborsky, L, Diguier, L, Seligman, D. A., Rosenthal, R., Krause, E. D. Johnson, S., et al. (1999). The researcher's own therapy allegiances: A "wild card" in comparisons of treatment efficacy. *Clinical Psychology: Science and Practice*, 6, 95-106.

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O'Conner, J., & Bensky, D. (1981). *Acupuncture: A comprehensive text*. Chicago: Eastland Press.

Oschman, J. L. (2006) Trauma energetics. *Journal of Bodywork and Movement Therapies*, 10, 21-34.

Pignotti, M. (2005). Thought field therapy voice technology vs. random meridian point sequences ñ A single-blind controlled experiment. *Scientific Review of Mental Health Practice*, 4(1), 38-47.

Roccia, L., & Rogora, G. A. (1976). Acupuncture and relaxation. *Minerva Medical Journal*, 67(29), 1918-1920.

Rowe, Jack E. (2005). The effects of EFT on long-term psychological symptoms. *Counseling and Clinical Psychology Journal*, 2(3),104-111.

Ruden, R.A. (2005). A neurobiological basis for the observed peripheral sensory modulation of emotional responses. *Traumatology*, 11(3) 145-158.

Waite, L.W., & Holder, M.D. (2003). Assessment of the emotional freedom technique: an alternative treatment for fear. *The Scientific Review of Mental Health Practice*, 2(1) 20-26.

Weinberger, J. & Eig, A. (1999). Expectancies: The ignored common factor in psychotherapy. In I. Kirsch (Ed.), *How expectancies shape experience* (pp. 357-382). Washington, DC: American Psychological Association.

Wells, S., Polglase, K., Andrews, H.B., Carrington, P., & Baker, A.H. (2003). Evaluation of a meridian-based intervention, Emotional Freedom Techniques (EFT), for reducing specific phobias of small animals. *Journal of Clinical Psychology*, 59(9), 943-966.

Worsley, J.R. (1975). *Acupuncturists' Therapeutic Pocket Book*. Columbia, Maryland: The Centre for Traditional Acupuncture.

