

THOUGHT FIELD THERAPY EFFICACY FOLLOWING LARGE SCALE TRAUMATIC EVENTS

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Received 2014-06-20; Revised 2014-07-09; Accepted 2014-07-12

ABSTRACT

Thought Field Therapy Efficacy Following Large Scale Traumatic Events: Description of Four Studies
Thought Field Therapy (TFT) has been shown to reduce symptoms of Posttraumatic Stress (PTS) with trauma survivors in four studies in Africa. In a 2006 preliminary study, orphaned Rwandan adolescents, who reported ongoing trauma symptoms since the 1994 genocide, were treated with TFT. A 2008 Randomized Controlled Trial (RCT) examined the efficacy of TFT treatments facilitated by Rwandan Community leaders in reducing PTS symptoms in adult survivors of the 1994 genocide. Results of the 2008 study were replicated in a second RCT in Rwanda in 2009. A fourth RCT in Uganda (in preparation for submission) demonstrated significant differences in a third community leader-administered TFT treatment. The studies described here suggest that one-time, community leader-facilitated TFT interventions may be beneficial with protracted PTS in genocide survivors.

Keywords: Posttraumatic Stress (PTS), Posttraumatic Stress Disorder (PTSD), 1994 Rwandan Genocide, Thought Field Therapy (TFT), Energy Psychology, Trauma, Trauma Survivors, Genocide Survivors, Community-Based Psychological Intervention

1. INTRODUCTION

Thought Field Therapy (TFT) is a foundational method of Energy Psychology (EP) developed by psychologist Callahan (1981; 1995; 2001; Callahan and Callahan, 2000). Energy Psychology (EP) is a family of mind-body treatment techniques targeting the flow of energy through the body in order to shift psychological symptoms. Energy psychology theory proposes that psychological problems reflect disturbed bio-energetic patterns within the interplay of a person's neurobiology and their cognitive-behavioral-emotional patterns. Energy psychology treatments combine cognitive interventions (including focused awareness and mindfulness, imaginal exposure to traumatic memories and cognitive reframing) simultaneously with the stimulation of one or more of the human bio-energy systems. TFT is growing in popularity in clinical and self-help settings and involves client self-tapping on acupuncture treatment points while

cognitively reviewing target symptoms, mental/emotional states and traumatic memories. Research evidence from randomized, controlled trials for the efficacy of TFT and related Energy Psychology methods continues to accumulate, as documented by Feinstein *et al.* (2012). As EP methods grow in popularity, delineating what methods work best for which clients with which conditions will be helpful to clinicians and the public alike.

Natural disasters and acts of war or political aggression leave a wake of psychological trauma and in underdeveloped nations, treatment options can be scarce or nonexistent. Provision of rapid, accessible treatments that can be peer-administered can be critical to reduce the long-lasting effects of such trauma (Ghosh *et al.*, 2004). Posttraumatic Stress (PTS/PTSD) in these populations is often widespread, ranging from 44% to 62% in children (Neugebauer *et al.*, 2009; Schaal and Elbert, 2006). Rates in adults are somewhat lower, around 25% (Pham *et al.*, 2004).

Research has demonstrated that therapies such as Cognitive Behavioral Therapy, Testimonial Psychotherapy, Narrative Exposure Therapy and Eye Movement Desensitization and Reprocessing have been effective interventions for trauma survivors (Ehnholt and Yule, 2006). These therapies are largely administered by professionally-trained mental health therapists, as recommended by Ghosh *et al.* (2004), rather than by peer therapists. While efficacy of these therapies is documented, Energy Psychology methods are gaining in use by professionally-trained therapists as well as by peer therapists, due to the ease of use and ease of training of EP methods. This ease of use and effectiveness, particularly when administered by community leaders as in three of the studies described here, means EP methods could bring treatment to many more trauma survivors. Connolly *et al.* (2013; Sakai *et al.*, 2010; Connolly and Sakai, 2011) have conducted three treatment outcome studies utilizing TFT with survivors of the 1994 Rwandan genocide. Robson *et al.* (0000) have conducted a study of TFT administered to trauma survivors by community leaders in Uganda. These studies are described and briefly critiqued in this article. In all four studies, procedures were in accordance with any and all ethical standards for use of human subjects, including obtaining informed consent, in accord with the Helsinki Declaration of 1975, as revised in 2000.

1.1. Study One

Fifty Rwandan orphaned adolescent survivors of the Rwandan genocide in 1994 were treated with Thought Field Therapy (TFT) in 2006 (Sakai *et al.*, 2010). The children (27 male, 23 female) attended a day school associated with a Rwandan orphanage. For selection, all students at the school were assessed utilizing two standardized checklists for PTSD, the Child Report of Post-Traumatic Symptoms (CROPS) and the Parent Report of Post-Traumatic Symptoms (PROPS) (Greenwald and Rubin, 1999), translated into the native language. Children completed the CROPS. Teachers at the school, often the children's only caregivers, completed the PROPS. Symptoms were assessed the day before a group session that explained the treatment process and immediately after for the CROPS. The PROPS post-test by the caregivers was within a day of completion of the treatment. Of 188 students at the school, the fifty children selected for participation had the highest scores on the assessment and 100% of those treated exceeded the PROPS PTSD cut-off score of 16. Follow-up assessments occurred for both instruments at 3 months, 6 months and 12 months post-treatment.

Subjective Units of Distress (SUDs) self-ratings (Wolpe, 1973) were also assessed by verbal report at start and completion of each child's treatment session.

The treatment consisted of a single TFT session of 20-60 min. There was no preset time limit; sessions could continue as long as the therapist deemed necessary. The TFT basic algorithm was utilized, with corrections for psychological reversals as needed, as described in Callahan (2001). The reported focus of treatment included multiple traumas, anger, rage, guilt, grief and chronic pain. Therapists were mental health professionals and volunteers on a trauma relief mission, including the study authors. The original study design had allowed for three treatment sessions across three days, but due to urgent conditions in another part of the continent, the number of therapists was reduced for this study. As a result, the study design was revised to include brief progressive relaxation and diaphragmatic breathing training supportive sessions, so that each child could still have three sessions over three days, but at reduced intervention time. The order of the TFT, relaxation and breath training sessions was randomized over the three days and CROPS assessments were completed after each session. Assignment of children to therapists was randomized as well. The hope with the study design revision was that the relaxation and breathing sessions could be analyzed as placebo control conditions, but data collection procedures did not support effective analysis. The authors characterized the study as a systematic investigation of clinical outcomes, lacking a comparison condition.

At the end of treatment, scores on the PROPS and CROPS were significantly reduced ($p < 0.0001$), paired *t* tests. These improvements were maintained at a follow-up one year later. Before treatment, 100% of the students had met the PROPS cut off for PTSD; 72% met PTSD criteria on CROPS. After treatment, 6% of students met PROPS criteria and 18% of students met CROPS criteria. At the one-year follow-up, those numbers were 8% and 16% respectively. Analysis of the Subjective Units of Distress of the most disturbing memory pre/post treatment also showed decrease at the $p < 0.0001$ level.

The authors corroborated these results with informal student and caregiver interviews. The authors also provide an interesting and thorough discussion of the results within the context of this particular facility and the culture of the country, while asserting that further research is needed to address flaws with this preliminary study. In particular, a controlled, blind design is needed, including the use of objective observer or behavioral outcome ratings (Vs. self-

report). The attempt to provide placebo controls (the relaxation and breathing sessions) may actually have confounded the results, with unknown effect. The researchers and therapists were one and the same, so that therapist/researcher bias was not controlled.

The open location of the treatment was another issue. At completion of a session, other children waiting for treatment could observe the change in a classmate, leading to a powerful expectancy effect as they waited their turn. Students at the orphanage quickly adopted the TFT protocol as a self-care strategy and would regularly teach the skill to other students or join in as another child tapped. Caregivers were also trained in the TFT technique, so that they could introduce the method to students new to the orphanage. This changed the orphanage atmosphere and culture, making it unclear if the follow up results were due to the single treatment session compared to ongoing use of the skill. This mimics the use of TFT in clinical practice, however, as tapping the TFT algorithms is often utilized as client homework. The authors also provide an excellent description of the background of this treatment study, against the backdrop of the yearly anniversary genocide commemoration, a significant cultural tool to process grief in Rwanda.

1.2. Study Two

Connolly and Sakai (2011) utilized a randomized waiting list control design to further examine the efficacy of TFT with 145 adult genocide survivors in Rwanda in 2008. In this study, 28 Rwandan community leaders were trained to provide the TFT treatment for the survivors. The treatment utilized was the algorithm for trauma, as described in Callahan (2001). Participants ranged in age from 18-73 and were recruited by volunteer leaders from aid organizations. Participants were self-identified as suffering from trauma symptoms related to the 1994 genocide. Transportation to the treatment site and snacks were the only compensation provided. The study began with 171 participants but was reduced to 145 by non-completion of the assessments, primarily at the one-week follow-up. This loss of participants was the result of transportation miscommunications. Final group composition was 80.3% female for the treatment group and 83.8% for the control group. Traumatic histories reported by the volunteers included being beaten, abused and witnessing killing, abuse, or beating of others.

All participants met DSM-IV criterion A1 for Post-traumatic Stress Disorder (PTSD), (APA, 2000 [DSM-IV-TR]). These criteria are: (1) Exposure to an extreme stressor involving direct personal experience that

threatens actual or possible death, serious injury, or other threat to personal integrity; or (2) witnessing an event that involves death, injury, or threat to personal integrity of another person; or (3) learning about unexpected or violent death, bodily harm, or threat of death or injury to a family member or close associate. Interviews were not conducted, but presence in Rwanda during the genocide qualified these participants according to the DSM-IV-TR checklist.

Two self-report pencil-and-paper measures were used to as objective measures, translated into Kinyarwanda. The Modified PTSD Symptom Scale (MPSS) (Falsetti *et al.*, 1993) was used to assess both frequency and severity of PTSD symptoms. All but a few participants were able to read and complete the assessments unaided. A majority (68.3%) of participants attained the PTSD cutoff of 71 for frequency and severity on the MPSS, reporting symptoms such as anxiety, fear, anger, guilt and depression. Mean PTSD sum scores on the MPSS pretest were 79.77 (SD = 22.4). The Trauma Symptom Inventory (TSI) (Briere, 1995) was used in its original form (translated, as stated above) at the pretest to determine occurrence of specific symptoms over the previous year. It was modified for the post-test, assessing how often symptoms had occurred in the previous 7 days, i.e., since the treatment date. Some TSIs were not included in final data analysis (13-19%) due to high scores on the "inconsistent response" subscale. A demographic form was also completed, providing data about experiences during the genocide. This form gathered information about frequency of discussion of and/or treatment for the person's experiences. A two-year follow-up assessment was included, completed by 60.7% of the sample. Comparisons between participants completing this two-year follow-up and those who did not complete it showed no significant demographic or experience differences ($p = 0.10$).

The treatment and wait list groups were randomly assigned. No significant demographic or symptom differences were found between treatment and waiting list groups using Chi square analyses and t tests. Those in the treatment group (N = 71, 49%) returned two days after pretest for treatment. The wait list group (N = 74, 51%) returned 7 days after pretest for the posttest. Treatment for the wait list group occurred two days after the posttest, followed by posttest 7 days later. Due to a miscommunication about transportation, 37% of the wait list control group failed to complete the 7-day post treatment assessment.

The volunteer community leaders received two days of training in TFT at the algorithm level, with ample chance for supervised practice by the study authors. A manual was also provided. Assignment to therapists

was randomized as well. The study authors were available for supervision throughout the treatment process. The mean duration of treatment sessions was 41 min and the median was 30 min.

Significant decreases in severity and frequency of symptoms were found from pretest to post-treatment posttest for both the treatment group ($p < 0.001$) and the wait list control group ($p < 0.05$) on both overall measures, the MPSS and the TSI, including the 10 TSI subscales, using paired-sample t-tests. Analyses of Covariance (ANCOVA) were conducted for each TSI subscale and MPSS scale, using pretest scores as covariates. Adjusted posttest scores showed significant reduction (all $p < 0.001$ except as noted) in trauma symptoms for the treatment groups on all TSI subscales: Anxiety, depression, anger/irritability, intrusive experiences, defensive avoidance, dissociation, impaired self-reference, tension reduction behaviors and sexual concerns ($p < 0.017$). Reductions in MPSS frequency scores were also significant.

The percentage of treatment group participants who met PTSD criteria on the MPSS Sum of Frequency and Severity Scale dropped from 71.8% at pretest to 7.4% at follow-up ($p < 0.01$). The percentage of wait list participants who met PTSD criteria on this same sum score dropped from 66.4% at pretest to 4.6% at follow-up ($p < 0.01$). Follow-up over the two-year period suggested durability of the results, with no significant recurrence of PTSD.

An admitted drawback with this study is primarily the lack of comparison of TFT to either a placebo, other established trauma treatment techniques, or both. The use of self-report inventories, subject to social desirability and measurement bias and the applicability of same to the Rwandan population also limit the generalize ability to trauma populations overall. The impact of the incompleteness rate, particularly on the treatment posttest with the wait list group, is unclear. There is also no mechanism for comparing the impact of community leaders as peer therapists to the impact of experienced mental health professionals. There was no mention in this study of whether community leaders had continued contact and/or treatment with the participants and whether there were cultural changes in adopting the use of TFT by the participants and spreading the knowledge to others. All of these factors could have affected results at the two-year follow-up.

1.3. Study Three

The third field study by Connolly *et al.* (2013) also focused on adult survivors of the 1994 Rwandan genocide. Participants were recruited by a Catholic

priest. The first 199 participants reporting current trauma symptoms were accepted into the study. All participants again met DSM-IV criterion A1 for Post-traumatic Stress Disorder (PTSD), (APA, 2000 [DSM-IV-TR]), by virtue of residing in Rwanda during the genocide. Research measures were again the Modified PTSD Symptom Scale (MPSS), (Falsetti *et al.*, 1993) and the Trauma Symptom Inventory (TSI), (Briere, 1995), both translated into Kinyarwanda. Of the volunteers, 35 were eliminated from participation due to scores above 75 on the Inconsistency Scale (INC) of the TSI, a response pattern that suggests an invalid/unreliable profile. Total participants in the final sample were 164 individuals, ranging in age from 18 to 100, with a mean age of 47.7 years. Women comprised 86% ($N = 141$) and men 14% ($N = 23$). Trauma experiences such as being beaten, abused, witnessing killing, abuse or beating of others were rampant in the histories of these participants. A demographic questionnaire, as used in study two, completed the assessment.

The design of study three mirrors the design of study two, both in execution of the TFT trauma algorithm protocol and assessment using the MPSS and TSI. However, there has not yet been a report of two-year follow-up, as was part of the previous study. In addition, the assessment instruments in this study were administered interview style in a one-to-one setting by the trained community leaders, except for one participant who could read the tests. The same Catholic priest who recruited participants selected thirty-six community leaders for the two-day TFT training. Community leaders were trained and supervised by the research team. Therapists were randomly matched to participants. The participants were randomly assigned to either immediate treatment, or the waiting list control condition. The treatment group ($N = 85$, 91% women) completed treatment two days after the pretest and returned to complete the posttest 7 days later. The wait list control group ($N = 79$, 81% women) completed the pretest and returned 7 days later to take the posttest. This wait list group then received treatment two days after posttest, returning once more seven days after treatment for a second posttest. The mean session time for the TFT intervention was 35 min, with a range from 5 to 120 min. Analysis of demographic data with Chi square and paired t-tests showed comparability of treatment and control groups. Seventy-three participants (44.5%) met or exceeded the PTSD cutoff of 71 on the pretest MPSS Sum of Severity and Frequency scales, with similar percentages in each condition (control Vs. treatment).

Paired sample t-tests were used to determine within-group changes for both groups. Even though

randomization was used to assign participants to groups, the pretest scores for the two groups were significantly different. ANCOVA was employed to control for pretest scores, with analysis of each TSI subscale and MPSS scales using pretest scores as covariates. Adjusted post-treatment posttest scores for all participants showed significant reduction in trauma symptom scores on all TSI subscales and the MPSS frequency and severity scales. Effects sizes resulting from the ANCOVA comparing treatment and waitlist groups ranged from large (for TSI scales anxious arousal, depression, anger/irritability, intrusive experiences, defensive avoidance, impaired self-reference and dissociation and MPSS frequency and severity scales) to high medium for the TSI tension reduction behavior scale. The TSI sexual scales showed small effect sizes.

The researchers offered a report of one-year follow-up with the trained therapists. Thirty-five of the original thirty-six therapists were interviewed. The community leaders had continued to use TFT to help make a difference in the lives of trauma survivors, meeting with on average 37 people, from 1 to 6 sessions each (mode = 3). These leaders were outspoken in these interviews about the benefits for their community and the importance of disseminating TFT throughout their country.

1.4. Study Four

A fourth randomized controlled trial with 256 participants (Robson *et al.*, (0000) in preparation) demonstrated marked improvement in PTS symptoms following treatment with Thought Field Therapy. In this 2012 study, newly trained community leaders again served as peer therapists in a large rural community in Uganda, to administer TFT to those suffering from the consequences of previous violent factional conflict. Symptoms were measured using the Posttraumatic Check List for Civilians (PCL-C) (Wang and Vivek, 2013). One week post-treatment, there was a dramatic fall in PCL-C scores, from 68% being diagnostic for PTSD, to 3%. There were highly significant changes from pre-treatment and compared to the wait-list control group, using parametric and non-parametric analyses ($p < 0.001$).

2. CONCLUSION

The World Health Organization (WHO, 2003) has stressed the major threat to health, well-being, longevity and survival that mental illness represents for populations around the world (McLeigh and Sianko, 2011). Given the toll that acts of war, political aggression and natural disaster take upon the health and well-being of a population through

post-traumatic stress and the lack of resources to cope with trauma in numerous places so afflicted, identifying methods to intervene and ameliorate the effects of trauma is critical.

These studies have demonstrated effectiveness of TFT delivered by peer leaders as compared to no treatment. Further research, comparing TFT to traditional trauma treatment methods, nontraditional trauma treatment methods and to placebo, rather than to just a wait list control, is necessary to strengthen the robustness of the claim of the effectiveness of TFT. There was not a blind condition in any of these studies, so that expectancy effect on the part of researchers is not controlled. Reliance strictly on self-report data indicates that social desirability and measurement bias may be factors in these outcomes as well. There is the question of cultural influence, as the assessment instruments have not been standardized on this population, even though other researchers have used at least one measure (TSI) with Rwandan war survivors (Hagengimana *et al.*, 2003; Pham *et al.*, 2004). Research that includes objective and behavioral outcome data is needed.

A convenience sample such as used in these studies means that participant selection did not involve random sampling across the country, so these results may apply only to these regions and populations. The cultural effects of peer therapists (Rwandan and non-Rwandan) versus professional therapists, (both Rwandan and non-Rwandan) for the Rwandan population could also not be addressed, given the design of these studies. Finally, these studies were limited to Rwandan trauma survivors, so applicability to other populations of trauma sufferers is only suggested, not established.

Certainly the authors of these studies are not asserting that a single session of TFT is the only answer to resolve severe, long-lasting effects of trauma, but given the feasibility of community leaders to apply TFT skills, this mode of therapy can be an accessible yet potent tool in the treatment of trauma around the world. Traditional therapies administered by mental health professionals, such as Cognitive Behavior Therapy, Testimonial Psychotherapy, Narrative Exposure Therapy and Eye Movement Desensitization and Reprocessing have been demonstrated to be effective interventions for trauma survivors (Ehnholt and Yule, 2006). With the four studies presented here, Thought Field Therapy (TFT) joins that list of effective treatments for wide-scale trauma treatment. These four studies detail the powerful positive effects that Thought Field Therapy (TFT) can have for survivors of large-scale trauma in Africa when administered by peer leaders. Training community leaders in TFT can be an effective strategy to address the widespread mental health need

created by natural disaster and human-initiated trauma. Training community leaders represents a huge impact, creating trauma resources where more traditional medical and psychological assistance is scarce.

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