THOUGHT FIELD THERAPY CLINICAL APPLICATIONS:

Utilization in an HMO in Behavioral Medicine and Behavioral Health Services

Caroline Sakai, Ph.D.

David Paperny, M.D.

Marvin Mathews, M.D.

Greg Tanida, M.S.W.

Geri Boyd, M.S.W.

Alan Simons, M.S., APRN-Rx

Charlene Yamamoto, M.S.W.

Carolyn Mau, M.S., APRN-Rx

Lynn Nutter, M.A.

Kaiser Behavioral Medicine and Behavioral Health Services Honolulu, Hawaii

This is a preprint of the article published in a special issue* of Journal of Clinical Psychology, 57(10), pp.1215-1227 in October 2001, without peer review but with an invited critical review by Jeffrey M. Lohr, pp.1229-1235.

Abstract

Thought Field Therapy (TFT) is a self-administered treatment developed by psychologist Roger Callahan. TFT uses energy meridian treatment points and bilateral optical-cortical stimulation while focusing on the targeted symptoms or problem being addressed. The clinical applications of TFT summarized included anxiety; adjustment disorder with anxiety and depression; anxiety due to medical condition; anger; acute stress; bereavement; chronic pain; cravings; depression; fatigue; nausea; neurodermatitis; obsessive traits; panic disorder without agoraphobia; parent-child stress; phobia; post-traumatic stress disorder; relationship stress; trichotillomania; tremor; and work stress. This uncontrolled study reports on changes in self-reported subjective units of distress (SUD) in 1594 applications of TFT, treating 714 patients. Paired t-tests of pre- and post-treatment SUD were statistically significant in 31 categories reviewed. These within-session decreases of SUD are preliminary data that call for controlled studies to examine validity, reliability, and maintenance of effects over time. Illustrative case and heart rate variability data are presented.

THOUGHT FIELD THERAPY CLINICAL APPLICATIONS

Introduction

Thought Field Therapy (TFT) is a self-administered, brief treatment that uses energy meridian treatment points and bilateral optical-cortical stimulation while focusing attention on the targeted negative emotion or symptom. TFT has been developed since 1980 by psychologist Roger Callahan, who treated 97% of 68 phobic patients successfully in an average treatment time of 4.34 min (Callahan, 1985). Callahan's uncontrolled study with treatments recorded in public view was replicated by psychologist Glenn Leonoff, with 97% success reported with 68 phobics in an average treatment time of 6.04 min (Leonoff, 1995).

Charles Figley and Joyce Carbonell noted that all of the newer therapies for post-traumatic stress disorder (PTSD) that they explored accelerated the therapy for trauma, in contrast to the lengthy traditional therapies. However, TFT was reported to be the most rapid treatment with comparable treatment success to the other new therapies:Traumatic Incident Reduction (TIR) treatment mean duration was 254 min, Eye Movement Desensitization and Reprocessing (EMDR) 172 min, Visual Kinesthetic Dissociation (VKD) 113 min, and TFT 63 min. More traditional therapies are estimated to take 1,200 to 18,000 min (20-300 hr of therapy)(Wylie, 1996).

In addition to phobias and traumas, TFT has been used clinically in the treatment of anxiety, addictions, anger, stress, obsessions, depression, jealousy, and other negative emotions. In addition to psychological diagnoses, TFT is now being applied to many other problems by physicians, naturopaths, chiropractors, dentists, acupuncturists, and other healing professionals. (Callahan & Callahan, 2000) The present uncontrolled study explores the range of problems amenable to treatment with TFT in the health care and behavioral health settings.

Method

Seven TFT trained therapists at Kaiser Behavioral Medicine Services and Behavioral Health Services used the symptom-specific or problem-specific TFT treatments in 1594 applications with 714 patients. Some patients were treated for more than one symptom or problem. The therapists were three social workers, two clinical nurse specialists, one master’s level clinician, and one psychologist. The therapists had a minimum of 15 hours of training on use of the TFT algorithms, with variable additional hours of consultation and supervision. Behavioral Medicine Service serves patients referred from primary care physicians, nurse practitioners, diabetes educators, dieticians, clinical pharmacists and other staff in the primary care clinics. Behavioral Health Services are the traditional psychiatry and mental health services offered in a specialty clinic. Behavioral Medicine Services sessions typically were 30 minutes in length, whereas Behavioral Health Services sessions were usually 50 minutes long. Therapists assessed the psychiatric disorder or the problem to be treated, and obtained a pre-treatment Subjective Units of Distress (SUD) (Wolpe, 1969) rating of the severity of the symptom or problem from the patient.

Therapists then guided the patient through the TFT treatment specific for the particular symptom or problem, obtaining SUD levels at designated treatment segments. The treatment meridian points, sequences, and protocols varied for the different target symptoms or problems, but were specific for the symptom or problem, and generally followed the TFT algorithms (Callahan & Trubo, 2001) and treatment flow charts. For neurodermatitis, tremor, trichotillomania, Type A personality traits, histrionic traits, nausea, and for a small percentage of the chronic pain patients, individually determined meridian treatment points and sequences (Callahan, 1998) were utilized. Patients were instructed that accurate SUD feedback was necessary to guide the segments of the treatment. Therapists then obtained a post-treatment SUD in the same session. Data were recorded on clinical multi-purpose tracking forms by the therapists. Pre-treatment and post-treatment SUD for problems or symptoms, for which at least 5 patients were treated, were compared by paired t-tests using SYSTAT 7.0 (SPSS Inc., 1997).

Heart rate variability short-term recordings of 5 minutes pre-treatment, and 5 minutes post-treatment were obtained using Biocom Technologies Heart Scanner Version 1.00 Beta in those cases where it was feasible. The Heart Scanner utilized two electrocardiograph (ECG) leads, with three contacts attached on the palm side of each of the patient's index fingers by velcro strips. Patients were sitting upright in a straight-backed chair during the recordings.

Results

Statistically significant within-session reductions in self-reported distress were obtained with 31 problems or symptoms treated with TFT in 1594 applications with 714 patients (see Table 1). These included acute stress, adjustment disorder with anxiety and depression, alcohol cravings, anger, anxiety, anxiety due to medical condition, bereavement, chronic pain, depression, fatigue, major depressive disorder, maladaptive food cravings, nausea, neurodermatitis, nicotine cravings, obsessive traits, obsessive-compulsive disorder, obsessive compulsive personality disorder, panic disorder without agoraphobia, parent-child stress, partner relational stress, post-traumatic stress disorder, relationship stress, social phobia, specific phobia, tremor, trichotillomania, Type A personality traits or histrionic traits, and work stress.

Paired t-tests of pre-treatment SUD and post-treatment SUD were significant at the .001 level of probability, except alcohol cravings, major depressive disorder, and tremors which were significant at the .01 level. The number of patients (N) treated for each diagnostic category or symptom (Dx or Sx), mean pre-treatment SUD (SUD-Pre), mean post-treatment SUD (SUD-Post), mean difference (Mean Diff), standard deviation of the mean difference (SD), and t value (t) are summarized in Table 1. LOU (Level of Urge) was substituted for SUD as patient's subjective rating of intensity of cravings for alcohol, nicotine, and specific food cravings.

Case Report

Case A was a female in her 30's who was referred for depression, flashbacks, insomnia, hypervigilance, avoidance behaviors, and hyperstartle. The CES-D (Center for Epidemiological Studies of Depression scale--a 20-item commonly used patient report of depression symptoms, Radloff, 1977) score was 49, which was in the extremely depressed range. By history, her depression appeared secondary to a trauma, so she was treated with the algorithm for complex trauma with TFT. After treatment her Subjective Units of Distress (SUD) dropped from 10 to 0. She no longer appeared tense, fatigued, irritable, sad, and feeling hopeless, but instead appeared animated, more energetic, and relaxed. Although the CES-D is not designed as a within-session measure, she had completed the initial scale as she was feeling at the time, and stated that she was feeling differently after treatment, so she repeated the CES-D at the end of that 30-minute session, and attained a normal range score of 14 (a 35 point drop, and 71% improvement). A followup session one week later was cancelled by the patient, who reported having no symptoms. In followup calls 1 month, 3 months, and 6 months later, she reported no further symptoms of depression nor of post-traumatic stress disorder.

Case B was a female patient in her 50's referred for depression, weight loss, loss of appetite, difficulty sleeping, tightness in chest, anxiety and distress about her relationship with her partner. She had a CES-D score of 50 in the extremely depressed range, based on how she was feeling at the time. After treatment for depression and lack of appetite, patient reported feeling more energetic, less depressed, no chest tightness, and she felt more hungry. Her post-treatment CES-D at the end of the 30-minute session was 30 (a 20 point drop, and 40% improvement). On one week followup, her appetite continued to improve, and she was regaining weight, as well as sleeping better. Her CES-D score then had improved to 18 (a 32 point drop, and 64% improvement), just above the normal range.

Case C was a male in his 30's referred for panic attacks and chronic pain, who reported feeling Ò100 times better" at the followup session three weeks after his initial session and treatment with TFT. He reported no panic attacks, and marked decrease in aches and pains.

Heart Rate Variability Data

Included in this report are three patients for whom heart rate variability (HRV) data were obtained before and after TFT treatment in the same session (Sakai & Paperny, 1999; Paperny, Sakai & Callahan, 2000). HRV refers to the degree of fluctuation in the length of the intervals between heart beats (Malik & Camm, 1995), and has been found to be relatively stable over time, and to not demonstrate placebo effects (Kleiger, et al., 1991). Short-term HRV measures the beat-to-beat time intervals as the heart speeds up or slows down with each breath, and short-term recordings are useful for determining the effects of an acute intervention on HRV (Rottman, et al., 1996). Short-term HRV data can provide useful physiological information in assessing the effects of a brief treatment.

HRV (Task Force of the European Society of Cardiology and the North American Society of Pacing and Electrophysiology, 1996) and power spectral density analyses (Cohen et al., 1999) have been used to monitor a number of pathological states, including predicting mortality after myocardial infarction (Bigger et al., 1993; Kleiger & Miller, 1978; Rottman et al., 1996; Stein et al., 2000) and congestive heart failure (Saul, et al., 1988). The effects of emotions on short-term power spectrum analyses of heart rate variability has been studied more recently (McCraty, et al., 1995).

Psychiatric research implications of HRV for anxiety and depression are pointed out by Yeragani (1995), who noted the variability of heart rate between 0.15 and 0.5 Hz is related to respiratory sinus arrhythmia, and is modulated by cholinergic activity, while the variability between 0.04 and 0.15 Hz is dually influenced by cholinergic and adrenergic mechanisms which can be used as a relative measure of sympathetic activity. Analysis of HRV provides a window into autonomic control of heart rate which is valuable in elucidating the autonomic underpinnings of panic disorder (Friedman & Thayer, 1998; Yeragani et al., 1998, Middleton & Ashby, 1995), phobic anxiety (Kawachi et al., 1995), anxiety (Watkins et al., 1999), ADHD (Borger, et al., 1999), type A personality (Kamada et al., 1992), and depression (Balogh et al., 1993; Carney, et al., 1995, 2000; Lehofer, et al., 1997; Yeragani, et al., 1991). A lower vagal component of HRV was found with perceived emotional stress, regardless of a person's level of physical fitness, heart rate, mean arterial blood pressure, respiration rate, age, gender, and disposition toward experiencing anxiety (Dishman, et al., 2000).

The first case is a male in his 50's presenting with chronic pain and sciatica, with secondary fatigue and depression (Figure 1). Pre-treatment 5-minute Total Power (the total variance of normal-to-normal heartbeat interval over the course of the sample period of 5 minutes) was 312, post-treatment Total Power was 1462, a 469% improvement. SDNN (standard deviation of the normal-to-normal heartbeat interval) improved from pre-treatment 28 to post-treatment 54. Autonomic balance between the sympathetic and parasympathetic activity was at low levels of regulatory activity at pretreatment (small black square in relationship to the normal level in the central gray square in the autonomic balance diagram), and improved to normal level of regulatory activity at post-treatment. SUD dropped from 7 at pre-treatment to 0 at post-treatment. Tachograms of his heart rate acceleration and deceleration for 5 minutes pre-treatment, and 5 minutes post-treatment demonstrated marked improvement, and are shown in Figure 2.

The second case is a female in her 50's presenting with anxiety and stress (Figure 3). Pre-treatment spectral analysis Total Power was 350, and post-treatment Total Power was improved 216% to 757. Pre-treatment SDNN was 28, with a post-treatment improvement to 40. At pre-treatment, she had low levels of sympathetic regulation and normal levels of parasympathetic regulation, and attained an improved balance between sympathetic and parasympathetic activity at a normal level at post-treatment. SUD dropped from 8 at pre-treatment to 0 at post-treatment. Her 5-minute tachograms at pre-treatment, and post-treatment show substantial change in variability (Figure 4).

The third case is a female in her 50's suffering from anxiety secondary to premature ventricular contractions (PVC), and esophageal reflux (Figure 5). The data in the middle is from a non-specific control treatment which included the bilateral optical-cortical stimulation. Her pre-treatment Total Power was 807, control treatment Total Power was 1007, post-treatment Total Power was 1246. Her pre-treatment SDNN was 43, control treatment SDNN was 44, and post-treatment SDNN was 51. She initially had low levels of sympathetic and normal levels of parasympathetic regulation at pre-treatment, no essential change with the control treatment, and attained a balance between sympathetic and

parasympathetic activity at normal levels of regulatory activity at post-treatment. SUD was 8 at pre-treatment, remained at 8 after the control treatment, and improved to 0 at post-treatment. Her 5-minute tachograms for pre-treatment, control treatment, and post-treatment, show nominal change with the control treatment, and demonstrate a marked change post-treatment (Figure 6).

Discussion

TFT treatments are associated within session with self-reported reduction in distress for a wide variety of symptoms and conditions. These results were obtained by seven different providers with different professional backgrounds, suggesting the applicability of this modality across disciplines.

Significant reductions in SUD within one treatment session were found for each of the 31 conditions with 5 or more patients included. Controlled studies with standardized measures to evaluate the magnitude and duration of effects, as well as rule out alternative explanations of such effects, are needed. Randomized trial designs are justified by the strength and consistency of the non-randomized data.

Further research is needed to systematically evaluate the duration of the effects of TFT for various diagnoses and symptoms. Treatment successes with phobias (Callahan, 1985) and post-traumatic stress disorder (Callahan & Callahan, 2000) have been reported to sustain without additional treatment in uncontrolled studies. Future studies with controlled randomized clinical trials that could examine the duration of impact in a smaller range of conditions, such as specific phobias and single uncomplicated traumas, are indicated.

Determining the effectiveness of treatments of recurrent conditions requires controlled TFT studies of the more complex treatments and protocols for discovering and working on the retriggering stimuli posited by Callahan (Callahan & Callahan, 2000). Physiological data, such as HRV, and standardized measures in controlled studies with different diagnoses or symptoms would be illuminating in comparing the effectiveness of different treatment modalities with this seemingly widely applicable, yet very specific treatment method.

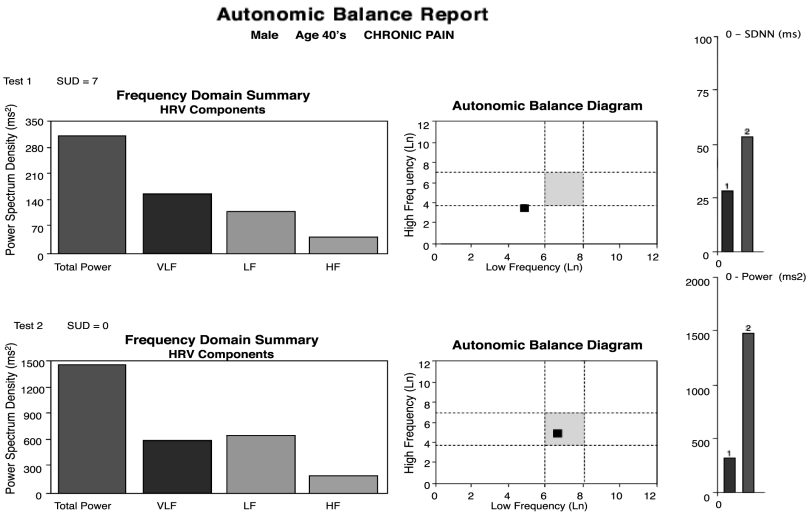

Figure 1. Case 1 (Chronic Pain) Pre-treatment and post-treatment 5-minute HRV power spectral analysis graphs and autonomic balance diagrams, SUDs; and comparison bar graphs of SDNN (standard deviation of normal to normal intervals) and 5-minute total power (total variance of normal to normal intervals).

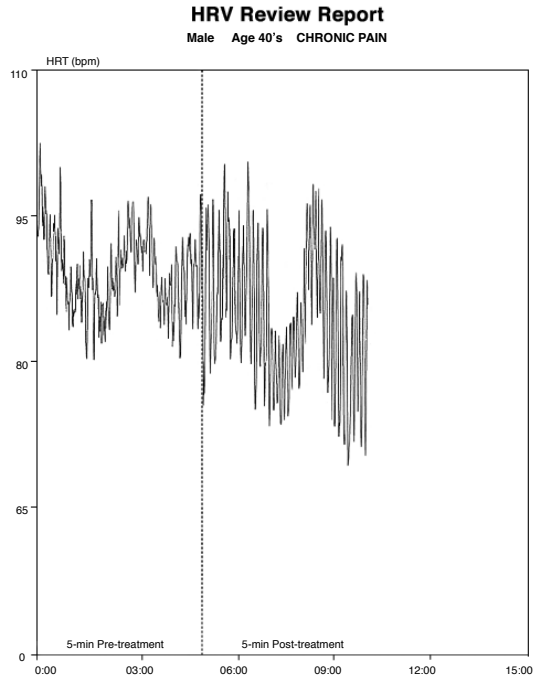

Figure 2. Case 1 (Chronic Pain) Pre-treatment and post-treatment 5-minute tachograms depicting the acceleration and deceleration of the heart rate.

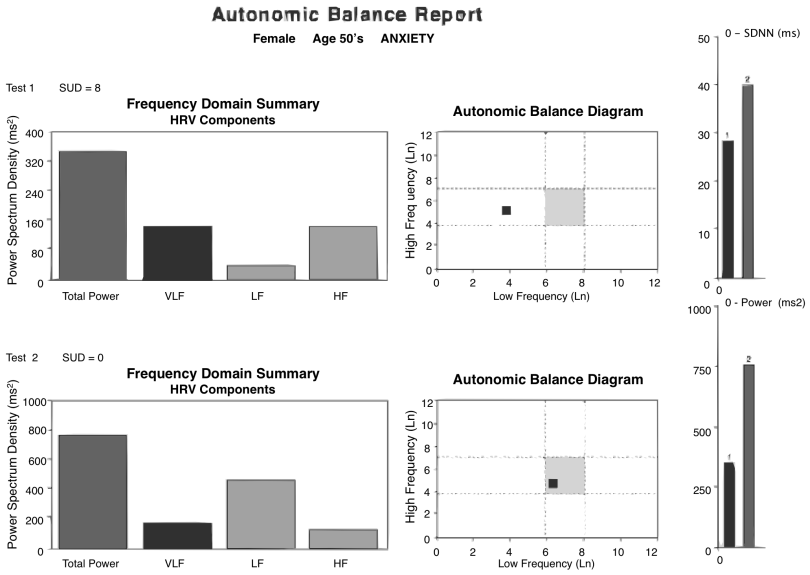

Figure 3. Case 2 (Anxiety) Pre-treatment and post-treatment 5-minute HRV power spectral analysis graphs and autonomic balance diagrams, SUDs; and comparison bar graphs of SDNN (standard deviation of normal to normal intervals) and 5-minute total power (total variance of normal to normal intervals).

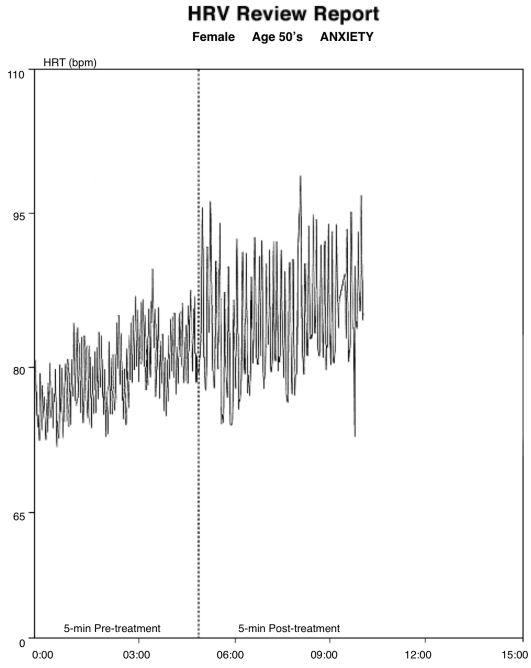

Figure 4. Case 2 (Anxiety) Pre-treatment and post-treatment 5-minute tachograms depicting the acceleration and deceleration of the heart rate.

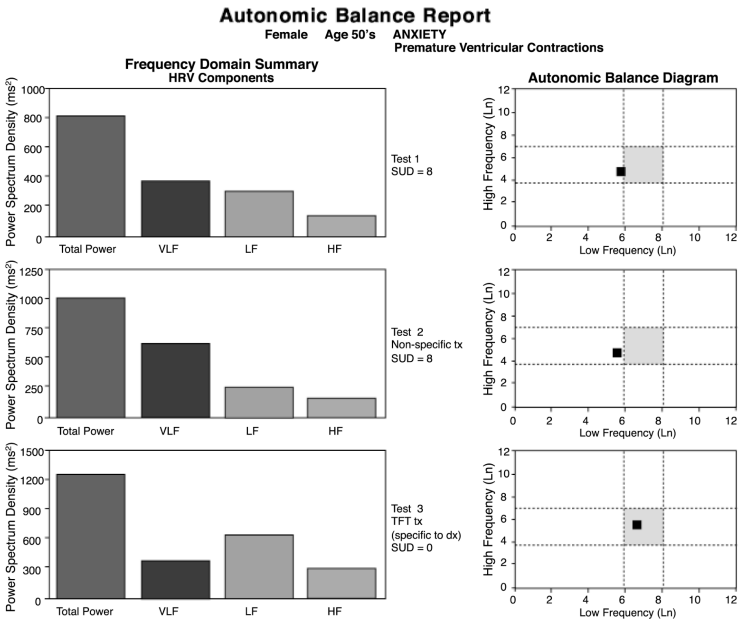

Figure 5. Case 3 (Anxiety/ PVC) Pre-treatment, non-specific control treatment, and diagnosis-specific post-treatment5-minute HRV power spectral analysis graphs, autonomic balance diagrams, and SUDs.

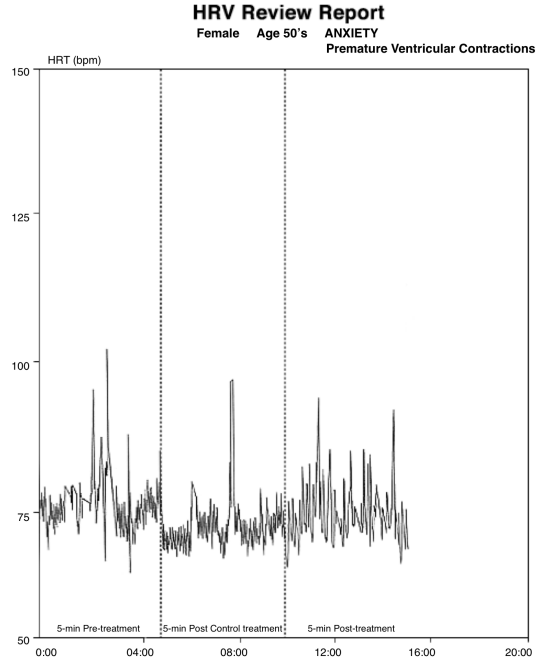

Figure 6. Case 3 (Anxiety/ PVC) Pre-treatment and post-treatment 5-minute tachograms depicting the acceleration and deceleration of the heart rate.

Acknowledgements

We appreciate the editing assistance of Randy Jensen, Tom Vogt, Ruta Summers, and Patrick Villyard, consultation by Bruce Fireman, the conversion to journal quality computer graphics by Stephanie Sakai, and the development and continuing improvement of TFT by Roger Callahan.

References

Balogh, S., Fitzpatrick, D.F.., Hendricks, S.E., & Paige, S.R. (1993). Increases in heart rate variability with successful treatment in patients with major depressive disorder. Psychopharmacology Bulletin, 29, 201-206.

Bigger, J.T., Fleiss, J.L., Rolnitzky, L.M., & Steinman, R.C. (1993). The ability of several short-term measures of RR variability to predict mortality after myocardial infarction. Circulation, 88, 927-934.

Borger, N., van der Meere, J., Ronner, A., Alberts, E., Geuze, R, & Bogte, H. (1999). Heart rate variability and sustained attention in ADHD children. Journal of Abnormal Child Psychology, 27, 25-33.

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

Callahan, R.J. (1995). Callahan Techniques Thought Field Therapy (CTTFT) algorithm for trauma: A reproducible experiment in psychotherapy. Paper presented at annual meeting of the American Psychological Association, August, New York.

Callahan, R.J. (1998). Callahan Techniquesâ Thought Field Therapy: Basic Diagnostic Training, Step A & B. La Quinta, CA.

Callahan, R.J. (2001). Heart rate variability (HRV) and Thought Field Therapy (TFT): Dramatic improvements in HRV and relationship between self-report and HRV. Journal of Clinical Psychology, 57, 1153-1170.

Callahan, R.J., & Callahan, J. (2000). Stop the nightmare of trauma: Thought Field Therapy (TFT)Ñthe power therapy for the 21st century. Chapel Hill, NC: Professional Press.

Callahan, R.J., & Trubo, R. (2001). Tapping the Healer Within. NY: Contemporary.

Carney, R.M., Freedland, K.E., Stein, P.K., Skala, J.A., Hoffman, P., & Jaffe, A.S. (2000). Change in heart rate and heart rate variability during treatment for depression in patients with cornonary heart disease. Psychosomatic Medicine, 62, 639-647.

Carney, R.M., Saunders, R.D., Freedland, K.E., Stein, P., Rich, M.W., & Jaffe, A.S. (1995). Association of depression with reduced heart rate variability in coronary artery disease. American Journal of Cardiology, 76, 562-565.

Cohen, H., Matar, M.A., Kaplan, Z., & Kotler, M. (1999). Power spectral analysis of heart rate variability in psychiatry. Psychotherapy and Psychosomatics, 68, 59-66.

Dishman, R.K., Nakamura, Y., Garcia, M.E., Thompson, R., Dunn, A.L., & Blair, S.N. (2000). Heart rate variability, trait anxiety, and perceived stress among physically fit men and women. International Journal of Psychophysiology, 37, 121-133.

Friedman, B.H., & Thayer, J.F. (1998). Autonomic balance revisited: Panic anxiety and heart rate variability. Journal of Psychosomatic Research, 44, 133-151.

Kamada, T., Miyake, S., Kumashiro, M., Monou, H., & Inoue, K. (1992). Power spectral analysis of heart rate variability in type As and type Bs during mental workload. Psychosomatic Medicine, 54, 462-470.

Kawachi, I., Sparrow, D., Vokonas, P.S., & Weiss, S.T. (1995). Decreased heart rate variability in men with phobic anxiety (data from normative aging study). American Journal of Cardiology, 75, 882-885.

Kleiger, R., Bigger, J., Bosner, M., Chunk, M., Cook, J., Rolnitzky, L., Steinman, R., & Fleiss, J. (1991). Stability over time of variables measuring heart rate variability in normal subjects. American Journal of Cardiology, 68, 626-630.

Kleiger, R.E., & Miller, J.P. (1978). Decreased heart rate variability and its association with increased mortality after acute myocardial infarction. American Journal of Cardiology, 59, 256-262.

Lehofer, M., Moser, M., Hoehn-Saric, R., McLeod, D., Liebmann, P., Drnovsek, B., Egner, S., Hildebrandt, G., & Zapotoczky, H. (1997). Major depression and cardiac autonomic control. Biological Psychiatry, 42, 914-919.

Leonoff, G. (1995). The successful treatment of phobias and anxiety by telephone and radio: A replication of Callahan's 1987 study. TFT Newsletter, 1, 2.

Malik, M., & Camm, J. (Eds.) (1995). Heart rate variability. Armonk, NY: Futura Publishing.

McCraty, R., Atkinson, M., Tiller, W.A., Rein, G., & Watkins, A. The effects of emotions on short-term power spectrum analysis of heart rate variability. American Journal of Cardiology, 76, 1089-1093.

Middleton, H.C., & Ashby, M. (1995). Clinical recovery from panic disorder is associated with evidence of changes in cardiovascular regulation. Acta Psychiatrica Scandinavica, 91, 108-113.

Paperny, D., Sakai, C., & Callahan, R.J. (2000, February). Therapeutic dissociations of negative affect from cognitive precipitants of affective disorders using thought field therapy. Paper presented at the Scientific Meeting of the American Society of Clinical Hypnosis, Baltimore, Maryland.

Radloff, L.S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. Applied Psychological Measurement, 1, 385-401.

Rottman, J.N., Kleiger, R.E., & Stein, P.K. (1996). Heart rate variability: Measurement and meaning. Cardiology in Review, 4, 101-111.

Sakai, C., & Paperny, D. (1999, November). Thought Field Therapy for therapeutic dissociation of negative affect from cognitive precipitant of affective disorders. Paper presented at the Annual Clifford J. Straehley Symposium, Honolulu, Hawaii.

Saul, P., Arai, Y., Berger, R., Lilly, L., Colucci, W., & Cohen, R. (1988). Assessment of autonomic regulation in congestive heart failure by heart rate spectral analysis. American Journal of Cardiology, 61, 1292-1299.

Stein, P.K., Domitrovich, P.P., Kleiger, R.E., Schechtman, K.B., & Rottman, J.N. (2000). Clinical and demographic determinants of heart rate variability in patients post myocardial infarction: Insights from the Cardiac Arrhythmia Suppression Trial. Clinical Cardiology, 23, 187-194.

Stein, P.K. & Kleiger, R.E. (1999). Insights from the study of heart rate variability. Annual Review of Medicine, 50, 249-251.

Task Force of the European Society of Cardiology and the North American Society of Pacing and Electrophysiology. (1996). Heart rate variability: Standards of measurement, physiological interpretation, and clinical use. Circulation, 93, 1043-1065.

Watkins, L.L., Grossman, P., Krishnan, R., & Blumenthal, J.A. (1999). Anxiety reduces baroreflex cardiac control in older adults with major depression. Psychosomatic Medicine, 61, 334-340.

Wolpe, J. (1969). The practice of behavior therapy. New York: Pergamon Press.

Wylie, M.S. (1996). Researching PTSD: Going for the cure. Family Therapy Networker, July-August, 21-37.

Yeragani, V.K. (1995). Heart rate and blood pressure variability: Implications for psychiatric research. Neuropsychobiology, 32, 182-191.

Yeragani, V.K., Pohl, R., Balon, R., Ramesh, C., Glitz, D., Jung, I., & Sherwood, P. (1991). Heart rate variability in patients with major depression. Psychiatry Research, 37, 35-46.

Yeragani, V.K., Sobolewski, E., Igel, G., Johnson, C., Jampala, V.C., Kay, J., Hillman, N., Yeragani, S., & Vempati, S. (1998). Decreased heart-period variability in patients with panic disorder: A study of Holter ECG records. Psychiatry Research, 78. 89-99.