Pilot Study of Emotional Freedom Techniques, Wholistic Hybrid Derived From Eye Movement Desensitization and Reprocessing and Emotional Freedom Technique, and Cognitive Behavioral Therapy for Treatment of Test Anxiety in University Students

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Objective: This study explored test anxiety benefits of wholistic hybrid derived from eye movement desensitization and reprocessing and Emotional Freedom Techniques (WHEE), Emotional Freedom Technique (EFT), and cognitive behavioral therapy (CBT).

Participants: Canadian university students with severe or moderate test anxiety participated.

Methods: A controlled trial of WHEE (n = 5), EFT (n = 5), and CBT (n = 5) was conducted. Standardized anxiety measures included the Test Anxiety Inventory and Hopkins Symptom Checklist-21.

Results: Despite small sample size, significant reductions in test anxiety were found for all three treatments. In only two sessions, WHEE and EFT achieved the same benefits as CBT did in five sessions. Participants reported high satisfaction with all treatments. Emotional freedom techniques and WHEE participants successfully transferred their self-treatment skills to other stressful areas of their lives.

Conclusions: Both WHEE and EFT show promise as feasible treatments for test anxiety.

Key words: Test anxiety, exam anxiety, emotional freedom technique (EFT), wholistic hybrid derived from eye movement desensitization and reprocessing and Emotional Freedom Techniques (WHEE), cognitive behavioral therapy (CBT)


INTRODUCTION

This study investigated the feasibility of two “Energy Psychology” techniques and cognitive behavioral therapy (CBT) in reducing test anxiety. Both emotional freedom techniques (EFT)1 and wholistic hybrid derived from eye movement desensitization and reprocessing and Emotional Freedom Techniques (EMDR; WHEE)2 are potent self-treatment methods for dealing with mild to severe stress, are safe for use outside the therapist’s office, and do not produce heavy emotional abreactions.

Emotional Freedom Techniques is a mental/emotional version of acupressure that can be self-applied for a wide range of emotional, health, and performance issues. Emotional Freedom Techniques is based on the connection between a person’s thoughts and emotions and the body’s subtle energies, neurological activity, and cellular function. Emotional Freedom Techniques treatment gently removes unconscious blocks to healing with a statement about the negative issue while repeating a self-affirmation and massaging neurolymphatic points on the chest or hand. This is followed by tapping or rubbing a specific sequence of acupuncture points on the face, upper body, and hands while repeating a reminder phrase about the negative issue. Emotional Freedom Techniques acupuncture points interface with the person’s neurophysiological systems to increase physical, emotional, and neurological stability.1

The methodology for WHEE combines the alternating right and left body stimulation derived from EMDR and EFT, with affirmations modified from EFT as a person focuses on their anxieties. Again borrowing from EMDR, WHEE installs positive cognitions and feelings to replace the negative ones that have been released. Anxieties are reduced by WHEE very rapidly and WHEE is used by people on their own to reduce recurrent anxieties as needed.2 Eye movement desensitization and reprocessing, from which WHEE is partly derived, has four studies demonstrating efficacy for test anxiety3-6 and many studies demonstrating efficacy for treating severe emotional trauma. In fact, the American Psychiatric Association has acknowledged EMDR as having the same efficacy as CBT in treatment of both acute and chronic posttraumatic stress disorder.7

Generally speaking, energy psychology research is still in its early days.8 Energy psychology has demonstrated efficacy in treatment of generalized anxiety disorder,8 weight control by using the Tapas Acupressure Technique,9 and specific phobias by using EFT.10 Clinical observations by D.J.B. and K.L. indicate that test anxiety responds rapidly and well to WHEE and EFT. Advantages of energy psychology techniques are that they

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ISSN 1550-8307/09/$36.00 doi:10.1016/j.explore.2009.08.001
are easily learned, rapidly effective, can be administered in groups, and are safe to use on one’s own. Cognitive behavioral therapy can include a variety of modalities. In this study, muscle relaxation with systematic desensitization, individualized to each student’s anxieties about their test anxieties, were used.\textsuperscript{11} Effectiveness of CBT has been demonstrated for test anxiety.\textsuperscript{12} We have found no studies exploring the rate of change of anxiety over the course of CBT therapy or of particular components of CBT that are effective in addressing test anxiety, which are some of the issues explored in this study.

**Present Study Objectives**

Given the encouraging early findings in energy psychology techniques, the purpose of this study was to evaluate the efficacy of WHEE and EFT in treating test anxiety in college students by using CBT as a control group. This study examined closely the rate of improvement in test anxiety resulting from each treatment. We expected that WHEE and EFT would be equally effective as CBT in bringing about relief from test anxiety, and that these benefits could be realized in fewer treatment sessions than with CBT.

**METHOD**

**Participants**

From an initial pool of 27 volunteers, 15 students met the inclusion criterion and completed the study. The inclusion criterion was that the student had to demonstrate moderate (>37 for males, >41 for females) to severe (46 for males and 51 for females) test anxiety on the Spielberger Test Anxiety Inventory. Use of major tranquilizers or a history of psychosis were exclusion criteria. Ethics review and approval was granted through the Institutional Review Board of Luther College and all students provided informed consent for the study and treatment.

**Therapists**

Daniel Benor, MD, is the developer of WHEE. He is a psychiatric psychotherapist with training in EMDR and EFT and eight years’ experience in using WHEE. Karen Ledger, RN, BScN, is a health educator and nurse-counselor with 13 years of experience teaching and working with EFT in groups and one-on-one therapy. Geoffrey G. Hett, PhD, retired from the University of Victoria in 2008 and specialized in teacher education and counseling psychology. Much of his career was directed toward teaching and supervising MA and PhD students in the use of CBT.

**Design and Procedure**

Our intent was to randomly assign all participants to one of three treatment groups. Due to a poor response to multiple recruitment efforts and conflicts with class schedules, we were not able to randomly assign participants to the treatment groups. Students were assigned to treatments on the basis of scheduling and availability. Both WHEE and EFT interventions were conducted by expert therapists in two weekly sessions lasting two hours. Cognitive behavioral therapy consisted of five approximately two-hour sessions focused on test anxiety reduction techniques.

Test anxiety assessments were made at baseline (ie, recruitment), one day before exams, and one day after exams.

**Measures**

Standardized assessments included the Test Anxiety Inventory,\textsuperscript{13} and the Hopkins Symptom Checklist-21.\textsuperscript{14} Qualitative demographic and personal history data were also collected.

**RESULTS**

**Quantitative Analyses**

Test Anxiety Inventory data were submitted to a 3 (EFT vs CBT vs WHEE) × 3 (base vs preexamination vs postexamination) mixed model repeated measures analysis of variance (ANOVA). The main effect for time of testing was significant ($F = 32.4; P < .001$). There was a decrease in anxiety from base (mean = 62.3, SD = 7.9) to preexamination (mean = 52.5, SD = 7.1) to postexamination (mean = 42.7, SD = 9.4). All pair-wise differences were statistically significant ($P < .001$). There was no treatment group × time interaction ($F = 1.6, \text{not significant}$). Hence, the rate of decrease in anxiety across the three treatment conditions was similar.

Because of nonparallelism present in graphical plots of the means of the three treatment conditions across the three time points and concerns about type II error involved in testing interactions with small samples, we further examined decreases in anxiety separately for each treatment condition. For the EFT and WHEE treatment groups, all decreases in anxiety across time were statistically significant ($P < .05$). For the CBT treatment group, there were no statistically significant decreases in anxiety at any time point. Hence, although the omnibus test of the interaction was not significant, decreases in anxiety did appear to differ quite dramatically across treatment conditions. Wholistic hybrid derived from EMDR and EFT treatments yielded statistically significant decreases in anxiety in only two sessions.

Hopkins Symptom Checklist-21 data were also submitted to a three (EFT vs CBT vs WHEE) × three (base vs preexamination vs postexamination) mixed model repeated measures ANOVA. Again, the main effect for time was significant ($F = 8.7; P < .001$). There was a decrease in distress from base (mean = 50.3, SD = 12.9) to preexamination (mean = 39.4, SD = 9.5) to postexamination (mean = 35.3, SD = 9.0). Decreases in distress from base to preexamination and base to postexamination were statistically significant ($P < .05$), but distress scores at preexamination and postexamination were the same (not significant). There was no treatment group × time interaction ($F = 0.3, \text{not significant}$). Hence, the rate of decrease in distress across the three treatment conditions was similar.

**Qualitative Analyses**

The qualitative responses of students who completed the study were uniformly favorable regarding treatment benefits related to their test anxiety, (qualitative data is available upon request). Importantly, students in the WHEE and EFT groups were more likely to have used these skills to also reduce stress responses in other areas of their lives.
DISCUSSION
Both WHEE and EFT are promising new methods for the treatment of test anxiety. They produced effects in only two sessions, as compared with five CBT sessions. Students reported using each of the methods frequently and transferring the use of EFT and WHEE to reduce stressors in other areas of their lives, with good effect. These findings, in essence, confirm others showing promising benefits of energy psychology in treating many psychological conditions.

Limitations
This pilot study has some key limitations. First, random assignment was not possible. Second, our sample size was small, limiting the power of statistical tests. Although these factors limit the generalizability of the results of this pilot study, they suggest that further, more rigorous studies may be warranted, and lessons learned from this study will be helpful to other researchers in planning their studies.

CONCLUSIONS
The limitations of the present study notwithstanding, this is the first known study to demonstrate the efficacy of WHEE and EFT in the treatment of test anxiety in college students, and the first comparison of these methods with CBT. Our data are preliminary, but with continued attention to the importance of complementary/alternative energy psychotherapies, larger-scale replications of this work will provide additional evidence of the efficacy of these techniques. Future studies will no doubt offer a focused lens in which to view the impressive and efficient effects of energy psychology techniques for use with a broad array of psychological maladies.

REFERENCES