

Changes in Self-Reported Depression, Anxiety and Post-Traumatic Stress Disorder Symptomatology from the Emotion Code Energy Healing Modality

Gelb Y^{1*}, Castaneda S², Castaneda L², and Allison-Aipa T³

¹President at Statistics Magician, 1070 San Miguel Road Apt. H5, Concord CA 94518, USA

²Miracle Code Healing, USA

³University of Phoenix, USA

Abstract

Objective: Depression, Post-Traumatic Stress Disorder (PTSD) and anxiety are on the rise in America. The current study was the first of its kind, highlighting the effects of the Emotion Code, and contributed to the research on alternative healing.

Materials and Methods: This research evaluated whether the EC healing modality had a significant impact on a population of 146 participants. Individuals completed pre- and post-treatment assessments measuring depression, anxiety and PTSD symptomatology, as well as sociodemographic characteristics. The measures utilized were self-report questionnaires including: the PTSD Checklist for DSM-5 (PCL-5), Zung Anxiety Scale, and Patient Health Questionnaire-9 (PHQ-9); they were administered pre-treatment and post-treatment and the scores were compared. The treatment administered is called The Emotion Code, which is a modality that utilizes manual muscle testing and energy healing to access the subconscious mind that locates trapped emotions in the body and releases them with the use of intention.

Results: Results show significant decreases in symptomatology in all three mental health categories. These results suggest that the EC healing method may be a useful tool in aiding to decrease reported symptoms in the areas of anxiety, PTSD, and depression.

Conclusion: This was the first study of its kind, and future studies should be conducted to replicate the results, and compare a treatment group with a comparable control group.

Keywords: Emotion code • Alternative healing • PTSD • Depression • Anxiety

Introduction

Anxiety, Post-Traumatic Stress Disorder (PTSD) and depression are among the most prevalent psychological disorders in the world [1]. Each of these disorders are often debilitating, commonly have comorbidity, and can even lead to suicide in more serious cases [2,3]. While novel methodologies are being explored to treat symptoms in all three diagnoses, numbers are still on the rise [4,5]. Many well-accepted and utilized interventions include pharmacological intervention and different types of psychotherapy [3-7]; however, alternative methods of healing are becoming more widely utilized, some of which include spirituality as well as the diverse array of documented phenomena arising from "bio-energetics" [8-11]. Modern research has validated the power of several alternative healing methods including methods that include energy healing, which warrants further empirical research of similar models.

Energy healing

Many popular alternative healing methods are making headway in the literature in regards to anxiety, PTSD and depression including meditation, Reiki, Acupuncture, Healing Touch and Emotional Freedom Technique [12-

17]. These modalities deal with controlling, modifying, or unblocking a flow of energy through the "energy body," a part of the human anatomy often mapped and modeled by alternative medical traditions and various spiritual traditions [13,17]. A large volume of research supporting meditation and mindfulness as effective interventions for anxiety, PTSD, and depression have also been brought to the forefront of the scientific consensus [18,19]. Observation of these methods has demonstrated the power of the mind-body connection, a connection that is becoming more understood by Western science and medicine [20]. The growing body of literature for alternative healing as well as the growing numbers of debilitating mental health cases warrants a deeper exploration of possible methods to ameliorate these mental health conditions.

The emotion code

This research study concerns a novel energy healing modality called The Emotion Code, a methodology that is grounded in several alternative beliefs including that of the energy body, Chinese acupuncture meridians, and the use of distance prayer and intention along with several other spiritually founded principles [21-23]. The founder of The Emotion Code, Dr. Bradley Nelson, explains this method in his book, *The Emotion Code*, in relation to the 'energy body,' the Chinese acupuncture meridians, the belief that magnetic stimulation can be used to facilitate the release of energy from the body, leading to psychological and physiological changes, the idea that distant intentional thought has a profound effect in healing, the assumption that it is possible to engage the subconscious through muscle testing (derived from the field of Applied Kinesiology), and the conclusion that the subconscious mind can be tapped into non-locally through the muscle testing principle of applied kinesiology [24-26]. While The Emotion Code's methodology as a whole is not grounded in common conceptions of scientific causality and reality, the paradigms it consists of are scientifically supported in the literature; therefore, we hypothesize that it could demonstrate efficacy and help relieve those with symptoms of anxiety, PTSD and depression.

*Address for Correspondence: Yuliana Gelb, Ph. D., President at Statistics Magician, 1070 San Miguel Road Apt. H5, Concord Ca 94518, Tel: (650) 303-8019, E-mail: ulja17@yahoo.com

Copyright: © 2021 Gelb Y, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received 22 November 2020; **Accepted** 02 January 2021; **Published** 24 February 2021

Manual muscle testing

The Emotion Code relies on the use of Manual Muscle Testing (MMT), a technique from the school of Applied Kinesiology, to detect and locate emotional energies stored in the body from past experiences or generationally. Nelson explains that these energies are trapped as congested energetic masses in the etheric 'energy body' [24]. The principle of MMT relies on the premise that the human body is tapped into a matrix of consciousness and that reliable answers can be arrived at by testing whether a person's musculature will stay strong or go weak under pressure in response to true or false statements respectively [27,28]. The Emotion Code relies on the assumptions that a) MMT testing can reliably and accurately detect the presence trapped emotions through asking yes or no questions and b) that this diagnostic measure can be done at a distance as the practitioner uses MMT on their own body as a proxy for the patient's body. In Emotion Code, this practice is called "proxy" muscle testing and Nelson attributes it to the principle of entanglement from quantum physics and the ability for the muscle test to tap into a non-local principle of mind. This surrogate muscle testing principle is the least scientifically supported phenomena involved in Emotion Code's methodology. However, some studies have been conducted that give evidence to non-local psychic phenomena [29-32]. If research demonstrates a significant effect in this practice, further research will be required to examine this practice.

Magnetic stimulation

The methodology of using magnets to assist in this process hinges on the conjecture that the magnetic force produced by a magnet can overcome and redirect emotional energies. While the specific use of the magnets as in Emotion Code's method has not been studied or verified, research has established that magnetic forces can be therapeutic and curative for both physical and mental ailments [33,34]. A literature review on studies regarding magnets being applied to acupuncture points, the most relevant use of magnets in relation to The Emotion Code, determined that further study is warranted [35]. In this review, Colbert showed a distinction between the efficacy of magnetic stimulation on the location of a pained site versus the efficacy of similar stimulation on an acupuncture channel or point. Magnetic stimulation on an acupuncture point showed more efficacy and promise as a treatment, further demonstrating that acupuncture points are channels for this energy to be received and disbursed through the body. Of the 42 studies included in this review, two were directly pertinent to this study and involved the use of neodymium magnets in the treatment of depression. One study showed significant improvement in depression symptoms in 7 of 10 subjects after wearing a neodymium magnet over GV20 and 4 Sishencong points on the scalp [36]. The other study showed a 93.33% efficacy rate ($p < 0.01$) on depression treatment when using magnetic stimulation in combination with an herbal decoction to restore balance to liver-chi function [37].

Acupuncture meridians

One of the most prominently studied and an accepted healthcare paradigm that deals with this flow of subtle energy is the field of acupuncture [38]. The acupuncture system describes and works with channels that *chi* or 'life force' energy flows through and methods have been developed using this system to stimulate, unblock, and redirect flow of this subtle energy. Empirical evidence of the efficacy of acupuncture is well documented and verified [39]. Acupuncture is now recognized by Western science to be a reliable and scientific practice and is covered by many health insurance companies in America [20].

Methods other than needle point acupuncture have been developed from an understanding of the anatomy of the acupuncture meridians. One of these is a practice called Emotional Freedom Technique (EFT), which consists of self-stimulation of acupuncture points through tapping on the body while practitioners concurrently reframe negative thought patterns into positive ones through internal affirmative autosuggestion [40].

A review of studies conducted assessing EFT in the treatment of anxiety showed that EFT had a significant positive impact on anxiety symptoms compared to control conditions but not in comparison to other evidence based therapies [41]. The Emotion Code's methodology for releasing trapped

emotions and making the necessary psychological/energetic changes is very similar to EFT. Both methods utilize the acupuncture meridians while concurrent internal mental reframing and releasing are conjured by the practitioners. While EFT utilizes tapping on the acupuncture meridians, Emotion Code utilizes magnetic stimulation on the main meridian in Chinese Medicine called the Du Mai meridian. The Du Mai meridian is the channel that runs along the spine from the base of the tailbone, around the head and to the upper lip. Dr. Nelson claims that the stimulation along the Du Mai meridian is intentional and specific in its inclusion in The Emotion Code [24].

Alongside the use of the magnetic device along the Du Mai acupuncture meridian, the intention to release the trapped emotional energy is conjured by the practitioner; a step which Dr. Nelson and Emotion Code Practitioners believe is quintessential to the process. Because the Emotion Code hinges on the assumption of the power of belief, distant healing intention (DHI), and non-local psychic phenomena, it falls into the category of being a 'spiritual healing practice'. Spiritual healing practices have been defined as practices that use "the intentional influence of one or more persons upon another living system without utilizing known physical means of intervention" [42]. There are not a great number of quality double blind research studies on the practice of using DHI to assist in outcome efficacy related to healing. A detailed review by Andrade C. et. al. in 2009 showed mixed results of prayer in outcome efficacy, citing 2 studies with significant positive results, 3 studies with neutral results, and 1 study that showed negative results [43]. Another study showed the positive effects of distant prayer on self-esteem, anxiety, and depression, although possible explanations could include the faith effect or placebo effect. Other reviews on spiritual healing practices that assessed a greater volume of studies, including non-blinded studies and studies of lesser quality, have similarly shown mixed results of the effect of distant healing intention on outcome [44].

Once a stagnated energy is released, practitioners believe the body will be liberated from the blockages it causes on the body and that the client's mental and physical health will improve. This study is specifically designed to discern whether or not these methods produce salubrious results. Scientific research has demonstrated that the neural underpinnings of emotion have a significant and tightly paired connection to the body, possibly contributing to what is commonly known as psychosomatic illness [45]. Subjects suffering from chronic stress are at higher risk of respiratory infections, cardiac syndrome autoimmune conditions and clinical depression; a comorbidity which can be explained by brain-body pairings [46].

The present study

The Emotion Code utilizes phenomena outside the reach of what science has been able to verify up to the current era on many fronts. The goal of this research is to measure the method's efficacy and influence on symptoms of anxiety, PTSD and depression. Given the foundational research on the paradigms utilized by the Emotion Code, we believe that the Emotion Code will produce a significant effect in reducing anxiety, PTSD and depression scores in participants. Furthermore, it is of interest whether those reporting high levels of clinical symptoms would have higher or lower differences in scores as those who would endorse low scores on anxiety, PTSD, and depression.

Materials and Methods

Participants

Participants were 14 (9.6%) males and 132 (90.4%) females recruited through a pool of clients, who began Emotion Code sessions for the first time in their life. These people were recruited by Emotion Code practitioners, and represent a demographic of people that would have signed up to do the practice and pay for the sessions on their own volition.

The mean age of the participants was 47.05 years ($SD=13.81$). This sample was not very culturally diverse, with reported ethnicity as follows: 128 whites (87.7%), 5 African-Americans (3.4%), 5 Asian/Pacific islanders (3.4%), 2 Hispanics (1.4%), 5 Asian/Pacific islanders (3.4%), 2 American Indian/Alaskan, and 4 Bi-/Multi-Racial (2.7%). Half of the participants ($n=73$; 50%) finished

a four-year undergraduate college or higher, more detailed information on participants' education level can be seen in Table 1. The majority of participants ($n=96$; 65.8%) reported annual income between \$31,000 and \$60,000. Forty two (28.8%) participants reported that they were single, 62 (42.5%) participants reported that they were married, 26 (17.8%) - divorced, 8 (5.5%) - living with a partner, and 8 (5.5%) reported that they were widowed. 131 (89.7%) of the participants identified as heterosexual, 6 (4.1%), as homosexual, 5 (3.4%) as bisexual, 1 (0.7%) as asexual, and 3 (2.1%) as undecided. 2 participants (1.4%) identified as veterans, and 144 (98.6%) - as non-veterans. Participants' mental health diagnoses can be seen in Table 2, and their physical health condition(s) - in Table 3. Thirty three participants (22.6%) reported that they were currently ill, and 113 (77.4%) reported that they were not currently ill. Those who reported that they were currently ill described their illness as a mental health diagnosis as well as physical condition(s). 25 (17%) endorsed having at least one medical diagnosis, 8 out of those participants (32%) emphasized chronic pain as their main concern. 5 participants (0.03%) reported a mental health concern or diagnosis.

The Zung Self-Rating Anxiety Scale

The Zung Self-Rating Anxiety Scale (Zung) is a 20 item questionnaire that asks practitioners about the frequency of their experience of particular symptoms of anxious behavior. Each response is calibrated to a numerical scale of 1-4, with 1 being "none or a little of the time" and 4 being "most or all the time". The responses to each question are summed, and responses over a threshold level of 36 represent that a person would be categorized into a high anxiety group [47]. The scores range from 20 to 80. In the present study, adequate internal consistency was found for the Zung Self-Rating Anxiety Scale at Pre-Test, ($\alpha=0.83$), as well as for Zung Self-Rating Anxiety Scale at Post-Test ($\alpha=0.83$).

The PHQ Depression Scale

The PHQ Depression Scale (PHQ-9) is a 9 item questionnaire that measures the frequency of depression symptoms along a scale of 0-3 with a response of zero being "not at all," and a response of 3 being "nearly every day." The measurement asks about the frequency of these symptoms over the last two weeks and is meant to monitor if a person is experiencing an episode of depression. For the purpose of this longitudinal study, each participant's score will be summed and measured against their previous result to determine if depressive symptoms are becoming more or less frequent. The PHQ Depression Scale states that summed scores between 1-4 indicate minimal depression, summed scores between 5-9 indicate mild depression, summed scores between 10-14 indicate moderate depression, summed scores between 15-19 indicate moderately severe depression, and scores between 20-27 indicate severe depression. The scores range from 0 to 27. The PHQ-9 has been demonstrated to be both internally and externally reliable. In the present study, adequate internal consistency was found for the PHQ-9 Scale at Pre-Test, ($\alpha=0.82$), as well as for PHQ-9 Scale at Post-Test ($\alpha=0.83$) (Figure 3).

The PTSD Checklist for DSM-IV (PCL-5)

PCL-5 is a 20-item self-report measure used to evaluate presence and severity of symptoms of PTSD [48]. Participants were asked to complete the PCL-5 according to the worst traumatic experience of their lives. The items refer to the past month pertaining to this specific event. The items can be divided into four sub-scales corresponding to the clusters B-E in the DSM-5: intrusion symptoms, avoidance, negative alterations in cognition and mood, and alterations in arousal and reactivity [49]. The items are rated on a 5-point Likert scale with 0 being "not at all" and 4 being "extremely". Total scores range

from 0 to 80 and a preliminary cutoff score of 38 is recommended as indicating PTSD case-ness [50]. Total symptom severity scores are summed across all 20 items. In the present study, high internal consistency was found for the PCL-5 Scale at Pre-Test, ($\alpha=0.94$), as well as for PCL-5 Scale at Post-Test ($\alpha=0.94$).

Background Questionnaires

A Background Questionnaire (Appendix C) gathered demographic information about each participant.

Participants received a battery of psychological diagnostic self-rating surveys including the Zung Self-Rating Anxiety Scale, the PTSD Checklist for DSM-5 and the Patient Health Questionnaire to measure depression. Surveys were administered through the online survey platform named Qualtrics and the pre-treatment survey was completed remotely by each participant before any session took place. The same battery of psychological surveys was administered post treatment in order to track progress.

Each Emotion Code session was administered by a certified Emotion Code Practitioner and began with the client and practitioner connecting through prayer and intention. Manual Muscle Testing (MMT) was then used upon the client (if in person), or on the practitioner (as a proxy) as the practitioner identified which emotions were trapped at a certain age or age range. Figure 1 shows an extensive chart of emotions that a participant could have felt over his or her lifetime. One emotion is found at a time through asking yes or no questions and using MMT for answers. Once each emotion is found, the age that accompanies this emotion is also found. The practitioner then asks if there is anything else that they need to know before releasing the trapped emotion and muscle tests for the yes or no answer. Sometimes the event must be briefly acknowledged before it is released, other times the trapped emotion can simply be released after being located. Once this process is complete, the trapped emotion must then be released. The practitioner asks once more, "Can we release this trapped emotion now?" If the MMT results in a strong answer, the practitioner then attempts to release the congested energy from the body using magnetic stimulation along the primary acupuncture meridian which runs from the base of the spine to the crown of the head with the intention to neutralize, or release the trapped emotion. The Emotion Code calls for any magnet for this process, but many practitioners use a neodymium magnet embedded in a massage roller device. If the practitioner is sitting in as a proxy for their client, the practitioner swipes a magnet from their forehead, over the top of their head, to the back of their head above their neck. This process is repeated as the practitioner asks "Are there any other trapped emotions we can release from you right now?" Until the MMT yields a weak "no" answer. This is when Nelson says the body must then process the session with a 48-hour break in-between sessions. When the practitioner gets this "no" answer, it does not always mean there are no more trapped emotions to be released, but that the body must process the session. After-session care instructions are given to drink plenty of water and rest. Subjects were also informed that they may experience "processing symptoms" including headache, fatigue, or feeling emotional. They are told that the symptoms will pass in 48 hours. Each client returned after processing to release more trapped emotions. The amount of sessions per participant varied, as each participant has a varying amount of trapped emotions.

Results

To test the hypotheses multiple dependent samples t-test, independent samples t-test, and one-way between-groups ANOVA analyses were run.

Table 1. PHQ-9 scoring box. Column scores from the PHQ-9 are added to produce a total score to determine severity.

Total Score	Depression Severity
01-Apr	Minimal depression
05-Sep	Mild depression
Oct-14	Moderate depression
15-19	Moderately severe depression
20-27	Severe depression

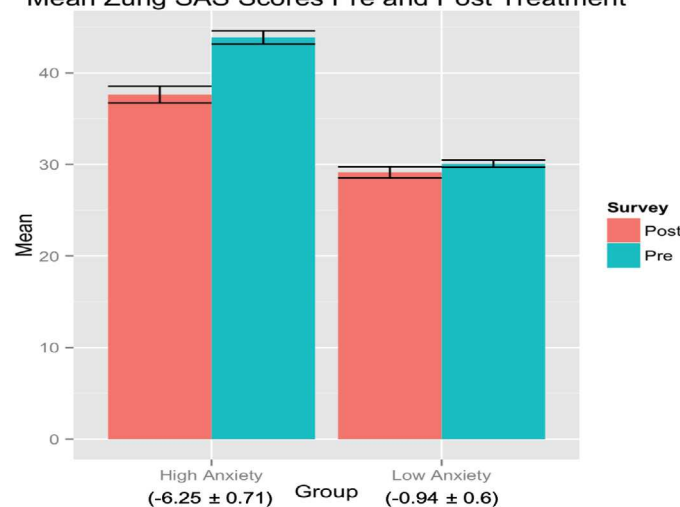
Table 2. Socio-demographics of experimental participants (N=146).

Characteristics	%	n
Gender		
Male	9.6	14
Female	90	132
Sexual Orientation		
Heterosexual	90	131
Homosexual	4.1	6
Bisexual	3.4	5
Asexual	0.7	1
Undecided	2.1	3
Education		
Middle School	2.1	3
Some High School	0.7	1
High School Diploma	8.2	12
GED	0.7	1
Some College	22	32
Associate's Degree	8.9	13
Bachelor's Degree	34	50
Master's Degree	14	20
PhD/MD	2.1	3
Trade School	7.5	11
Income		
> \$20,000	0.7	1
\$20,000-\$30,000	15	22
\$31,000-\$40,000	19	27
\$41,000-\$50,000	23	34
\$51,000-\$60,000	24	35
\$61,000-\$70,000	16	23
\$71,000-\$75,000	2.7	4
Marital Status		
Single	29	42
Married	43	62
Divorced	18	26
Living with Partner	5.5	8
Widowed	5.5	8
Ethnicity		
Asian	3.4	5
American Indian/Alaskan Native	1.4	2
Black/African American	3.4	5
White/European	88	128
Hispanic/Latino	1.4	2
Multi-racial	2.7	4
Veteran		
Yes	1.4	2
No	99	144
Currently Ill		
Yes	23	33
No	77	113
MH Diagnosis		
PTSD	9.6	14
Anxiety Disorder	12	18
Depression	18	26
Bipolar Disorder	2.7	4
Personality Disorder	0	0
ADHD	2.1	3
Eating Disorder	2.7	4
Substance Abuse/Addiction	3.4	5
OCD	0.7	1
None of the Above	49	71

Health Issues		
Heart Disease	0.7	1
Cancer	2.1	3
Respiratory Disease	1.4	2
Kidney Disease	0	0
Fibromialgia	4.1	6
Rheumatoid Arthritis	1.4	2
Diabetes (Type I or II)	2.7	4
Migraines	8.2	12
Dizziness/Fainting Spells	1.4	2
Gastrointestinal Problems	11	16
Overweight/Obese	23	34
None of the Above	44	64

Table 3. Differences on the study variables before and after treatment.

Survey	t	df	p	95%CI
Zung				
Pre	6	145	<.001	9
Post				
PCL-5				
Pre	7	145	<.001	29
Post				
PHQ-9				
Pre	8	145	<.001	36
Post				

Mean Zung SAS Scores Pre and Post Treatment**Figure 1.** Scores are raw score totals. High anxiety grouping indicates a pre-treatment survey score of 36 or higher. Numbers in parentheses indicate group mean change in survey score ± SEM.

Parametric assumptions, such as normality, and homogeneity of variance were evaluated prior to conducting dependent samples t-tests and one-way between groups ANOVA. The normality assumption was met for most study variables, which means it approached a normal distribution. The homogeneity of variance was met for all the tests, and for those that it was violated, "unequal rows assumed" of the results was used. According to Hypothesis 1, anxiety, depression, and PTSD symptoms were expected to decrease after emotion control healing treatment. Consistent with Hypothesis 1, anxiety, depression, and PTSD symptoms significantly decreased after the treatment. Moreover, the effect sizes for the dependent samples t-tests were moderate (Table 4).

Research Question 1 asked if participants with high anxiety and participants with low anxiety had significant decreases in symptoms after treatment. Anxiety symptoms significantly decreased after the treatment for both low and high anxiety groups. Moreover, the effect sizes for these dependent samples

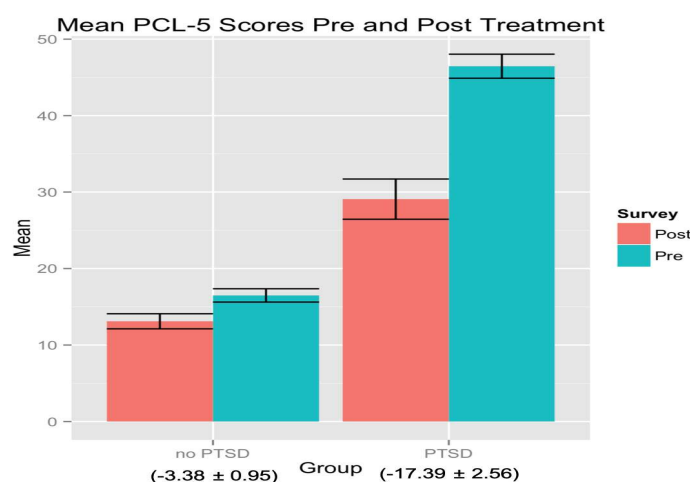


Figure 2. Scores are raw score totals. PTSD grouping indicates a pre-treatment survey score of 34 or higher. Numbers in parentheses indicate group mean change in survey score \pm SEM.

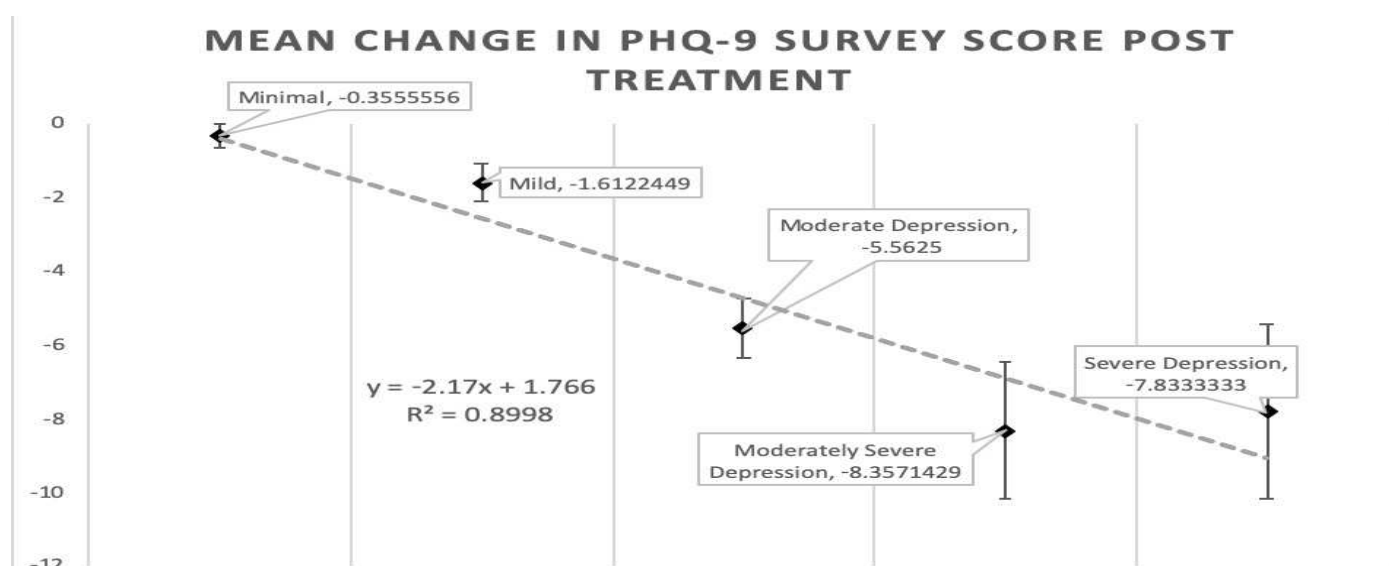


Figure 3. Mean change in survey scores for PHQ-9. Groupings were created based on the scale shown in Table 1. Error bars represent \pm SEM.

t-tests were very large (Table 5).

Research Question 2 asked if participants with PTSD and participants without PTSD had significant decreases in the symptoms after treatment. PTSD symptoms significantly decreased after the treatment for both groups. Moreover, the effect sizes for these dependent samples t-tests were very large (Table 5).

Research Question 3 asked if participants with different levels (minimal, mild, moderate, moderately severe, and severe) of depression had significant decreases in symptoms after treatment. Depression symptoms significantly decreased after the treatment for all of the levels of depression. Moreover, the effect sizes for these dependent samples t-tests were very large as well (Table 5).

Research Question 4 asked if participants with higher levels of symptoms had higher decreases in them after the treatment than those with lower levels of symptoms. Higher reduction in anxiety symptoms was observed among the high anxiety group versus the low anxiety group. Then, scores on PTSD decreased more in the PTSD versus no PTSD group. Both differences had very large effect sizes (Table 6). The results for depression were significant with the following statistics of one-way analysis of variance (ANOVA): $F(4, 141)=374.84$, partial eta squared=0.914, $p < 0.001$. Depression levels decreased in a linear manner from the severely depressed group to the minimal group, as seen in Figure 2.

Discussion

Alternative and holistic healing methods for Anxiety, PTSD and depression are at the forefront of literature due to the prevalence and life-debilitating nature of these conditions. The results of our study provide support to the growing literature on mental and emotional health. Specifically, the Emotion Code yielded significant decreases in reported symptomatology of all three conditions. The nature of this study was exploratory, as it is the first of its kind with no previous peer-reviewed articles published. Although the literature is extensive for anxiety, PTSD and depression in the arena of western medicine, holistic healing methods are becoming more widely accepted and could be used as an alternative or hand-in-hand with western medicine to be more effective. While many people may be skeptical of energy healing since it is not visible to the human eye, similar modalities such as Emotional Freedom Technique, Transcendental Meditation and Reiki are reporting positive results in the literature and becoming more commonly used, even in the clinical setting by licensed therapists [51-55]. While this is the first study of its specific kind, The Emotion Code shares core concepts with much of the body of alternative healing research that shows positive results and it would be beneficial to continue to research this modality in different ways. It was hypothesized that participants with lower anxiety, PTSD and depression ratings would benefit the most from this modality since they have fewer traumas to release from the body and therefore may feel relief more quickly and easily; however, results show

Table 4. Categorizations dependent on pre-survey score for each of the three survey types.

Pre				Post					
Survey	N	%	M ± SD	N	%	M ± SD	t-test		
							df	p	
Zung									
High Anxiety	63	43.2	43.87 ± 0.72	42	28.8	37.62 ± 0.91	117.5	< .001	
Low Anxiety	83	56.9	30.07 ± 0.39	104	71.2	29.13 ± 0.61	139.8	0.198	
PCL-5									
PTSD	41	28.1	46.46 ± 1.57	21	14.4	29.07 ± 2.63	65.37	< .001	
no PTSD	105	71.9	16.49 ± 0.87	125	85.6	13.1 ± 0.99	204.9	0.011	
PHQ-9									
Minimal	45	30.8	2.73 ± 0.18	76	52.1	2.38 ± 0.32	70.17	0.338	
Mild	49	33.6	7.02 ± 0.18	46	31.5	5.41 ± 0.5	59.89	0.003	
Moderate	32	21.9	11.63 ± 0.23	17	11.6	6.06 ± 0.77	36.54	< .001	
Moderately Severe	14	9.59	16.5 ± 0.36	4	2.74	8.14 ± 1.63	14.27	0.000	
Severe	6	4.11	23.67 ± 0.84	3	2.1	15.83 ± 2.24	6.39	0.016	

Table 5. t-test (Zung & PCL-5) and ANOVA (PHQ-9) results of mean change in survey score based on pre-survey groupings. Mean change from pre-survey to post in Zung score was significantly greater in the high anxiety group [$t(131.84) = -5.735$, $p < .001$] (Table 5, Figure 1).

Survey	df	t/F	p-value
Zung	131.84	-5.735	<0.001
PCL-5	51.32	5.1335	<0.001
PHQ-9	4, 141	18.22	<0.001

Table 6. Test-retest reliability between pre and post measures (N=146).

	post PHQ	post PCL	post ZUNG
pre PHQ	0.55 ^{b,c}		
pre PCL		0.59 ^{b,c}	
pre ZUNG			0.67 ^{a,c}

Note. ^a $r^2 \geq .6$ < .7 is questionable reliability, ^b $r^2 \geq .5$ < .6 is poor reliability. ^c All above $p < .001$.

that subjects with high and low symptomatology in all categories benefited in a significant and highly effective way. This suggests that the Emotion Code could be beneficial to people of all walks of life. Since the Emotion Code seems to provide stress relief to its recipients, it could be an effective tool for licensed therapists to utilize themselves for self-care, as burnout is on the rise in licensed therapists [56]. Therapists could also use this technique in conjunction with talk therapy for their clientele. If therapists are not open to learning the technique, they could partner with certified Emotion Code Practitioners to provide their clients with complementary healing methods along with regular talk therapy. Since the Emotion Code can be done by proxy, clients could use Telehealth to receive this healing from anywhere in the world with internet or phone connection.

There are a number of limitations to the present study. A control group was administered, but lacked consistency with the experimental group in terms of demographics, collection method, sample size and pricing and was thrown out. In order to rule out a significant Placebo Effect, a randomized study should be run with a control group included. The measures used in this study were self-report and therefore may include responses that are subject to the many natural biases that come about when self-reporting, such as the social desirability bias and the recall bias. Another limitation is that we cannot conclude any causal effects of the Emotion Code on anxiety, PTSD or depression, but only correlational by nature of this study. Additionally, there were sessions done on the phone, in-person, or on a face-to-face video platform. While the Emotion Code claims that this should not make a difference, this should be looked into further.

Conclusion

Finally, the Emotion Code is an energy healing method and may go against the beliefs of some spiritual and religious groups. This should be taken into

consideration when offering treatment with this modality. Because the Emotion Code demonstrated significant efficacy in the results of this study, further study of the methodology is warranted. Future research should include exploring the differences between phones, video or in-person sessions, concluding that there is no difference in efficacy across these different platforms. Furthermore, this healing modality is not limited to adults, but is also practiced on children and animals who are unaware they are being worked on. Future studies should include these populations to show results in these non-biased populations to eliminate any bias or placebo effect. Future research should also include randomized trials with a control group. And lastly, future research should include a longitudinal study, to follow up after 1 year, and then 5 years to see if this modality's results hold over time. Since this was the first study of its kind, it should be replicated to ensure validity and reliability. The results of our study implicate that further investigation is warranted. It may be beneficial to offer Emotion Code sessions to those seeking treatment for anxiety, PTSD and depression as an option along with other well-verified treatment modalities, especially because the treatment is minimally invasive and shows to be highly effective.

Acknowledgments

This work was funded in part by Discover Healing, Inc. We would like to acknowledge the invaluable contributions of the participants who consented for us to use the survey data for research purposes.

References

1. World Health Organization. Depression and Other Common Mental Disorders: Global Health Estimates. (2017).
2. Flory J. and Yehuda R. "Comorbidity between Post-Traumatic Stress Disorder

- And Major Depressive Disorder: Alternative Explanations And Treatment Considerations." *Dialogues In Clinic Neuro* 17(2015): 141–150.
3. Anxiety and Depression Association of America. Facts, statistics (2018)
 4. Kalin, Ned. "Developing Innovative and Novel Treatment Strategies." *J Psychiatr* (2019)
 5. Weinberger Andrea and Hilary Gbedemah. "Trends in Depression Prevalence in the USA from 2005 to 2015: Widening Disparities in Vulnerable Groups." *Cambridge University Press* 48(2018): 1308-1315.
 6. Ballenger, C. James. "Anxiety and Depression: Optimizing Treatments." *J Clin Psychiatr* 2(2000): 71–79.
 7. Eva Ceskova and Petr Silhan. "Novel Treatment Options in Depression and Psychosis." *Neuropsychiatric Dis Treatment* 14(2018): 741–747.
 8. Inger Burnett-Zeigler, Stephanie Schuette, David Victorson and Katherine L. Wisner. "Mind-Body Approaches to Treating Mental Health Symptoms among Disadvantaged Populations: A Comprehensive Review." *J Alter Complementary Med* 22 (2016): 115–124.
 9. Kathi J. Kemper, Paula Gardiner and Gurjeet S. Birdee. "Use of Complementary and Alternative Medical Therapies Among Youth With Mental Health Concerns." *Academic Pediatrics* 13 (2013): 540–545.
 10. Beverly Rubik, David Muehsam, Richard Hammerschlag and Shamini Jain. "Biofield Science and Healing: History, Terminology, and Concepts." *Global Advan Health Med* 4 (2015): 8–14.
 11. Amin Tabish, Syed. "Complementary and Alternative Healthcare: Is it Evidence-Based?" *J Health Science* 2 (2008): V–IX.
 12. Miguel Bellosta-Batalla, María del Carmen Blanco-Gandía, Marta Rodríguez-Arias and Ausiàs Cebolla, et al. "Brief Mindfulness Session Improves Mood and Increases Salivary Oxytocin in Psychology Students. Stress and Health" *J Society Invest Stress*. 36(2020): 383.
 13. Church Dawson Hawk, Crystal Brooks Audrey and Toukolehto Olli, Wren Maria, et al. "Psychological Trauma Symptom Improvement in Veterans Using Emotional Freedom Techniques: a Randomized Controlled trial." *J Nervous Mental Dis* 201 (2013): 153-160.
 14. Holroyd, Jules. "Transpersonal Modes of Healing: Biophysical Correlates of Hands-On-Healing Methods. Dissertation Abstracts International: Section B." *Sciences Eng* 81 (2020).
 15. Janine Joyce and G Peter Herbison. "Reiki for Depression and Anxiety." *Cochrane Database of Systematic Reviews* (2015): 683.
 16. Partaka, Melissa R. "Healing Naturally: an Integrative Health Approach to Treating Anxiety and Depression. Dissertation Abstracts International: Section B." *Sciences and Eng* 81 (2020).
 17. Lindsay C. Webster, Janice Miner Holden, Dee C. Ray and Eric Price, et al. "The Impact of Psychotherapeutic Reiki on Anxiety." *J Creat Mental Health* (2019): 311-326.
 18. Stefan G. Hofmann, Sawyer A and Alicia Witt. "The Effect of Mindfulness-Based Therapy on Anxiety and Depression: A Meta-Analytic Review." *J Consulting Clinic Psych* 78 (2010): 169-183.
 19. Reisman, Miriam. "PTSD Treatment for Veterans: What's Working, What's new, and what's Next." *J Formulary Management* 41 (2016): 623–634.
 20. Brower, Vicki. "Mind-body research moves towards the mainstream." *EMBO Reports* 7 (2006): 358–361.
 21. Loftin, D., John. "Supplication and Participation: The Distance and Relation of the Sacred in Hopi Prayer Rites." *Anthropos* 81 (1986): 177-201.
 22. Jason, Gary, Wright. "An Experimental Study of the Effects of Intercessory Prayer-at-a-Distance on Self-Esteem, Anxiety and Depression." *Dissertation Manuscript* (2006).
 23. David Sibbritt, Jane L. Phillips and Louise D. Hickman. "Prayer or Spiritual Healing as Adjuncts to Conventional Care: A Cross Sectional Analysis of Prevalence and Characteristics of Use among Women." *BMJ Open* 5.
 24. Bradley, Nelson. "The Emotion Code: How to Release Your Trapped Emotions for Abundant Health, Love and Happiness." (2019).
 25. Anthony L. Rosner and Scott C. Cuthbert. "Applied kinesiology: Distinctions in its Definition and Interpretation." *J Bodywork Movement Therapies* 16 (2012): 464-
 26. Rothlyn, P., Zahourek. "Intentionality Forms the Matrix of Healing: A Theory." *Alternative Therapies Health, Medicine* 10 (2004): 40-49.
 27. Nani Morgan, Michael R. Irwin, Mei Chung and Chenchen Wang. "Investigation of Mind-Body Therapies on the Immune System: Meta-Analysis." *PLoS One* 9 (2005).
 28. Scott C. Cuthbert and George J. Goodheart. "On the Reliability and Validity of Manual Muscle Testing: A Literature Review." *Chiropractic & Osteopathy* 15(2007).
 29. Krippner Stanley and Achterberg Jeanne. "Anomalous healing experiences." *American Psychological Association* (2014):273–301.
 30. Jerry R. Mendell and Julaine Florence. "Manual Muscle Testing." *Muscle & Nerve* 13 (1990): S16-S20.
 31. Dean Radin, Marilyn Schlitz and Christopher Baur. "Distant Healing Intention Therapies: An Overview of The Scientific Evidence." *Global Advances Health Med* 4 (2015): 67–71.
 32. Radin, Dean. "Testing Nonlocal Observation as a Source of Intuitive Knowledge." *Explore* 4 (2008): 25-35.
 33. Steven L. Henry, Matthew J. Concannon and Gloria J. Yee. "The effect of magnetic fields on wound healing: experimental study and review of the literature." *Eplasty* 8 (2008): 393-399.
 34. Antonio Mantovani, Sarah H. Lisanby, Fulvio Pieraccini, Monica Ulivelli and Paolo Castrogiovanni, et al. "Repetitive Transcranial Magnetic Stimulation in the Treatment of Obsessive-Compulsive Disorder and Tourette's Syndrome." *J Neuropsychopharmacology* (2006) 95-100.
 35. Agatha P Colbert, James Cleaver, Kimberly Ann Brown. "Magnets Applied to Acupuncture Points as Therapy – a Literature Review." *Acupuncture in Medicine* 3(2008): 160-170.
 36. Colbert, Agatha. "Magnets on Sishencong and GV20 to Treat Depression: Clinical Observations in 10 Patients." *Med Acupuncture* 12 (2000): 20-24.
 37. Guangji Zhang and Jiyuan Ruan. "Treatment of Mental Depression Due to Liver-qi Stagnancy With Herbal Decoction and by Magnetic Therapy on at the Acupoints - a Report of 45 Cases." *J Trad Chinese Med* 24 (2004): 1-20.
 38. Kenji Kawakita and Kaoru Okada. "Acupuncture Therapy: Mechanism of Action, Efficacy, and Safety: a Potential Intervention for Psychogenic Disorders?" *BioPsychoSocial Medicine* 8 (2014): 4.
 39. J-C Darras, P Albarède, De Vernejoul. "Nuclear Medicine Investigation of Transmission of Acupuncture Information." *Acupuncture Medicine* 11 (1993): 22-28.
 40. Rancour, Patrice. "The Emotional Freedom Technique: Finally, a Unifying Theory for the Practice of Holistic nursing, or too Good to be True?" *J Holistic Nurs* 35 (2017): 382–388.
 41. Brenda Sebastian and Jerrod Nelms. "The Effectiveness of Emotional freedom Techniques in the Treatment of Posttraumatic Stress Disorder: A Meta-Analysis." *Explore* 13 (2017):16-25.
 42. Benor, Daniel. "Survey of spiritual healing research." *Comp Med Res* 4 (1990): 9-33.
 43. Chittaranjan Andrade and Rajiv Radhakrishnan. "Prayer and Healing: a Medical and Scientific Perspective on Randomized Controlled Trials." *J Psychiat* 51 (2009): 247–253.
 44. John A. Astin, Elaine Harkness and Edzard Ernst. "The Efficacy of "Distant Healing": A Systematic Review of Randomized Trials." *Annal Internal Med* 132 (2000): 903–10.
 45. C. B. Pert, M. R. Ruff, R. J. Weber and M. Herkenham. "Neuropeptides and Their Receptors: A Psychosomatic Network." *J Immun* 135 (1985): 820s-824s.
 46. George Miller, E. Chen and Zhou Enlai. "If it goes up, Must it Come Down? Chronic Stress and the Hypothalamic-Pituitary-Adrenocortical Axis in Humans." *American Psycho Ass* 133 (2007): 25–45.
 47. William W.K. Zung. "A rating instrument for anxiety disorders." *J Consult Liaison Psychiatry* 12 (1971): 371–379.
 48. Kurt Kroenke, Robert L. Spitzer and Janet B. W. Williams. "The PHQ-9: validity of a brief depression severity measure." *J General Internal Med* 16 (2001): 606-613.
 49. Christy A. Blevins, Frank W. Weathers, Margaret T. Davis and Tracy K. Witte, et al. "The Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5): Development and Initial Psychometric Evaluation." *J Traumatic Stress* 28 (2015): 489–498.
 50. Donna Bach, Gary Groesbeck and Peta Stapleton. "Clinical EFT (Emotional

- Freedom Techniques) Improves Multiple Physiological Markers of Health." *J Evidence-Based Integr Med* 24 (2019): 453.
51. Jonathan W. Kanter, Andrew M. Busch, Cristal E. Weeks and Sara J. Landes. "The Nature of Clinical Depression: Symptoms, Syndromes, and Behavior Analysis." *Behavior Analyst* 31 (2008): 1–21.
 52. Helané Wahbeh, Angela Senders and Rachel Neuendorf. "Complementary and Alternative Medicine for Posttraumatic Stress Disorder Symptoms: a Systematic Review." *J Evidence-Based Complement Med* 19 (2014): 161–175.
 53. Judy Singer and Jon Adams. "Integrating Complementary and alternative Medicine into Mainstream Healthcare Services: the Perspectives of Health Service Managers." *BMC Complement Altern Med* 14 (2014): 167.
 54. Udani, Jay. "Integrating Alternative Medicine Into Practice." *JAMA* 280 (1998): 1620E.
 55. Stephanie Stockham-Ronollo and Shruti S. Poulsen. "Couple Therapy and Reiki: a Holistic Therapeutic Integration." *Family J* 20 (2012): 292–298.
 56. Gary Morse, Michelle P. Salyers, Angela L. Rollins and Maria Monroe-DeVita, et al. "Burnout in Mental Health Services: a Review of the Problem and its Remediation." *Admin Policy Mental Health* 39 (2012): 341–352.

How to cite this article: Yuliana Gelb, Sara Castaneda, Lenny Castaneda and Tim Allison-Aipa. "Changes in Self-Reported Depression, Anxiety and Post-Traumatic Stress Disorder Symptomatology from the Emotion Code Energy Healing Modality". *Altern Integ Med* 10 (2021): 329