

## The effect of emotional freedom technique (EFT) therapy on the reduction of aggression in single mothers

**Mohammad Reza Abdi**

MA in general psychology, Department of Psychology, Research and science branch, Islamic Azad university, Yazd, Iran.

**Khadijeh Abolmaali, Ph.D**

Faculty member, Department of Psychology, Roudehen branch, Islamic Azad University, Tehran, Iran.

### Abstract

The present study was aimed to determine the efficacy of emotional freedom technique (EFT) therapy on the reduction of aggression in single mothers. The statistical population consisted of women referring to welfare centers in Tehran aged 25 to 40 in 2013. The method was quasi-experimental with a control group pretest-posttest design. The investigated sample in this study was 30 women who had high scores on tests of aggression and assigned randomly to the experimental group (15 subjects) and control group (15 people). Abolmaaly Aggression Test (2012) was used to collect the data. The experimental group was under the emotional freedom technique therapy by the researcher and two fellow clinicians for 12 sessions, while the control group received no treatment. MANCOVA test was used for data analysis. The results showed that EFT therapy significantly reduced aggression ( $P < 0.01$ ). According to the significant difference between control and experimental groups, EFT therapy could be used as an effective therapy method for reducing aggression in single mothers.

Keywords: emotional freedom technique, aggression, single mothers

### Introduction

Over the past few decades, aggression has been known as one of the most important social issues in Iran. Aggression has numerous potential negative consequences. These consequences include fear, counter aggression, loss of control, guilt, being away from human traits, alienation of people, reduction of health and creating a society that makes life very dangerous and this risk even threatens the comfortable and secure life of aggressive people (Bolton, 2005).

What made researchers pay attention to aggressive behavior is its adverse effects on interpersonal behavior and also its negative impacts on the internal and mental states of individuals. Lack of inhibition of aggressive behavior not only can cause problems between the individuals and violate the rights of others but also it can be poured inside the individuals and cause a variety of physical and psychological problems such as ulcers, migraines and depression (Ellis, 1998). Some social problems such as child abuse, and various forms of intergroup conflict are clearly rooted in the inability to control anger and the anger arousal (Novaco & Chemtob 1998). According to Baron and Richardson (1994, 7), the word aggressive is used when a behavior is intended to hurt or harm any living being, who is trying to avoid such damage, occurs. They have shown in the definition of the aggression that the purpose of these behaviors is destruction and harming a living being and his properties, a behavior that causes defensive and preventive reactions appear from the victim (Khanjani and Azimzadeh, 2010, 86).

Some theories Like Freud's theory considers aggression as innate drives and some other theories such as Bandura relates Aggression hugely to the past experiences of individuals and direct experience and observational learning play an important role in the acquisition of social behaviors such as aggression (Seif, 2009). But what is important is the type and severity of symptoms of this behavioral disorder among the different types (Dortaj, Masaebi and Asadzadeh, 2009).

Psychologists have suggested various techniques and methods for the treatment of aggression which can control and treat a large part of this problem. One of the most important techniques is emotional freedom technique (EFT). From the perspective of emotional freedom technique (EFT), aggression has caused by the disorder in the body's energy system and can be reduced by tapping the energy points of the body (Callahan, 2010). This therapy technique takes place in energy psychology therapy group (Craig and Callahan, 2005). This technique is a new method in the late nineties by an American named Gary Craig was developed based on acupuncture and its basis is treating the disorders of the body's energy. In this method, unlike acupuncture there are no needles,

instead some important parts of the body are tapped with the fingertips and at the same time the individual focuses on his problem.

From the Psychoanalytical perspective, anger expression leads to emotional drain and decrease in negative emotions. From the learning perspective, anger is made through learning and can be changed through learning as well (Mayne & Ambrose cited in Sadeqi, Ahmadi and Abedi, 2002). Aggression is not related to a particular age or period, as shown in several studies it has been found that aggression and violence have existed from childhood and persisted over time (Thomas and Chess, 1976, cited by Nelson & Izail, 1997) and continues into adolescence and adulthood. One of the issues that can cause individuals to encounter the negative emotions or do not have any emotional control is several responsibilities that they have to do in life, for example the single mother has responsibilities such as deciding to deal with the issues and personal, psychological, social, emotional, economic, familial, educational and children's behavioral problems in the future and she needs to do something about maintaining the existing emotional ties within the family and preventing from the creation of minimum stress in the family and also protecting children in terms of physical and spiritual. Due to the expected roles of men and women, it seems that the type and amount of pressure that single mothers experience than others due to the different roles they have such as managing home affairs, education and care of children alone and working outside home with lower wages are under more pressure and psychological problems and issues. On the one hand they should have the tenderness of a mother and on the other hand they should play the role of a breadwinner and the so called breadwinner man, this could be the cause of aggression. Nowadays most women, in addition to being involved in traditional risk factors, they are exposed to the significant stresses in their workplace (Carlson, Eisenstat and Terazipoorin, translated by Abolmaaly et al., 2010).

The results of several studies suggest that EFT therapy intervention can be effective in controlling negative emotions, especially women's aggression. In the following, some studies are referred.

Rove (2005) has examined the long-term effects of emotional release techniques (EFT) on the mental symptoms. Previous studies of Salas (2000); Wells et al. (2003) and theoretical writings of Arenson (2001); Callahan (1985); Durlachr (1994); Flint (1999); Gallo (2002); Hover and Kramer (2002); Lake & Wells (2003); Lambrou & Pratt (2000); and Rove (2003), and many case reports have stressed the importance of energy therapy as an effective treatment method. In the study conducted in 2012, Church, Yount and Brooks (2012) have concluded that EFT had a significant impact on the reduction of cortisol, aggression and stress of experimental group. In the study done by Benor, Ledger, Toussaint, Hett and Zaccaro (2009) it is demonstrated that emotional freedom technique (EFT) therapy, which was performed on a group of university students in Canada, significantly influenced the anxiety and anger control.

A pilot study has been performed by Waite and Haldr (2003) over 119 university students who have expressed special fear and phobia. Participants divided into four groups of EFT, placebo, modelled treatment, no treatment or control group. The pre-test and post-test were given to all groups. All three treatment groups reported better condition than the group that received no treatment.

In 2005, Rove tested 102 participants for long-term problems in 6 months using workshop and therapy by EFT. The results obtained in the pre-test and post-test revealed significantly reduced symptoms of psychological distress.

The results of studies done by Varogoli and Darviri (2011) about the effect of EFT therapy on the reduction of stress show that the above therapy besides the stress reduction, it had a significant effect and causes the reduction of pain and increase in the amount of acceptance in dealing with the capability and life quality relative to the health of individual contracted with good and evil, or having an immediate effect on phobia, anxiety, depression, trauma and coronary heart disease. According to findings of Hui (2000) EFT like acupuncture sends signals directly to the amygdala in order to mitigate the fear. Other assumed mechanisms on EFT include increase in building serotonin (Ruden, 2009) and activation through stress, moderating genes in the hippocampus and hypothalamus (Church, 2009), a specific regulation of genes such as EGR that are active during the great distress experience (Sabban & Kvetnansky, 2001, Bozon & Laroche, 2003).

In general it can be said that the studies have shown that EFT technique enjoys good performance in physical and stress disorder problems resulting from the unpleasant memories and also mental problems. Studies have shown that pressing or tapping the acupunctured points can be as useful as needling. The above two approaches (acupuncture and tapping the energy points) were mixed by an American psychologist Roger Callahan in the 1970s. EFT has been known valid in many studies as a medical approach based on evidence. Since most single mothers became aggressive due to the multiplicity of responsibilities, the current study is dedicated to the effect of emotional freedom technique (EFT) therapy on the reduction of aggression.

## Methodology

According to the nature of the study, a quasi-experimental study (pretest and posttest) with the control group is used where at first single mothers who wished to participate in the study completed the aggression test, then women who achieved a high score (raw score of 33) based on the norm of the test were assigned to two experimental and control groups.

The statistical population of this study included single mothers of 25 to 40 years of age in 2013 who referred to welfare centers located in Tehran city.

Sample and sampling method: Cohen table was used to estimate the sample size. Using this table with an effect size 0.5 and test power of 76%, a sample size of 30 patients in each group of 15 patients were estimated (Sarmad, Hejazi, and Bazargan, 2008). In the present study, according to a list of institutes of welfare centers in Tehran city, 2 centers were selected randomly in the central and southern part of Tehran, then among the women who referred to these center volunteers completed the aggression test and among 20 individuals under the coverage of central welfare organization and 48 individuals under the coverage of southern welfare organization who gained high scores according to the performed test (raw score above 33, from the seventh decile and next), 30 individuals were selected and assigned to two experimental and control groups. In order to comply with the Code of Ethics, at first the purpose of the study was explained to the participants after achieving their consent and agreement to participate in the study, confidentiality of data that are collected was explained to them and then the questionnaire was carried out on them.

Measuring instruments: In this study, Abolmaaly Aggression Questionnaire (2012) was used to determine the aggression of single mothers. This questionnaire contains 29 questions. Likert scale is used for responding the items of the test. The results of the analysis showed that the factor analysis was done based on varimax rotation and five extracted factors of data were proposed. The first, second, third, fourth, and fifth factors explained 13.5, 9.07, 9.02, 7.73, and 6.43 percent of the total variance and on the whole 45.8 percent of the test's total variance is explained by these five factors. In order to determine the factors from the factorial loads 0.4 was used at least and based on the five obtained factors which were indicative of five coherent and significant dimensions of aggression construct, five behavioral factors were called active-aggressive-instrumental, emotional-reactive-aggressive, behavioral-passive-verbal, behavioral-passive-nonverbal, and cognitive-aggressive-nonverbal.

The Retest coefficients (Pearson) for scale aggression was obtained 95%. Validity and reliability of testing every five factors were calculated using internal consistency (Abolmaaly, 2012). The reliability of the total scores in this questionnaire with 29 questions, using the retest method is (96%) and internal consistency is (Cronbach's alpha, 91%). Reliability coefficient for each sub-scale test using internal consistency method is desirable. The validity of this test is obtained through determining its correlation with the short form of social problem solving test Zuryla and Nezu and Mai Dave, Lyvars, ketl scale of anxiety, and aggression subtest of SCL90 test which were satisfactory and meaningful (Abolmaaly, 2012).

Table 1: Presentation of EFT

sessions	Objectives	Implementation of training
<b>1st session</b>	Introduction and knowing the therapists and therapeutic technique and performing the therapeutic planning	This session lasted two hours, before holding the therapeutic sessions at first a briefing session was held for introducing the members of the group with the therapist and 2 female companion therapists who were psychologist and expert in this subject. And a description of therapy, therapeutic effects, and the duration of sessions were given. At this session the definition of aggression and other relevant factors, its effects on the mental health of single mothers, as well as EFT and performing its accurate procedures on a subject was described and carried out as a sample by the therapist. Then, 3 therapist performed the whole task on all subjects.
<b>2nd session</b>	Performing the therapeutic planning with the purpose of self-practice	The length of 2 <sup>nd</sup> session to 12 <sup>th</sup> session was one hour and were performed under the supervision of 2 therapists with the self-practice that this is one of the great advantages of this therapeutic method. At this session, every member of the experimental group, expressed their actions and feelings and also evaluated some reactions. Afterwards, subjects started to perform the therapeutic method in the form of self-practice under the supervision of the therapists and finally some exercises were given to them to practice at home.
<b>3rd session</b>	Therapeutic feedback And Performing the therapeutic planning	At this session, first everyone expressed the results of treatment effects used above on their behaviors and modes. If the problem was reduced, assessments were continued again and sometimes clients were needed to ask the people's' assessments about how to deal with stressful events, took note and discuss them for next session. Others evaluation may be accurate and helpful and may be they assessed unrealistically to their own interests. It is important that the client or subject always continue his cognitive assessment. This session was held like the previous sessions.
<b>4<sup>th</sup> to 11<sup>th</sup> session</b>	Self-report and Performing the therapeutic planning	From 4 <sup>th</sup> session up to 11 <sup>th</sup> session after giving reports by the experimental group, treatment was performed through self-practice by the clients and under the supervision of the therapists. Also, At this sessions, besides giving reports by the subjects if a problem was reduced, it was reassessed and therapeutic investigations were conducted and participants were asked to offer their and their family's feedback to the therapeutic effect.
<b>12<sup>th</sup> session</b>	Performing the therapeutic planning, discussion, and conclusion	At first, group reports are done by the experimental group which includes assessment of treatment effects by the feedbacks taken from friends and especially family and then performing the re-treatment by the fellow therapists and finally investigation of discussion and conclusion of group members and disambiguating were carried out

### Findings

Mediocrity and dispersion indices and indices of distribution and draw of statistical charts were used to describe data. Moreover, MANCOVA test was used to analyze data.

Table2: descriptions of variables

Index	Group	Number	Mean	Standard deviation	amount z k-s test
<b>active-aggressive-instrumental</b>	Experimental	15	15	4.33	0.654
	control	15	9.73	4.04	0.698
<b>emotional-reactive-aggressive</b>	experimental	15	5.13	2.10	0.701
	control	15	13.47	3.90	0.833
<b>behavioral-passive-verbal</b>	experimental	15	3.27	2.37	0.601
	control	15	8.47	3.39	0.864
<b>passive-nonverbal</b>	experimental	15	4.13	1.5	0.635
	control	15	9.07	3.45	0.925
<b>aggressive-nonverbal</b>	experimental	15	3.73	1.66	0.739
	control	15	8.27	3.39	0.934
<b>Total score</b>	experimental	15	20.60	7.03	0.844
	control	15	49	12.71	0.592

According to the table, mean and standard deviation of the scores of the experimental group in the total score of aggression test and its components in the pre-test are lower than the post-test.

Table 3: Results of Levine's test for equality of variances of the error

index	F	d.f <sub>1</sub>	d.f <sub>2</sub>	Sig.
<b>active-aggressive-instrumental</b>	0.167	1	28	0.686
<b>emotional-reactive-aggressive</b>	0.339	1	28	0.565
<b>behavioral-passive-verbal</b>	2.63	1	28	0.116
<b>behavioral-passive-nonverbal</b>	3.50	1	28	0.072
<b>aggressive-nonverbal</b>	1.34	1	28	0.256
<b>Aggression total score</b>	4.03	1	28	56

As shown in Table (3), according to the fact that the obtained level of significance in all the factors are bigger than (0.05) and therefore obtained F-value is not significant which represents confirming the assumption of equality in error variance. Assumption of homogeneity of variance in the dependent variables is confirmed that represents equality of error variance of the dependent variable in the levels of grouping

Table 4: the results of covariance analysis test of aggression total score

Source of changes	Sum of squares	Degree of freedom	Mean square	F	Level of Significance
<b>Model correction</b>	7326.18	4	1831.54	27.24	0.0001
<b>Fixed degree</b>	192.21	1	192.21	2.85	0.103
<b>age</b>	85.66	1	85.66	1.27	0.270
<b>Length of guardian</b>	48.98	1	48.98	0.729	0.401
<b>pretest</b>	1146.92	1	1146.92	17.06	0.0001
<b>grouping</b>	5324.42	1	5324.42	79.20	0.0001
<b>error</b>	1680.61	25	67.22		
<b>total</b>	45338	30			
<b>Total of correction</b>	9006.80	29			

**Determination coefficient = 0.813, modified determination coefficient = 0.784**

As shown in Table 4, the statistics of (f) grouping (79.20) with degrees of freedom (25, 1) is calculated according to the level of significance (0.0001) which is smaller than the degree of (0.05) and is indicative of statistically significant difference at the 99 percent confidence level between control and experimental groups. The results indicate significance in the whole model and also the separate effect of each independent variable in the dependent variable of the model, and null hypothesis is rejected, thus the hypothesis of "the effect of emotional freedom technique (EFT) therapy on the reduction of aggression in single mothers" is approved. Given that the calculated adjusted coefficient of determination is 0.804 represents 0.789 of the variance in the

dependent variable by the independent variable. Therefore, other variances in the dependent variable (0.211) in this study are under the influence of factors and variables which are not investigated in this study. And also given that the value of  $f$  calculated for age variable ( $f= 1.27$ ) and length of guardianship variable ( $f= 0.729$ ) are not statistically significant and indicates lack of effect of age and length of guardianship variables.

Reviewing the pre-hypotheses of the multivariate analysis of covariance test and its results are as follows:

To evaluate the covariance matrix of the dependent variable for the levels of the independent variable (grouping) Box's M test was used. In this case, instead of comparing the size of dependent variable variance at different levels of the dependent variable all coefficients of dependent covariance matrices will be studied. The standard method for evaluating the equality of covariance matrix is the Box's M test in which no statistical significance indicates the homogeneity of covariance matrices which is desirable.

Table (5): Results of Box's M test for the homogeneity of covariance matrices

Box's M	F	d.f <sub>1</sub>	d.f <sub>2</sub>	Sig
29.72	1.59	15	3157	0.067

As shown in Table (5), the obtained level of significance is (0.067) that is larger than (0.05) and thus the calculated value of ( $f$ ) is not statistically significant at the 95 percent confidence that represents covariance matrix is homogeneous. Thus the assumption of homogeneity of covariance matrices of the dependent variable to the independent variable (grouping) are approved.

Table (6). The results of multivariate tests for linear combination of dependent variable

Index of effects	group	value	F	Hypothesis d.f	Error d.f	Sig	Partial Eta Squared
group	Lambda Wickles	0.221	11.97	5	17	0.0001	0.779

As shown in Table (6) the results of the multivariate analysis of covariance is dependent in the variable combination in order to study the difference between both experimental and control groups. for the resource changes in group Lambda Wickles value (0.221) with the value of ( $f=11/97$ ) and the obtained level of significance (0.0001) and eta squared are (0.779) and according to the level of significance (0.0001) is smaller than (0.01) is statistically significant at the 95 percent confidence and it represents that there are significant differences between the two groups from the combination of dependent variables perspective, and considering that Eta square can be expressed as (0.779), it can be stated that almost 78 % of the variation is due to the EFT treatment or therapy . Levine's test was used to check the assumption of equality of error variances for the reported results in Table 3.

Table 7: Test of effects between subjects

index		Sum of squares	Degrees of freedom	Mean square	F	Level of Significance	Eta squares
source	Dependent variable						
Grouping	active-aggressive-instrumental	167.72	1	167.72	20.37	0.0001	0.492
	Emotional-reactive-aggressive	250.15	1	250.15	48.15	0.0001	0.696
	Behavioral-passive-verbal	118.58	1	118.85	19.09	0.0001	0.476
	Behavioral-passive-nonverbal	114.93	1	114.93	19.62	0.0001	0.483
	Aggressive-nonverbal	81.75	1	81.75	16.98	0.0001	0.443

## Discussion

This study confirmed the effect of EFT therapy on reducing aggression in single mothers. The results obtained in the therapy sessions show improvements in the experimental group patients. This study is coordinated and consistent with the results of previous studies in the field of EFT, including Rove (2005); Weit and Halder (2005); Rove and Davson (2003); Salas (2000); Wells et al. (2003) and similar results are obtained with the results of studies done by Dinter (2009); Crick(2009); Church et al. (2012) and theoretical writings of Arenson (2001); Callahan (1985); Durlachr (1994); Flint (1999); Gallo (2002); Hover and Kramer (2002); Lake & Wells (2003); Lambrou& Pratt (2000); and Rove (2003), Benvor et al. (2009); Church et al(2009) about the effect of EFT therapy on the reduction of aggression and negative emotions and more especially on the aggression.

Single mothers lose their mental peace and feel lonely, depressed, anxious, and aggressive Because of the multiplicity and conflicts of roles. They always seek calmness and security because of their natures. It can be witnessed by lack of social ambitions and a tendency to delinquency and crime among women in history and only few women had tendency towards these affairs which is insignificant in comparison with men. But this issue shouldn't be ignored that the role of women in the home and family setting is strong and important and the today's aggressive daughter becomes the tomorrow's aggressive mother and it is clear that women are the mothers of the society and can theorize the aggressive mentality in the next generation. I dare say that certain part of the requested divorces and conflicts between couples come from the consequences of increasing aggressive mentality in women. (Firoozchy, 2004).

Liravi (2004) investigated the problems of single mothers and concluded that mothers and their children are plunged into the trap of poverty more than any other groups of people that this issue caused some disorders in their mental balance including aggression.

According to the failure theory, the result of all aggressive acts is failure. It means aggression can be the effect and the unfortunate and dismal situation. The most important factor in creating situations of aggression comes from that dismal situations and failure (Ahmadvand, 2011). Deprivation often leads to aggression. Aggressive behavior is a kind of compensatory behavior that appears from an individual against deprivations and deterrent. This compensatory behavior depends on lack of self-confidence and perception of lack of competence and adequacy (Shamloo, 1995). When single mothers are faced with lack of satisfaction in terms of demands and needs in their community and the family, in other words, they are not understood and taken into consideration, they are inevitably drawn to abnormal behaviors. Accordingly, economic and social deprivations cause their aggression. The therapeutic effect of EFT in processing the mind can lead to aggression.

Based on biological theories of Saduk and Kaplan (2011) it seems cholinergic and catecholaminergic mechanisms are effective in the occurrence and severity of aggressive aggression and amino butyric acid (GABA) and serotonergic systems are involved in controlling this behavior. According to the existing evidence, catechol aminergic and serotonergic systems regulate emotional aggression. Apparently aggression facilitates dopamine, norepinephrine and serotonin inhibit it. According to the findings of Hui (2000), EFT causes fear and aggression to be adjusted by sending signals directly to the amygdala. Other mechanisms with the increase in the building of the serotonin (Rodin, 2009), adjusting genes in the hypothalamus and hippocampus (Church, 2009) and for the regulation of genes such as EGR are highly active in experiencing distress and aggression Saban (2001); Bazun and Larooch (2003).

In EFT therapy, manual stimulation or tapping on energy points cause to produce morphine -like substances, serotonin, GABA -Amino Butyric Acid (GABA) and cortisol hormones that regulate stress and mental tension and aggression is reduced or lost. These changes resulted in the reduction of pain, heart rate, anxiety, autonomic nervous system regulation and also leads to a sense of calmness (Varogoli and Darviri, 2011).

## Conclusion

Generally, results of this study shows the efficacy of EFT therapy on the reduction of aggression in single mothers. Since EFT therapy is a new, affordable and effective method, it is recommended that psychologists and psychiatrists use the above methods to reduce the negative emotions of single mothers and other clients. It is suggested that with due attention to this possibility that this therapy technique has short-term effects, in future plans follow-up stage of effects should be considered in the medium and long term period.

By summarizing what has been stated, it can be concluded that this study is consistent in some ways with the previous studies generally.

## References

- Abolmaaly, Kh. (2012). Development and standardization of aggression scale. *Journal of Psychology*, Y. 1, No. 1, pp. 5-24.
- Ahmadvand, M.A. (2011). *Mental Health*, Payam Nour Publication: Tehran.
- Bolton, R. (2005). *Human Relations Psychology*, Translated By Hamid Reza Sohrabi and Afsaneh Hayat Roshanai, Roshd Publication: Tehran.
- Sarmad, Z. et al. (2008). *Methods of investigation on behavioral sciences*, Agah Publication: Tehran.
- Khanjani, Z. and Azimzadeh, Sh. (2010). Comparison of type and level of aggression among teenagers exposed to violent movies in Meshkinshahr, *Journal of Women and Family Studies*, Y. 3, No. 9, pp. 81-96.
- Dortaj, F. et al. (2009). The impact of training anger management on aggression and social adjustment of male student between 12 and 15 years old, *Journal of Applied Psychology*, Y. 3, No. 4(12), pp. 62-72.
- Seif, A.A. (2009). *New Educational Psychology*, Doran Publication: Tehran.
- Shamloo, S. (2009). *Mental Health*, Vol. 1, Roshd Publication.
- Sadeghi, A. et al. (2002). Study of the effectiveness of group training of anger management using emotional-behavioral-intellectual methods on reduction of aggression, *Journal of Psychology*, Y. 6, No. 1.
- Firoozchy, A. (2006). Review article: Professor Jafari and personality of Islamic women, *Journal of Way of Perfection*, No. 12, p. 253.
- Kaplan, H. and Saduk, B. (2011). *Summary of Psychiatry*, Translated by Farzin Zarei, Arjomand Publication: Tehran.
- Carlson, L. et al. (2010). *Mental Health of Women*, translated by Abolmaaly et al., Savalan Publication: Tehran.
- Craig and Callahan (2005). *Behavioral disorders in children*, Translated by: Tousi, S.M.T., Ghods Razavi Publication.
- Nelson, V. and Izail, A. (1997). *Behavioral disorders of children*, translated by Monshi Tousi, M.T., Energy Publication.
- Baron. R.A. & Richardson, D.R. (1994). *Human aggression* (2nd Ed.). Network: Plenum Press.
- Benor, D. J., Ledger, K., Toussaint, L., Hett, G., & Zaccaro, D. (2009). Pilot study of emotional freedom techniques, holistic hybrid de- rived from eye movement desensitization and reprocessing and emotional freedom techniques, and cognitive behavioral therapy for treatment of test anxiety in university students. *Explore: The Journal of Science and Healing*, 5, 338-340.
- Church, D" Yount G" Brooks Aj. (2012). the effect of emotional freedom techniques on stress biochemistry: a randomized controlled trial. *Foundation f0r Medicine" fulton" CA 95439" USA*
- Church, D. (2009a). The treatment of combat trauma in veterans using EFT (Emotional Freedom Techniques): A pilot protocol. *Traumatology*, 15:4
- Church, D. (2009b). *The Genie in Your Genes* Santa Rosa: Energy Psychology Press, 223.
- Ellis, A. (1998). *Anger, how to live with and without it*. New York: JAICO Publishing Co.
- Hui, K. K. S, Liu, J., Makris, N., Gollub, R. W., Chen, A. J. W., Moore, C. I., et al. (2000). Acupuncture modulates the limbic system and subcortical gray structures of the human brain: Evidence from fMRI studies in normal subjects. *Human Brain Mapping*, 9, 13-25
- LeRoy, S., (2004) welfare and poverty: family matters' fraser for Newzeland
- Novaco, R. W. & Chemtob, C. M. (1998). Anger and trauma: Conceptualization, assessment, and treatment. In: Follette, V. H.; Ruzek, V. I. & Abueg, F. R. *Cognitive- Behavioral Therapies for Trauma* New York: Guililynd.
- Rowe JE. The effects of EFT on long- term Psychological symptoms. *Counseling Clin. Psychol.* 2005; 2 (3) 104- 111.
- Rowe, J. (2005). The effects of EFT on long-term psychological symptoms. *Counseling and Clinical Psychology Journal*, 2(3): Rowe, J. (2005). The effects of EFT on long-term psychological symptoms. *Counseling and Clinical Psychology Journal*, 2(3):104
- Ruden, R. (2009). *When the past is always present: A primer on the origins, consequences, and cure of emotional traumatization*. New York: Routledge. Sabban, E.
- Varvogli, L & Darviri. (2011), *Stress Management Techniques: evidence-based procedures that reduce stress and promote health*, (pp. 74 – 89) *HEALTH SCIENCE JOURNAL*, Volume 5, Issue 2.
- Waite WL & Holder MD. Assessment of the Emotional Freedom Technique: An alternative treatment for fear. *Scientific Rev. Mental 2)20- Health Practice* 2003; 2 (26).
- Waite, L.W. & Holder, M.D. (2003). Assessment of the Emotional Freedom Technique: An Alternative Treatment for Fear. *The Scientific Review of Mental Health Practice*, 2(1) 20-26.