

The Comparison Between Laughter and SEFT Therapies Effect Towards Stress For The Elderly People

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Abstract. The elderly people tend to be prone to stress. It actually relates to life problem, decrease of physical and psychological functions, and loneliness. Laughter and SEFT (Spiritual Emotional Freedom Technique) therapies are effective to decrease stress level. The aim of this research is to compare the influence between laughter and SEFT therapies on stress for the elderly people. This research applies quasi-experimental design. Furthermore, the subjects involved in this research are the elderly people aged 60 and over. They are classified into three groups, laughter therapy, SEFT, and control groups which respectively consisting of 5 elderly people. The subjects are selected by using purposive sampling technique. The data are collected by using Perceived Stress Scale. Then, the data are analyzed by using one-way anava test. The results of the research showed that there is difference alternative in decreasing stress on laughter therapy, SEFT, and control groups ($F = 6.825, p < 0.05$). Control group is slightly different with laughter therapy and SEFT groups. Otherwise, laughter therapy group is not significantly different with SEFT group. As a consequence, SEFT therapy is more effective than laughter therapy in decreasing stress.

Keywords: laughter therapy, SEFT, stress, elderly people

INTRODUCTION

The older population is rapidly growing annually in Indonesia. Based on the data of Central Statistics Body (known as BPS in Indonesia), the number of older population aged 59 or over is 23,190,345 people. In 2008, there was 10 percent of total population in Indonesia suffering from stress. Mainly, women tend to be prone to stress with 135,000 cases rather than men with 86,000 cases (Mijoc, 2009).

The increasing number of older population is surely followed by various issues, such as physical, mental, social, economic, and psychological problems. Stress is a psychological problem experienced by the elderly (Cohen & Janicki-Deverts, 2012; Cohen, Janicki-Deverts, & Miller, 2007; Krohne, 2002). Also, stress is a part of developmental stages in human life. The elderly stage can decrease cognitive and psychomotor abilities as well as learning process, perception, understanding, attention, speed, action, and coordination of an individual (Hurlock, 2001). According to WHO, chronological age of human is categorized into four groups, those are middle age (45-59 years old), elderly age (60-74 years old), old age (75-90 years old), and very old (over 90 years old) (Samodara, Palandeng & Kallo, 2015).

Stress should be prevented before it causes problem on biological and psychological aspects. Biological aspect indicates, for example, excessive headaches, lack of sleep quality, indigestion, loss of appetite, and condition of excessive sweating in all parts of human body. Meanwhile, psychological aspect indicates memory impairment and lack of concentration causing angry, anxiety, and negative behavior (Sarafino, 2008).

The elderly people who are stress can be solved by two alternatives, namely pharmacotherapy and non-pharmacotherapy. Laughter and SEFT therapies are categorized into non-pharmacotherapy medication (Church, 2012; Clark, 2008; Kataria, 1999; Look, 2010; Putri, 2014; Zainuddin, 2006). Laughter therapy is a treatment to create life spirit for the elderly. There are more than 70 percent diseases which highly associated with stress condition, such as high blood pressure, heart disease, anxiety, depression, insomnia, and other diseases (Kataria, 1999).

Previous research showed that laughter therapy can decrease stress level and increase individual health (Bast & Berry, 2014; Desinta & Ramdhani, 2013; Hartanti, 2010; Prasetyo & Nurtjahjanti, 2012; Yazdani, Esmaeilzadeh, Pahlavanzadeh & Khaledi, 2014). This therapy is able to release psychological reversal, such as anxiety, stress, and

depression (Mora-Ripoll, 2010; Papousek & Schulter, 2008; Shahidi, et al., 2011). Laughter therapy not only decrease psychological reversal, but also create positive emotions which is just more than smiling (Neuhoff & Schaefer, 2002).

SEFT (Spiritual Emotional Freedom Technique) is a set of method oriented to the system of human body energy to help an individual from physical and emotional problems. The principle of SEFT states 'the cause of all negative emotions is a disruption in the body's energy system'. Negative emotion is initiated by the representation of poor condition on internal human body. This condition leads to disruption of human body's system. Therefore, SEFT is an effective treatment to restore the system of human body energy (Church, 2012; Clark, 2008; Look, 2010; Zainuddin, 2006).

Based on previous discussion, there is 60 percent of people implementing SEFT can release psychological reversal. Another 20 percent of whose are getting better by practicing continuously the technique. The research on EFT and SEFT indicated that these two therapies could decrease high level of stress of the subject. The subject finally felt relax, comfortable, and peaceful (Banerjee, Puri & Luqman, 2015; Church, Yount & Brooks, 2012; Zainuddin, 2006).

Hereby, the researcher would like to implement laughter and SEFT therapies in decreasing stress. These therapies are easy to be learned and applied by anyone due to less equipment and specific treatment. As noted, these therapies can be implemented by an individual after training conducted by the experts. This research focuses on the comparison between laughter and SEFT therapies effect towards stress for the elderly which is never been conducted before. Therefore, the researcher is interested to conduct this research. The aim of this research is to compare the effect of laughter and SEFT therapies on stress for the elderly.

Literature Review

Laughter therapy to decrease stress for the elderly

Stress is defined as a body reaction on internal and external condition which can threat health of the elderly (Cohen & Janicki-Deverts, 2012; Cohen, Janicki-Deverts, & Miller, 2007; Krohne, 2002). The perception of the elderly on stress can be pathogenesis of physical problem caused by psychological reversal (anxiety and depression). It directly influences physiological and psychological process or behavior patterns indicating anxiety and depression on the

elderly (Cohen & Janicki-Deverts, 2012; Cohen, Janicki-Deverts, & Miller, 2007).

Stress on the elderly is occurred due to several problems, such as life changes, decrease of physical and psychological functions, loneliness, and post power syndrome (Samodara, Palandeng, & Kallo, 2015). Stress is commonly known by stressor. Stressor is a condition of human body, environment, mind, external stimulus, or threat experienced by an individual (Desinta & Ramdhani, 2013; Mardiana & Zelfino, 2014). Moreover, stress is caused by anxiety, annoyed, exhausted, frustration, over work, focusing only on one thing, confused, continuous fear (Desinta & Ramdhani, 2013).

One of therapies that can decrease stress is laughter therapy. This therapy is combined with yoga and meditation and aimed at assisting an individual to decrease physical and mental problem. Laughter therapy allows an individual to feel comfortable and peaceful naturally instead of stress. Feeling happy could make an individual to smile and laugh. Otherwise, depression could make an individual getting uncomfortable. In other word, happy and sad emotions depict on the facial expression naturally (Kataria, 1999).

Laughter therapy applies behavior approach through conditioning method. This therapy is conducted by allowing the subject to laugh and requiring individual body movement. The laughter accidentally appears without any humor boost. An individual is trained to do motor skill and laughter voice (increase of parasympathetic nervous system and decrease of sympathetic nervous system). Regarding facial feedback hypothesis, the change of facial expression can create the same emotion (Kataria, 1999). Several studies about laughter therapy showed that it had psychological and physical effects concerning to stress self-efficacy, and blood pressure (Beckman, Regier & Young, 2007; Chaya, Kataria, & Nagendra, 2008; Christina, 2006).

Commonly, laughter therapy also applies cooperative approach which means that it is conducted together with the partner and becomes one aspect of communication. According to Ryff and Singer (in Hartanti, 2010), laughter has positive interaction in connecting each other. As a consequence, laughter affects interpersonal relation. To obtain effective result, the therapy should involve eye contact. Eye contact aims at giving stimulus to other and affecting other to laugh. Cooperative approach is considered having advantages, especially therapeutic factors: (1) members of group will increase life expectancy while therapy process; (2) members of group will meet another member that facing the same problem, in case the meeting will aware the members of group to feel that they are not alone; (3) members of group will be supported by another group; and (4) members of group will also be trusted by another group.

While an individual facing stress, the body feels exhausted in producing epinephrine. This condition leads to decrease of immune system of human body. Palma (2002) revealed that individual with exhaustion will experience lack of adrenal due to psychological reversal. Laughter is a transition between the increase of parasympathetic nervous system and decrease of sympathetic nervous system. The increase of the system performance aims at supplying energy for body movement. Then, it is continuously followed by the decrease of sympathetic nervous system which causes the relaxation on certain muscles of human body and reduction on nitric oxide leading to artery. As a consequence, the influence of laughter causes average of blood flow is 20 percent while stress causes the decrease of blood flow by 30 percent (Hasan & Hasan, 2009).

The research on the effect of laughter showed that it is psychologically and physically good for human health. Laughter physiologically helps an individual to control blood

pressure by reducing stress level (Bennet, Zeller, Rosenberg & McCann, 2003). Christie and Moore (2005, in Hartanti, 2010) showed that review on several scientific journals concerning to humor and laughter is applied as coping with stress. The effect of laughter physiologically can control blood pressure by reducing stress hormone and creating relaxation. The research about laughter therapy which is conducted by Hartanti (2010) showed that laughter therapy can decrease distress and control blood pressure on patient with hypertension. Another research conducted by Hartanti (2002) showed that humor and social support could reduce depression on adult patient after stroke attack. In addition, another research showed that humor could reduce stress (Hartanti, 2008).

Spiritual Emotional Freedom Technique (SEFT) to Decrease Stress on the Elderly

SEFT is a therapy using simple movement aims at healing pain on patient, increasing health performance, and obtaining peaceful and life meaning. The stages of this therapy are (a) the set-up, aims at neutralizing psychological reversal on human body; (b) the tune in, aims at directing mind in pain spots; and (c) the tapping, aims at investigating pain spot by tapping on certain spots of human body (Zainuddin, 2006).

SEFT is a combination between the system of psychological and spiritual energy, thus resulting amplifying effect. In the stage of implementation, there are three things that must be applied by patient: (a) devoutness (*khusyu'*); (b) truthful (*ikhlas*); (c) submission (*pasrah*). Those stages are the key for success in the implementation of SEFT. The guidance of SEFT is to instruct the patients to say positive word and block individual emotion in order to clear mind and create balance. Patients with stress feel relax and peaceful after implementing SEFT method (Zainuddin, 2006).

SEFT also applies spiritual approach. In SEFT implementation, there is spiritual affirmation process, such as reciting *do'a* as an affirmation and form of submission to Allah (Zainuddin, 2006). Thus, the therapy combines between spiritualities (*do'a*, truthful, and submission) and psychological energy to neutralize negative emotion (psychological reversal).

Anwar and Niagara (2011) said that SEFT could solve specific phobia disorder. It also can decrease stress on individual (Zainuddin, 2006). The victim of accident could experience PTSD followed by nightmare and fear of change significantly while using EFT (Swingle, Pulos, & Swingle, 2005). McCarty (2008) discussed the findings of his research, the children aged 6 years old have eating phobia. After EFT treatment, the children started to eat regularly. EFT also has a good effect for students' anxiety (Benor, Ledger, Toussaint, Hett, & Zaccaro, 2008). In addition, it creates peaceful condition for patient with Traumatic Brain Injury (TBI) (Craig, Bach, Groesbeck, & Benor, 2009).

Based on previous discussion, laughter therapy creates sense of happiness by showing facial expression, thus it reduces psychological reversal on individual with stress. Mainly, SEFT has systematical procedure in stimulating effect towards stress. SEFT also covers several stages, those are: (1) *the set-up*, aims at neutralizing psychological reversal; (2) *the tune in*, the patient feels devoutness, truthful, and submission while praying to Allah as affirmation that we are weak living creature; (3) *the tapping*, aims at blocking individual emotion of body energy system and healing individual mind and body balance. This explains why SEFT is more effective than laughter therapy. Thus, it confirms the hypothesis that the difference of stress level for the elderly coming from SEFT group is more effective in decreasing

stress level than the elderly coming from laughter therapy group.

METHOD

Research Design

The research uses quasi-experimental with non-randomized pretest-posttest control group design. This design is not randomized to establish experimental and control groups (Bungin, 2013). Particularly, this design aims at comparing the influence between SEFT and laughter therapies on the elderly with stress. Group of intervention I acquires laughter therapy treatment; group of intervention II acquires SEFT treatment; and control group do not acquire any treatment.

Table 1. Research Design

Groups	Pre-test	Treatment	Post-test
Group I	1	1	O2
Group II	3	X2	O4
Control Group	5	-	O6

Notes:

- Group I and II : Experimental group I (laughter therapy) and Experimental group II (SEFT therapy)
- X1 : Laughter therapy
- X2 : SEFT therapy
- O1, O3 & O5 : Level of stress on the elderly before treatment
- O2, O4 & O6 : Level of stress on the elderly after treatment

Research Subject

The subjects involved in this research were 15 elderly people consisting of 3 groups: laughter therapy group, SEFT therapy group, and control group. Each group consists of 5 elderly people. The subjects are selected by using purposive sampling technique. According to Latipun (2010), purposive sampling is a technique to select the subject based on certain considerations.

The subjects of the research should meet several inclusion criteria, such as: (1) the subject is 60 years old or over; (2) the subject experiences stress with medium and high level; (3) the subject is not under other psychological treatment aiming at organizing stress problem (based on unstructured interview to the subject); (4) the subject is still communicating in order to ease research process; (5) the subject should not have chronic severe illness record (based on unstructured interview and health record from health center); (6) the subject should be ready to follow up laughter and SEFT therapies marked by informed consent contract.

Research Variable and Instrument

Variable is perceived as a concept with variability aspect. It is also a varied construction with certain value (Latipun, 2010). The variables measured in this research are stress and the elderly.

Meanwhile, this research applies Perceived Stress Scale as an instrument (Cohen, 1994). It consists of 10 statements with the options 'never', 'almost never', 'sometime', 'often' and 'very often' with the range of 0-4 (Cohen, 1994 in Corcoran & Fischer, 2000). The scale is designed based on individual experience and perception about personal life. The aspects involved in this scale are feeling of unpredictability, feeling of uncontrollability, and feeling of overloaded. For example,

on the item scale, 'I feel nervous and depressed'. This scale aims at measuring the condition of personal life which considered stress. Therefore, the reliability of Perceived Stress Scale is 0.85.

Based on the test on 50 subjects conducted in November 1, 2016, the reliability value was 0.712 (reliable). Also, the results found that 4 from 10 items with number 1, 4, 5, and 9 (item discrimination < 0.30). The result of the test of laughter and SEFT therapies on 4 subjects conducted in November 2-8, 2016 showed that during the treatment the subjects could follow the instruction well. However, the problem was inability of the subjects to speak Bahasa Indonesia. Therefore, the therapist should communicate to them in Javanese language. Moreover, the subjects could not follow two stages of laughter therapy optimally (laughter with forgive and laughter stages). Thus, those stages of laughter therapy are not used to the next session for experimental group.

Research Procedures

- The researcher applies screening activity to 43 elderly people using Perceived Stress Scale. Based on criteria, the researcher reduces the subjects becoming 15 elderly people.
- The elderly is asked to fill out willingness sheet as a subject (informed consent).
- The researcher distributes Perceived Stress Scale as an initial data to examine the level of stress before pre-test.
- The researcher prepares observation sheet to examine subjects' behavior during treatment process and after committing laughter and SEFT therapies.
- The researcher provides module of laughter and SEFT therapies as a guidance during treatment process.
- Intervention process
 - Laughter Therapy

Laughter therapy is defined as a training session and compilation of segmental breathing, stretching, and laughter exercises. Laughter therapy mainly has been developed by Kataria (1999) and has ever been implemented in the study of Skrekou (2007), Prasetyo and Nurtjahjanti (2012). Each session of this therapy is a combination between segmental breathing exercise, stretching exercise, and other technique of laughing stimulus. Commonly, one session spends 20-30 minutes. Meanwhile, one round of laughing session spends 30-40 seconds. This therapy is implemented once a week (6 meetings).

 - There are several stages of laughter therapy (Kataria, 1999).
 - Breathing
 - Physical relaxation
 - Collecting social support
 - Mental relaxation
 - The tools are therapy module and observation sheet.
 - Spiritual Emotional Freedom Technique (SEFT)

SEFT is a therapy developed by Zainuddin in 2005 (2006). This therapy is applied at least 30 minutes in a week (6 meetings).

 - There are several stages of SEFT therapy (Zainuddin, 2006).
 - Doing Set Up
 - Doing Tune In
 - Doing Tapping

In the line with Tune In activity, the therapist taps to vital areas of the major energy meridian, such as:

 - Head
 - Chest

(c) Hands

After the end of session, the therapist instructs the subject to take deep breath slowly through nose and exhale through mouth followed by saying ‘Alhamdulillah’.

- 3) The tools are therapy module and observation sheet.
7. After giving therapies, the therapist measures the subject again using Perceived Stress Scale to examine stress level (post-test).
8. After two weeks therapy, the therapist follows up the subject Perceived Stress Scale to examine stress level.

Data Analysis

The result of the test showed that there is no difference between pre-test and post-test results on two groups analyzed by two stages of analysis, homogeneity and hypothesis tests (Winarsunu, 2006; Widhiarso, 2011)

RESULTS and DISCUSSION

Data Description

The subjects of this research consist of 15 elderly women aged 60-75 years old. The data described that 3 subjects are categorized high level of stress and 12 subjects are categorized medium level of stress.

Table 2. Data Analysis of the Research Subjects

Subject Characteristics	Laughter Therapy Group	SEFT Group	Control Group	Total
Age				
60-75 years old	(33.3%)	5 (33.3%)	5 (33.3%)	15 (100%)
Gender				
woman	(33.3%)	5 (33.3%)	5 (33.3%)	5 (100%)
Level of Stress				
Medium	(26.64%)	4 (26.64%)	4 (26.64%)	12(79.9%)
High	(6.7%)	1 (6.7%)	1 (6.7%)	3(20.1%)

Result of Assumption Test

Normality test with Shapiro-Wilk test found that the significant value of laughter therapy, SEFT, and control groups are 0.42, 0.44, 0.49 ($p > 0.05$) and categorized normal distribution. Homogeneity test with Levene test found that the significant value is 0.50 ($p > 0.05$) and variables of those groups are homogenic. Therefore, assumption test has met the criteria and can be conducted further analysis.

Analysis Results

The result of analysis showed that the value of $F_{\text{calculation}}$ is 6.82 and F_{table} is 3.88. It also showed that $F_{\text{calculation}} > F_{\text{table}}$ ($6.82 > 3.88$) with significant 0.01 ($p < 0.05$), thus the hypothesis stated that there was difference of stress level on the elderly from laughter therapy, SEFT, and control groups is accepted

Table 3. The Comparison of Influence between Laughter Therapy, SEFT, and Control Groups

Group	Group	Mean Difference	Sig.
Laughter Therapy	SEFT	-0.20	1.00
	Control	3.20	0.03
SEFT	Control	3.40	0.02

The comparison of influence among those three groups showed that laughter therapy group is significantly different with control group (mean 3.20 with significance of 0.03 ($p < 0.05$)); SEFT group is significantly different with control group (mean 3.40 with significance of 0.02 ($p < 0.05$)); and laughter therapy group is not significantly different with SEFT group (mean -0.20 with significance of 1.00 ($p < 0.05$)). Based on explanation above, SEFT is more effective than laughter therapy in decreasing stress on the elderly.

Discussion

According to data analysis, laughter therapy, SEFT, and control groups can decrease stress level on the elderly. However, there is significant differences on average among those three groups with treatment and without treatment. The result of the research showed that SEFT is more effective than laughter therapy decreasing stress level on the elderly.

Particularly, SEFT can to decrease stress on the elderly. This statement is supported by previous study, Sadif and Safitri (2013) which stated that SEFT is an effective way in decreasing depression and other chronic disease on patient. Another study also showed that EFT and SEFT can decrease the level of stress on subject. The subject feels relax, comfortable, and peaceful (Banerjee, Puri & Luqman, 2015; Church, Yount & Brooks, 2012; Karatzias, Power, Brown, McGoldrick, et al., 2011; Zainuddin, 2006).

The subject treated by SEFT will be accustomed to affirm him or herself becoming individual with positive emotion, devoutness, submission on problem related to stress. Moreover, SEFT positively affects to physical health of an individual due to its function to reduce negative emotion through energy system alignment of human body (Zainuddin, 2006). It combines spiritual aspect and energy system of human body to produce positive thinking as well as emotion (Frenstein, 2009).

In SEFT therapy, there is relaxation process aimed at healing subject’s health. Jacobson and Wolpe in Prawitasari et al. (2002) stated that relaxation can reduce stress and anxiety. Sympathetic nervous system plays an important role when an individual feels stress. However, parasympathetic nervous system plays an important role when an individual feelrelaxes.

SEFT has 14 therapy techniques, affirmative suggestion is one of them. There is spiritual affirmation, such as reciting *do’aseveral times as an affirmation and form of submission to Allah* (Zainuddin, 2006). Thus, the therapy combines between spiritualities (do’a, truthful, and submission) and psychological energy to neutralize negative emotion (psychological reversal).

The result of the research also showed that laughter therapy can reduce stress on the elderly. Psychologically, the influence of laughing can decrease stress level (Bennet, Zeller, Rosenberg & McCann, 2003). Moreover, Christie and Moore (2005, in Hartanti, 2010) had reviewed several scientific journals regarding humor and laughing that were used as coping with stress. It physiologically helps to control blood pressure by reducing stress hormone and creating relaxation. The study conducted by Hartanti (2010) showed that laughter therapy could reduce distress and control blood pressure on patient with hypertension. She also explained that humor and social support are effective in reducing stress level on patient after stroke attack.

Rutledge and Hupka (in Pinel, 2009) stated that the subject does not feel angry when he or she is happy. Otherwise, the subject does not feel happy when he or she is happy. This statement is accordance with hypothesis by Waynbum stated that facial expression favorably influences

the way of thinking and feeling of an individual. As stated by Cousins (in Palma, 2002), positive emotion leads to individual health condition while negative emotion leads to illness. Moreover, Rubensin (in Hodkinson, 1987) said that laughter is the best cure. He also said that laughter in one minute can create relaxation in 45 minutes for human body. Laughter through stomach produces muscle relaxation. After laughing, the involved muscles in the process feel relaxes (Calvert & Whipple, 2008).

Previous study showed that an action to generate facial muscles in creating happy expression can give positive effect on nervous system. Paul Ekman (in Prasetyo & Nurtjahjanti, 2012) believed that movement on facial muscles is highly associated with autonomous nervous system in organizing heartbeat, breathing, and bodily functions unconsciously. Zajonc (in Prasetyo & Nurtjahjanti, 2012) stated that laughter therapy is used to cure patient with psychosomatic and psychological reversal, such as stress, depression, and anxiety. An individual is helped to control facial muscles to feel happy.

In the first stage of therapy, the therapist built communication with the subjects to create a comfortable atmosphere. The subjects followed instruction from beginning until the end of session. In milk shake stage, the subject tried humming laughter with closed lips, laughter exercise cell phone, and laughter resembled lion. Those five subjects from laughter therapy group seemed shy doing laughter movement. In the fourth stage, two subjects of this group laughed while followed by covering their lips. They did not follow instruction from the therapist. Their laughter seemed as made up, thus they could not feel relax. In the third meeting, the subjects adapted and followed instruction from the therapist. They also started to feel confidence in doing laughter movement.

In SEFT therapy process, the subjects could follow instruction from the therapist from the first stage until the end, set up, tune in, and tapping stages. Initially, they also seemed shy showed by tight position of their body while the therapist applied tapping activity under chest spot. In addition, the subjects raised their hands up when the therapist tapped under armpit spot. The subjects seemed difficult to follow several movements of 9 gamut procedures, such as moving eyes from the right to the left and rolling the eyeballs in the same and opposite direction. In the third meeting, the subjects started to adapt with instruction from the therapist. Finally, they did not seem shy and tight while the therapist tapped spot under chest and armpit areas. They were good enough to do 9 gamut procedures even they were not optimal yet.

The subjects of laughter therapy and SEFT groups felt good and peaceful after obtaining those therapies instead of feeling negative emotions, such as angry, anxious, and sad. This change was supported by interest, motivation, and participation to end stress during stress therapy.

Basically, the technique of laughter and SEFT therapies can be implemented by self help without specific treatment. Oemarjoedi (2003) stated that the therapist should prepare professional alternatives to compromise the dependence of subjects on treatment in solving their problem. After the end session of therapy, the therapist suggested subjects to practice the therapy based on gamut procedures. It indirectly influenced the result in two weeks after therapy. This result showed the decrease of stress level is effective.

CONCLUSION AND RECOMMENDATION

Based on the result of the research, laughter and SEFT therapies have the similar influence in decreasing stress level on the elderly people. After comparing among those three control groups, SEFT therapy is the most effective in decreasing stress on the elderly.

The next researcher is recommended to consider several things, such as the use of random assignment in (1) classifying the subjects into experimental and control groups; and (2) adding the number of research subjects and scale item to create representative result. The elderly people and health center staffs are advised to implement laughter and SEFT therapies to solve stress and other psychological problems.

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