

Comparison of the effectiveness of Cognitive-Behavior Therapy and Yoga on happiness Increase in students of Medical Sciences University of Torbat Heydaiyeh

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ABSTRACT

The aim of the present study was to compare the effectiveness of cognitive-behavior therapy and Yoga on happiness increase in students of Medical Sciences University of Torbat-e-Heidariye.

Procedures: Oxford Happiness questionnaire was used to gather the data. The independent variable was 8 sessions of group cognitive-behavior therapy and Yoga while the dependent variable was the score obtained by the Oxford Happiness Questionnaire. The statistical sample consisted of 45 students of Medical Sciences University of Torbat-e-Heidariye in 2013-14. They were chosen via simple sampling method and divided randomly into 3 experimental and control groups (n=15). The design was semi-experimental with the pre-test and post-test with a control group. Data was analyzed using SPSS-16 software and t-test.

Findings: the results of this study showed that both cognitive-behavior therapy and Yoga had positive effects on students' happiness.

KEYWORDS: cognitive-behavior therapy, Yoga, student, happiness

INTRODUCTION

From long years ago, development, self-actualization, achieving an eminent human place, making harmony in individual realms, and general biologic assurance has been the most basic human attempts in all ears in various forms. Human attempts in these years have helped him a lot and he has become successful in asserting his existence by a perfect knowledge about all his existence aspects. Now, we have no way except development, progress and making harmony in qualified and quantified aspects; paying simultaneous attention to the body and soul is crucial for achieving these goals. Human psyche is an aspect of his existential aspects. As the body has some requirements for its existence and development, the psyche also needs to hygiene and therapy, nourishment, pastime, and similar factors. In fact, a healthy body is the base of fostering a healthy psyche and a healthy psyche is the base of fostering a healthy wits. Therefore, a person with physical problems will possibly encounter problems in other human aspects, since discipline in the nature, makes close relations among components of any system, in a way that if a part of a system is discipline less, other parts of this system will suffer from it, too (entropy) (2).

One of the features of mental health is having positive emotions like happiness. Happiness includes one's cognitive and emotional evaluations from himself and his life. In recent decades, many researchers and authors have paid attention to enjoyment, happiness, and satisfaction with life. Seligman et al (2001), stated that the number of psychological abstracts on mental health, happiness and life satisfaction essays had come to 780 ones in 1980s (3). In contrast to this belief that the fixation point for happiness is determined by heritage, and considering the fact that the cultural environment facilitates our sense of health or makes barriers to it, it is possible to foster our skills and organize the environment in a way that it become possible to spend most of our time close to fixation point of happiness or beyond it (4). Positivist psychologists tend to help people having a happier a life. In this process, they investigate the nature of happiness and how they can increase individuals' happiness and satisfaction. They believe that life satisfaction is caused by finding challenges, selecting personal goals, and making meaning to life (5). Treatment process in cognitive therapy is the issue of researchers who try to find the shortest and best time for treating disorders like depression and anxiety. Therapy of patients with borderline personality disorder should be done in the same way. However, making some modulation in standard cognitive therapy is necessary for this group of patients (6). The basic hypothesis of cognitive-behavior approaches is that cognition affects feelings and behaviors. In addition, it is believed that people respond to their cognitive restructuring of events more than the events, themselves. CBT counseling emphasizes on reduction of

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beliefs effects or malfunctioned feedbacks (7). In this approach, the client learns to objectively evaluate his/her thoughts and imaginations about unpleasant events. In other words, he/she learns to evaluate them based on the objective evidence, amend his/her cognitive distortions, gain new and more compatible cognitions about the self, world and future, and also to reduce malfunctioned schemas (8). CBT is a combination of behavior therapy as well as cognitive therapy. It has integrated strengths point of these two separate approaches including objectiveness, evaluation, and using the role of memory in restructure and interpreting of information, as a one single body of knowledge (9).

Yoga means alike, couple, integration, and its applied meaning means the integration of body and soul. This word is derived from the root of a Sanskrit word and means becoming single or joined. Yoga is not a religious approach but a scientific way that its techniques can be applied by Buddhists, Jewish, Moslems, Hindus and even pagans in the same way. Yoga is integration with the whole (10). Happiness is a necessity that gives meaning to the life and basically, the creation of the world and human is in the way that brings about happiness and enjoyment per se (11). Plato in the book "Republic" points to 3 components in human entity including reason, appetites, and emotions. He considers happiness as the balance of these three components. Happiness gadgets and its related factors have 3 major parts: positive emotion, life satisfaction, and lack of negative emotions like depression and anxiety (12). Mayers and Dainer (2003) also believe that happiness has emotional, social and cognitive components. Emotional components cause the individual to be always happy. Social components results in the development of social relations and increase of social supports. Finally, cognitive component helps the individual to have his/her own specific thought and processing of information and to interpret daily events in a way that brings him/her optimism. Having positive relation with others, purposeful life, personal development, loving others and the nature, are also components of happiness (13). Happiness has positive effects on life style and academic success of students and increases the tendency to do tasks related to academic progress. This explanation is derived from many studies that report happiness terminates in attractive and productive activities.

Psychologists believe that happiness is an important factor in students' academic success. Many studies have revealed that students with permanent happiness have higher levels of mental health. Lack of happiness and low self-confidence are factors that result in reduction of life quality and academic states of students (14). Scat, Shanon and Carolin (2006) showed that students with high levels of happiness can easily ask their teachers to help them while confronting academic problems. Houtard (1989; quoted by Dehdashti Lahestani, Ahankooob Nezhad, Mombini, and Alavi, 2012) investigated the influence of happiness on academic performance of Norwegian students. He found a positive correlation between happiness and academic performance. Results of the study of Tamannayi Fard, Salalmi Mohammad Ababdi, and Dashtban Zadeh (2012) also unfolded a significant relation between mental health and happiness; meaning that the higher the levels of mental happiness, the higher the level of happiness, and vice versa.

Study Design

This was experimental study. The samples were selected among students of Medical Sciences University of Torbat-e-Heidariye and put randomly to 2 experimental and 1 control groups. The experimental groups participated in 8 sessions of CBT and Yoga. These sessions were holding twice a week, each one lasted for 90 minutes. Oxford Happiness Questionnaire was filled before and after the interventions.

Statistical population

Statistical population of the present study consisted of all B.A female students of Medical Sciences University of Torbat-e-Heidariye in 2013-14 (N=650).

Sampling method

To compare the effectiveness of CBT and Yoga on happiness increase in students, an experimental and applied research was done on some students of Medical Sciences University of Torbat-e-Heidariye, randomly. First, a primitive screening was performed on the dependent variable and then, 2 experimental and 1 control groups were formed from the output of this screening. Subjects were put randomly in these 3 groups. The groups were matched according to age and studies. Before experimental manipulation, a pretest was performed on dependent variables in the experimental groups. Then, these groups were exposed to a new or different independent variable and finally, at the end of the experimental period, the independent variable was measured again in both groups.

To perform this research, first, all participants filled the OHQ in order to evaluate the happiness rate; they filled the same questionnaire once again at the end of the interventions.

Tools

Oxford Happiness Questionnaire was used in this study. Short explanation about the periodic nature and validity of this questionnaire is presented below.

1-5-3 Oxford Happiness Questionnaire (OHQ)

Oxford Happiness Questionnaire is the improved form of Oxford Questionnaire (Argayle, Hills & Crossland, 1989), made by Hills and Argyle (2002). It evaluates these psychological constructs: life enforcers, mental readiness, self-satisfaction, aesthetic feeling, life satisfaction, time organization, attractiveness seeking, and happy memories.

Hills and Argyle (2002) had reported its reliability 91% and internal correlation among items as 40% to 65%. They found a significant relation between this questionnaire and extroversion ($p < 0.001$; 61%), neuroticism ($p < 0.001$; 59%) and psychosis ($p < 0.05$; 17%) scales. In addition, positive correlations have been found between OHQ and life orientation questionnaire, life attention scale, self-respect test, and life satisfaction scale that confirms its high constructs validity (15). OHQ has 29 items, each one consisted of 4 statements and the subject should choose one of them. The score of each item is from 0 to 3; the least total score is 9 and the maximum is 87 (16). Hadi Nezhad and Zarei (1385) performed OHQ on 1021 male and female students of Zanjan city studying in math majors. They reported correlation coefficient of this questionnaire by test-retest method and 4 weeks interval, as 78% ($p < 0.001$). Chronbach alpha was 84% in the test time and 87% in the re-test time for the total OHQ index, which are desired measures. Several methods were used to evaluate the validity of the questionnaire. To investigate the content validity, OHQ was given to several psychology experts and they confirmed its ability in evaluate happiness. Findings of the present study showed that Oxford Happiness Questionnaire has desired validity and reliability and is appropriate to measure happiness in Iran.

Method of Performance

Subjects of the present study were chosen randomly and then the examiner was introduced. Then, a short explanation about the questionnaire was presented and the subjects were asked to fill it if they liked to participate in the research. The subjects were selected randomly from students of Medical Sciences University of Torbat-e-Heidariye. In this experimental study, 45 students from Medical Sciences University of Torbat-e-Heidariye were chosen and put randomly into 3 groups of Yoga, CBT and control. After explaining the way of filling the questionnaire, the subjects were told to ask questions to remove any ambiguous about the items. No certain time was determined to fill the questionnaire, however, it was said that the first answer is usually the best and most accurate one.

Subjects of the first and second experimental group participated in 8 sessions of group cognitive-behavior therapy and Yoga, respectively. These sessions were holding twice a week (4 weeks), each one lasted for 90 minutes. The control group received no intervention during this period. At the end of the intervention, the post-test was conducted on all 3 groups. Both experimental groups were matched based on the age and studies.

Intervention method

Contents of the study sessions were designed according to theoretical and applied principle of CBT and Yoga with the aim of increasing students' happiness. Like other psychological approaches, they are also based on basic skills in counseling like understanding the client, reflecting his/her speech, acceptance and lack of judgment about him/her.

Summary of CBT model

Session 1: salutation, introducing the subjects, reviewing the general pattern of sessions, explaining the group roles, describing ABC model, giving homework for the next session

Session 2: reviewing homework of the previous session, explaining automatic thoughts and cognitive distortions, giving homework for the next session

Session 3: reviewing homework of the previous session, teaching basic negative beliefs, downfall arrow technique, giving homework for the next session

Session 4: reviewing homework of the previous session, teaching the way of evaluating and challenging thoughts, presenting several techniques on this issue, giving homework for the next session

Session 5: reviewing homework of the previous session, teaching about evaluation of the assumptions and rules, presenting several techniques on this issue, giving homework for the next session

Session 6: reviewing homework of the previous session, teaching about evaluation of worries, presenting several techniques on this issue, giving homework for the next session

Session 7: reviewing homework of the previous session, teaching about placing the issue on the outlook, presenting several techniques on this issue, giving homework for the next session

Session 8: reviewing homework of the previous session, teaching about information processing and logical errors, explaining about available exercise, reviewing previous sessions, listening to participants' ideas about the group

Summary of the mediation therapy (Yoga)

Session 1: salutation, introducing the members, explaining about Yoga and the way of performing sessions

Session2: performing meditation (body awareness), performing Asana (body flexibility and doubling body energy), Shavasana (breathless body and taking energy from the earth) Meditation, Asana, and Shavasana were repeated till the eight sessions

Data analysis

After selecting the subjects via simple sampling method, they were asked to read the questionnaire carefully and answer it accurately. They were assured that their personal information would remain secret and there was no need to write name and family. By using SPSS software, covariance analysis was used to compare the effectiveness of CBT and Yoga on happiness, while one-way variance analysis was applied to compare the two approaches according to the difference between the pre-test and post-test outcomes.

DISCUSSION AND CONCLUSION

The aim of the present study was to compare the effectiveness of cognitive-behavior therapy and Yoga on students' happiness increase. According to our findings, both CBT and Yoga were effective in increasing students' happiness. This finding is consistent with the finding of Veris (2006) and Simus (2005). These researchers showed that teachings cognitive distortions to students who suffered from weak moral could increase their spirituality. Badripour, Kamarzariin and Taqi Zade also reported that Yoga could improve individuals' moral. Houtard (1989; quoted by Dehdashti Lahestani, Ahankoob Nezhad, Mombini and Alavi, 2011) investigated the influence of happiness on academic performance of Norwegian students. He observed a positive and significant relation between happiness and academic performance. This study also uncovered that teaching cognitive-behavior therapy and Yoga results in significant reduction of students' stress and increases their happiness.

Data analysis:

Hypothesis: there is a significant relation between effectiveness of cognitive-behavior therapy and Yoga in students' happiness increase

Table 1: descriptive parameters of pre-test and post-test in the 3 group

Group		Mean	SD	Standard Error of Mean
CBT	15	-21/47	15/01	3/88
Yoga	15	-25/27	10/79	2/79
Control	15	-2/40	5/57	1/44

According to Table 1, the mean of difference between pre-test and post-test results was -21.47, -25.27, and -2.40 in the CBT, Yoga and control groups, respectively; the highest mean of difference belongs to Yoga.

Table 2: one-way variance analysis of the difference between the pre-test and post-test results

Variable	Sum of Squares	fd	M	F	Sig.
Inter-group	4504/311	2	2252/156	18/127	0/001
Intra-group	5218/267	42	124/244		
Total	9722/578	44			

As it is shown in table 2, in variance analysis test, the difference between pre-test and post-test is 18.27 and the significance level is 0.001. Since the significance level is less than 0.01, the zero hypothesis is rejected and it can be said by 99% that there is a significant level among the happiness means of the 3 (cognitive-behavior, Yoga, and control) groups.

Fisher test (LSD) was used to investigate the different categories more carefully.

Table 3: Fisher test LSD

i	j	Difference of Means	Sig.
CBT	YOGA	3/80000	0/356
	Control	-19/06667*	0/001
YOGA	CBT	-3/80000	0/356
	Control	-22/86667*	0/001
Control	CBT	19/06667*	0/001
	YOGA	22/86667*	0/001

Based on the Table 3, the sinificance level of the test between the control group with cognitive-behavior and Yoga groups is less than 0.05; therefore, the zero hypothesis is rejected and it is confirmed that the mean of

difference is significant among the mentioned levels. Significant level is higher than 0.05 in other groups (CBT and Yoga) , so, the mean of happiness is not significant between them. In other words, both approaches were effective in increasing students' happiness.

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