

Effectiveness of Spiritual Therapy on Negative Automatic Thoughts and Life Satisfaction in Depressed Students

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Abstract

Depression is one of the most common psychiatric disorders and a mood disorder that manifests itself with symptoms such as low mood, loss of feeling, emptiness, mental and motor slowness, sadness, hopelessness, boredom, loneliness, they show guilt and inability to concentrate and thoughts related to death. The aim of the present study was the effectiveness of spiritual therapy on negative self-esteem thoughts and life satisfaction of university depressed students. The method of this research was semi-experimental with a pre-test and post-test design with a control group. The statistical population of this research included all depressed male and female students. The sample of this research included 36 depressed students (18 students in the experimental group and 18 students in the control group) who were selected by simple random. The process of selecting the sample was as follows: first, the Beck depression questionnaire was administered among students, and among the 66 students who scored above 20 (cut point) and based on the entry criteria, 36 were randomly selected into two experimental and control groups. (each group consist of 18 individuals). The experimental group was exposed to 10 sessions of spiritual training, and during this time, the control group did not receive any treatment. Beck depression questionnaire, negative spontaneous thoughts questionnaire and life satisfaction scale were used to collect data. The results of multivariate analysis of covariance (MANOVA) showed that spiritual therapy training was associated with a decrease in self-negative thoughts and an increase in life satisfaction of depressed students ($p < 0.001$). Based on the findings of this research, it can be concluded that spiritual therapy actually reduces negative emotions such as depression through secret and need with God and solitude with the Almighty, and as a result improves life satisfaction in a person.

Keywords: spiritual therapy, negative automatic thoughts, life satisfaction, depression

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1. Introduction

Depression is one of the most common and debilitating emotional phenomena of the present century that torments humans today (Chakrabarty et al, 2023). Depression has many important and debilitating complications, so that it is mentioned as the fourth most costly disorder in the world in 1990 and the second most costly disorder in the world by 2015, and numerous factors may predispose to depression. Some of them may exist for all members of society, including: inheritance and genetic factors, cognitive style, hormonal interactions and neurotransmitters, stress, etc., which may all cause depression in individuals. The latest edition of the Diagnostic and Statistical Manual of Mental Disorders of America (DSM-5) includes the following depressive disorders: 1- Disruptive mood dysregulation disorder, 2- Major depressive disorder and persistent depressive disorder (Casey, 2017). We have two important events in depression: loss and failure. Depression affects the emotional, behavioral, cognitive, and physical aspects of the individual. Depression has numerous symptoms, such as emotional experiences like sadness, hopelessness, and lack of motivation, lack of interest in activities and lack of pleasure, decreased sexual desire, feelings of worthlessness and emptiness and hopelessness, pessimistic beliefs, thoughts of suicide, inability to concentrate and make decisions, slow speech and behavior, fatigue, psychomotor retardation in most individuals and sometimes the opposite of psychomotor agitation, being unkempt and disregarding hygiene, decreased or increased appetite and weight, constipation, sleep disorders that cause lethargy, insomnia or hypersomnia, menstrual cycle disorder, decreased sexual arousal (Richardson, 2018). The depressed person interprets every event pessimistically and has a selective focus on the negative aspects of their life. These people focus on the deficiencies, stressful events, and failures of their lives, attribute every event to themselves, and constantly criticize themselves (Herrera et al, 2021). Due to its detrimental effects, students are among the most vulnerable people to the consequences of this disorder (Mei et al, 2020). Depression can be a trigger for physical, psychological, social, and even spiritual problems for students. Numerous studies show that the prevalence of this disorder is increasing among students in different countries (Sarikhani et al, 2020; Roman-Arbues et al, 2020; Akhtar et al, 2020; Gao et al, 2020).

Cognitive theories consider negative automatic thoughts and negative views about oneself, the world, and the future as the cause of depression, its persistence, and recurrence (Goksan, 2023). Negative automatic thoughts are negative, pessimistic, and illogical perceptions about oneself that occur unintentionally and uncontrollably in the mind. Negative automatic thoughts are cognitions that are automatically activated in a specific situation as a result of cognitive schemas or core beliefs, and influence the emotional and behavioral responses of individuals (Takeda, 2023). In such a way that they cause a painful, deadly, and stressful reaction. The salient feature of negative automatic thoughts is that they pass through the mind quickly and there is no possibility to challenge or control them at that moment. In a study, Vali Tabar and Hosseini Sabt showed that there is a positive and significant relationship between negative automatic thoughts and depression (Valitabar & Hossein Sabet, 2017). Rezaei and Khaledi in a study showed that there is a relationship between negative automatic thoughts and depression (Alijani & Ranjbar Kohan, 2022).

Various studies show that depression is highly correlated with decreased vitality and joy (Tan et al, 2019), a sense of emptiness and meaninglessness of life (Ching-Teng et al, 2020), and decreased life satisfaction (Raj et al, 2019). According to Olson, life satisfaction refers to the extent to which a person feels happy and satisfied with their personal and social life (Shin, et al, 2023). Life satisfaction is one of the components of mental well-being that encompasses a person's general attitude and evaluation towards their whole life or some aspects of it (Thompson et al, 2022). In other words, the concept of life satisfaction as a general criterion reflects individuals' tendencies, judgments, and reactions towards their surrounding environment (Ruggeri et al, 2020). Life satisfaction is a judgment process in which individuals evaluate the quality of their lives based on their unique criteria. Life satisfaction is not a stable and objective trait, but rather it is sensitive to situational changes and is considered based on the individuals' own perception and viewpoint (Lucas et al, 2018).

It seems that one of the therapies that can affect negative automatic thoughts and life satisfaction of depressed students is spiritual therapy. Spiritual therapy, while utilizing the spiritual capacities of human beings such as prayer and meditation, brings about calmness, joy, and hope, which is not achievable through other pharmacological and psychological interventions (Zamaniyan et al, 2016). Spiritual therapy is one of the most important works in solving problems in which a sense of worthlessness of life, fear of death, anger, anxiety, and depression have arisen (Heravi et al, 2020). Because it strengthens the spiritual and physical forces of human beings as well as hope and inner peace. Spiritual intervention as an effective therapeutic method has received attention in recent years. Spirituality provides a set of ways through which human beings can understand the meaning and concept of their life (Güldaş & Karşlı, 2023). The importance of spirituality and spiritual growth in human life has attracted increasing attention from psychologists and mental health professionals in recent decades. So much so that the World Health Organization, in defining the existential dimensions of human beings, refers to the physical, psychological, social, and spiritual dimensions. According to the viewpoints of theorists and conducted research, neglecting the spiritual dimension and self-knowledge in women's lives hinders their growth and flourishing (Sadati & Mahdavi, 2023). Spirituality in life leads to the acquisition of healthy coping skills that help individuals understand the purpose of their existence (Peyravi, 2022). This feeling causes them to enjoy the remaining moments of life and to spend difficult times without stress and anxiety. Otherwise, they will no longer strive to survive, lose life opportunities, and get involved in various psychological problems (Noghani et al, 2024). Spiritual therapy is one of the best ways to create a satisfying life with high satisfaction. Humans need God to give meaning to their lives; because the need for spirituality exists in all people, many people become quickly discouraged due to spiritual and meaninglessness, and make wrong decisions. In the process of therapy, spiritual therapy addresses the important spiritual issues of clients at the appropriate time, enabling them to benefit from the potential power of faith and spirituality in their healing process (Jimenez-Fonseca et al, 2018). Based on this, Rosmarin, Alper, and Pargament (2016) state that spiritual therapy and, in general, religion- and spirituality-based therapies can lead to improved mental health and quality of life in individuals. Voldi in a study showed that spiritual therapy has reduced anxiety and consequently improved the quality of life of students (Veldi, 2023). Additionally, Rosmarin, Alper, and Pargament (Rosmarin, Alper & Pargament, 2016; Ellison, Bardett, & Hill,

2009 & Paukert et al, 2009). also showed that spiritual therapy can lead to improved mental health and a reduction in psychological components that cause harm, such as anxiety, stress, and depression.

Considering that the student community is considered the spiritual capital of any society, and since attending university, due to the presence of numerous factors such as a period of pressure and stress, the difficulty of courses, problems related to studying, etc., with the expansion of psychological problems and pressures, it may lead to an increase in hopelessness and depression among students. For this reason, students may be more vulnerable to depression. Therefore, the aim of the present study was to investigate the effectiveness of spiritual therapy on negative automatic thoughts and life satisfaction of depressed university students.

2. Method

The research method was semi-experimental with a pretest-posttest design with a control group. The statistical population of this study included all depressed male and female students at Payame Noor University of Chabahar. The sample of this study consisted of 36 individuals (18 in the experimental group and 18 in the control group). The sample selection process was as follows: First, the Beck Depression Inventory was administered among the students, and out of 66 students who scored higher than 20 (the cut-off point), based on the inclusion criteria, 36 were randomly selected and assigned to the experimental and control groups (18 in each group). The experimental group received 10 sessions of spiritual therapy training, while the control group did not receive any treatment during this period.

Materials

1. Beck Depression Inventory-II (BDI-II): The revised version of the Beck Depression Inventory designed to measure the severity of depression (Beck et al, 1966). This questionnaire, which consists of 21 items, has 2 items related to affect, 11 items related to cognition, 2 items related to overt behaviors, 5 items related to somatic symptoms, and 1 item related to interpersonal symptomatology. Thus, this scale determines different degrees of depression from mild to very severe, with the following cut-off points: 0 to 13 for minor depression, 14 to 19 for mild depression, 20 to 28 for moderate depression, and 29 to 63 for severe depression (Segal et al, 2008). The score range is from a minimum of 0 to a maximum of 63. Psychometric studies conducted on the second edition of this questionnaire show that it has acceptable reliability and validity. Beck has reported the internal consistency of this instrument to be 0.73 to 0.93 with mean 0.86 and the alpha coefficient for the patient group is 0.86 and non-patient group has reported 0.81 (Beck & Wilson, 2000). Also, Dobson and mohammadkhani (2006) obtained alpha coefficient of 0.92 for outpatients 0.93 for students and a retest coefficient of 0.93 after one week (Dobson and Mohammadkhani, 2006).

2. Negative Automatic Thoughts Questionnaire: This questionnaire was designed by Hollon and Kendall (1980) and consists of 30 questions on a Likert scale ranging from never (=1) to always (=5). The minimum possible score is 30 and the maximum is 150. In a study by Hollon and Kendall (1980), the reliability of this instrument was reported as 0.97 using Cronbach's alpha. Kaviani et al (2005) reported the reliability of this instrument as 0.88 using the test-retest method.

3. Satisfaction with Life Scale by Diener et al. (1985): The Satisfaction with Life Scale was developed by Diener et al. in 1985. This scale has five items that the subject responds to on a 7-point scale. The internal consistency reliability coefficient of this scale ranges from 0.80 to 0.89, and its test-retest reliability coefficient ranges from 0.64 to 0.84. The correlation coefficient between this scale and other measures of life satisfaction and psychological well-being ranges from 0.35 to 0.82 (Diener et al, 1985). Bayani et al. (2007) reported the Cronbach's alpha and test-retest reliability of this scale as 0.83 and 0.69, respectively.

The content of the Islamic spirituality therapy training sessions was provided to the students in 10 sessions based on the training packages of Kamari & Fooladchang (2016) and Bahreinian et al. (2017) as follows:

Table 1. Summary of spiritual therapy training sessions

Session	content covered in each session
Session 1	Introductions, pre-test, discussion on the concepts of spirituality and religion and their impact on people's lives
Session 2	Familiarizing participants with the characteristics and effects of hope and hopelessness from an Islamic perspective, the Quran, and religious figures
Session 3	Focusing participants on their own strengths, considering the emphasis in the Quran on human capabilities.
Session 4	The word of God, connection with God or a higher power one believes in, prayer and conversation with God.
Session 5	Friendship and performing spiritual activities in a group setting
Session 6	Connection with sacred entities, self-concept, self-awareness, connecting with oneself and listening to one's inner voice.
Session 7	Discussion on forgiveness, lack of forgiveness, feelings of guilt and self-forgiveness.
Session 8	Recalling the effects of faith and reliance on God in life.
Session 9	Discussion on the meaning of independence based on Quranic verses and hadiths, and the clarity of the purpose of human life from the Quranic perspective.
Session 10	Gratitude and appreciation, summarizing all sessions, post-test.

As can be seen in Table 1, a summary of spiritual therapy training sessions has been reported.

3. Results

In this study, descriptive statistical methods such as mean and standard deviation were used, and the Kolmogorov-Smirnov test was used to assess normality of distribution. Moreover, to test the assumption of homogeneity of variances, the Levene's and Box's tests were used. For data analysis, multivariate analysis of variance (MANCOVA) and SPSS software version 25 were employed. The significance level for all tests was considered 0.05.

Table 2. Kolmogorov-Smirnov test results in negative automatic thoughts and life satisfaction in two groups

Group	Steps	Variable	Kolmogorov-Smirnov	Sig
Experiment	Pre test	negative automatic thoughts	0.585	0.884

	Post test		0.852	0.462
	Pre test	life satisfaction	0.976	0.297
	Post test		0.807	0.553
	Pre test	negative automatic thoughts	0.537	0.935
Control	Post test		0.409	0.996
	Pre test	life satisfaction	0.512	0.956
	Post test		0.843	0.476

The Kolmogorov-Smirnov test was used to assess the normality of the distribution. According to the results in Table 2, the obtained significance levels for each of the research variables were greater than 0.05 ($P < 0.05$), indicating that the data for all variables were normally distributed. Therefore, parametric tests were used for variables with a normal distribution.

Table 3. Results of Levene's test for homogeneity of variances

Variables	Levens statistic	df 1	df 2	Sig	test results
negative automatic thoughts	0.005	1	34	0.943	Homogeny of variance
Life satisfaction	0.709	1	34	0.190	Homogeny of variance

To assess the homogeneity of the research variables' variances, Levene's test of equality of error variances was used. Based on the obtained significance level in this test, one can judge whether the variances are homogeneous or not. In this way, if they obtained significance level is greater than 0.05, the variances are equal, and vice versa. Therefore, considering the above table, the assumption of homogeneity of variances is met.

Table 4. Box's M test for equality of covariance matrix

Box's M	F	df 1	df 2	Sig
3.157	0.985	3	208080.000	0.398

Based on Table 4, the results of Box's M test showed that the obtained probability value for each of the research variables was greater than 0.05 ($P < 0.05$). If this assumption is met, the analyst can use Wilks' Lambda.

Table 5. Results of Wilks' Lambda test in multivariate analysis of covariance

Test	Value	F	Hypothesis df	df error	Sig	Eta coefficient
Wilks' Lambda	0.517	6.247	4.000	64.000	0.000	0.281

According to Table 5, the results of Wilks' Lambda test showed that the educational intervention of spiritual therapy had a significant effect on at least one of the variables ($P < 0.001$, Wilks' Lambda=0.517). Therefore, the condition for using multivariate analysis of variance (MANCOVA) was met.

Table 6. Mean and standard deviation of pre-test and post-test negative automatic thoughts and life satisfaction in the two groups

	Excremental group	Control group
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steps	Variable	Mean	SD	Mean	SD
Pre test	negative automatic thoughts	78.556	11.515	73.111	11.560
	Life satisfaction	16.722	2.824	15.056	2.312
Post test	negative automatic thoughts	50.777	12.223	72.333	11.624
	Life satisfaction	21.833	4.176	16.666	3.009

As observed in Table 6, the negative automatic thoughts and life satisfaction scores in the pre-test and post-test differed in the experimental group.

Table 7. Results of the decomposition of multivariate analysis of covariance on negative automatic thoughts and life satisfaction of depressed students

Dependent variable	Sum of square (SS)	df	Mean square (MS)	F	Sig	Eta coefficient
negative automatic thoughts	3494.015	2	1747.007	10.424	0.000	0.387
Life satisfaction	237.263	2	118.632	8.633	0.001	0.343

Considering the pre-test scores as covariates, according to the results in Table 7, the difference between negative automatic thoughts and life satisfaction in the experimental and control groups was significant ($P < 0.01$). Therefore, it can be stated that considering the eta-squared values of 0.387 for negative automatic thoughts and 0.343 for life satisfaction, the percentages of changes are explained by the educational intervention of spiritual therapy.

4. Discussion and Conclusion

The present study aimed to investigate the effectiveness of spiritual therapy on negative automatic thoughts and life satisfaction of depressed students at Payame Noor University of Chababar. Based on the first finding, it was determined that spiritual therapy training had an impact on reducing negative automatic thoughts in depressed students. This finding is consistent with the results of Peyravi et al. (2022) and Peyambari et al. (2021).

Negative automatic thoughts are negative self-statements about oneself; beliefs and thoughts that occur to one's mind without deliberate effort and without choice, leading to disproportionate emotional responses. These thoughts can be organized as fundamental attitudes or internal cognitive schemas (Marchetti et al, 2016). In other words, negative automatic thoughts are intrusive thoughts that exist involuntarily in one's self-awareness, and depending on the intensity and weakness of these thoughts in the mind, they cause negative moods in individuals (Ji et al, 2019). These thoughts may be interpretations of current experiences, predictions about future events, or reminders of past events, which in turn give rise to other symptoms of depression, such as behavioral symptoms (decreased activity levels, withdrawal), motivational symptoms (disinterest, lethargy), emotional symptoms (anxiety, guilt), cognitive symptoms (difficulty concentrating, inability to make decisions), and physical symptoms (loss of appetite and insomnia).

In explaining this finding, it can be said that negative automatic thoughts initially have rigid, specific, and powerful internal expectations, which are usually expressed in words such as "must," "certainly," "necessarily," and "inevitably." Secondly, they lead to highly unreasonable attributions, excessive generalization, and catastrophic thinking, which result in depression in the individual. Research shows that religious and spiritual efforts such as yoga, meditation, prayer, and attending religious ceremonies increase the chances of recovery from depression in clients (Bush et al, 2012; Esazadeh & Safarina, 2019; Yavari ramshe et al, 2023). Therefore, it can be said that faith in God and reliance on Him create a sense of security in the depressed individual. It seems that the depressed person's view of the world, themselves, and others is negative. Spiritual therapy causes the person's perspective to shift, realizing that their presence and the occurrence of events in the world are based on the wisdom of God Almighty. The universe is orderly, and all events occur by the will of God and divine providence. Therefore, their presence, events, and occurrences in the world are not accidental but are under the providence and power of God, who is compassionate and benevolent. This understanding can reduce the person's sense of negativity towards themselves, others, and the world. In fact, spiritual therapy reduces negative emotions in the individual through intimate conversation with God and seclusion with the Absolute Power. Prayer is a spiritual and innate relationship established between a human and their Creator, as the source of grace, honor, and mercy (Ramshe et al, 2023). Through sincere and humble prayer, the person draws closer to the source of creation, establishing a profound emotional connection with God. This relationship strengthens their spirit and soul, enabling them to reduce the spiritual and psychological symptoms of depression and experience joy and vitality (Peyambari et al, 2021). In other words, sincere prayer and intimate conversation with God are forms of emotional release that are highly important in reducing depression and improving mental health.

Based on another finding of this study, it was determined that spiritual therapy training was associated with increased life satisfaction among depressed students. This finding is consistent with the results of kamari, S., & fouladchang (2016) and Safara et al. (2020).

Life satisfaction is defined as a level of individual awareness or, better put, a cognitive evaluation of the quality of life, which may reflect either a comprehensive and general evaluation or an evaluation in specific areas of life, such as family, self, and society (Badri, 2020). The results of various studies indicate a broad relationship between life satisfaction and a number of important behaviors and psychological states, including depression and anxiety (Ghazwin et al, 2016; Gigantesco, et al, 2019). Life satisfaction is considered a prominent indicator of an individual's successful adaptation to changing life situations. One of the most important goals of interventions in the field of spirituality, including happiness, hope, and positive thinking, is to improve quality and increase life satisfaction while reducing emotional problems. Based on this, the spiritual therapy approach is focused on increasing meaningfulness in life, where engagement and meaning not only alleviate emotional problems but also make life happier and richer. Through spiritual and religious methods, as well as positive thinking, a person can reach the ultimate level of their abilities and potential, which is highly valuable (Rajaei, 2010). Spiritual and religious beliefs, by providing a unifying force with individuals' physical and psychological aspects, help them to be spiritually healthy and, within this realm of health, experience a sense of being alive, purposefulness, and life satisfaction.

Therefore, considering the discussed points, conducting research in the field of spiritual therapy is vital today and in the present era, especially among university students, to emphasize its important and essential role.

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Study design and data analysis: All authors. Investigation and drafting the manuscript: All authors; Final. Approval: All authors.

Conflict of interest

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