



Effectiveness of Unity-Oriented Psychodrama on Sense of Coherence of MS Patients

Saeed Dehnavi^{1,*}, Ali Zadeh Mohammadi² and Marjan HassaniRaad³

¹Islamic Azad University of Qazvin, Qazvin, Iran

²Family Research Institute, Shahid Beheshti University, Tehran, Iran

³University of Tehran, Tehran, Iran

*Corresponding author: Clinical Psychology, Islamic Azad University of Qazvin, Iran. Tel: +98-9188561185, Email: saeed.dehnavi@gmail.com

Received 2016 March 05; Revised 2018 July 08; Accepted 2018 September 13.

Abstract

Background: Multiple sclerosis (MS) is one of the most common chronic and progressive central nervous system ailments that is considered as a disabling and traumatizing disease.

Objectives: The goal of the present study was to investigate the effectiveness of psychodrama based on unity-oriented approach on the sense of coherence of MS patients.

Methods: This was a quasi-experimental research, which included pre-test, post-test, and follow-up design with a control group. Using a convenience sampling method, 20 individuals were selected from among females with MS who had visited the Iranian MS Society. The subjects were randomly placed into two experiment and control groups. The experiment group participated in a 12 session unity-focused psychodrama therapy plan for six weeks, whereas the control group received no intervention. For data collection, the Flensburg-Madsen's Sense of Coherence Questionnaire was used. The data was analyzed using ANOVA with repeated measures.

Results: The results revealed that there is a significant difference between two groups' sense of coherence scores in post-test and follow-up stages ($P < 0.05$).

Conclusions: As seen in the findings, the unity-oriented psychodrama can be used as an effective treatment to enhance the sense of coherence among MS patients. Unity-oriented approach helps the patients integrate with the universe and define their bitter experiences. It also facilitates better patient acceptance through understanding a sense of connectivity to the coherent world and offers a sense of immortality to the MS patients.

Keywords: MS, Multiple Sclerosis, Psychodrama, Sense of Coherence, Unity-Oriented

1. Background

Multiple sclerosis (MS) is one of the most common ailments of the central nervous system, even in young people. This chronic and progressive disease of the brain and spinal cord leads to neurological symptoms such as a range of blurred vision, muscle weakness, and sensory dysfunction by damaging the myelin shield. The cause is unknown, however, studies have focused on viral infections and immune disorders (1). In Western societies, MS is considered as the second factor after trauma for neurologic disability in early to middle adulthood. MS demonstrations vary from a benign disease to a rapidly progressive and debilitating ailment that requires significantly changing the way of life (2).

An important point about MS is that this disease continues to grow over the last two decades and the prevalence has clearly increased. Although the cause of increased

prevalence is unknown, environmental factors such as psychological stress are not ineffective and, of course, stress and mental factors contribute greatly to the intensification and development of new attacks. For MS patients, what is more recommended than medication and complex treatment is distancing from anxiety, stress, and mental tensions (3).

Studies have indicated that the relationship between mental health and MS disease is significant. In a systematic review of 118 population-based studies, it was found that the prevalence of anxiety was nearly 21.9%, while it was 14.8% for alcohol abuse, 5.83% for bipolar disorder, 23.7% for depression, 2.5% for substance abuse, and 4.3% for psychosis (4). Moreover, the quality of life in patients with MS is significantly lower than the general population (5). Other studies demonstrate that people with MS suffer from high rates of mental health difficulties; for instance, they suffer higher rates of depression (6). All these findings are

indications of complex psychological problems of MS patients.

In regards to the fluctuating role of sense of coherence and less vulnerability, a research was conducted on women who were recently diagnosed with cancer. Results showed that women who have a high sense of coherence are less vulnerable to lose their spirit, which is revealed in the form of mood of despair, desperation, lack of purpose, and meaning and mental stress (7). Another study showed that there is a strong correlation between sense of coherence and physical health (8). Similarly, another study showed that people with a high sense of integrity tend to use more adaptive coping strategies and rely less on non-adaptive strategies (9).

The research suggest that a sense of coherence, which is a key trend to consider life as understandable, controllable, and meaningful most probably leads to more adaptability and decreased vulnerability (10). Therefore, it can be said that the amplified sense of coherence in MS patients can be considered as a good coping strategy for compatibility with the disease. In fact, the variety of interventions conducted in the area of sense of coherence indicates that there potentially exists many ways that can help people with MS.

Results from previous studies have suggested that improvement in mental health conditions such as anxiety, stress, and sense of coherence, leads to reduced brain lesions seen on an MRI in MS patients (11). Accordingly, we can say that understanding the psychological variables and the effectiveness of various methods of psychotherapy, such as psychodrama approach can be an effective agent for treating or reducing the symptoms, and prevention in patients with MS, since it helps patients to show their thoughts, feelings, and beliefs, and also it should be noted that the unity-oriented approach is rooted in Iranian indigenous and cultural beliefs.

Unity-oriented psychology and psychotherapy is a new Iranian approach based on the unity-oriented human nature, which is associated with Islamic mysticism and eastern philosophical line of thought. Unity-oriented therapeutic approach is based on cognitive and spiritual tasks, which include a series of awareness-seeking tasks for becoming more cognizant of and connected to the unitary presence (link to the unity-oriented source of being) and meaningful connection to one's own self and the universe by means of cognitive and intuitive exercises, like unity-oriented recognition of self and creation, and acceptance of meaningful life in a purposeful cosmos. This type of insight adds to the feeling of security, sense of worth and importance of the individual in the world through the understanding of his/her unique and matchless role, also strong belief in eternal and continuous life, which leads to pro-

moting the value and integrity of self and a sense of confidence and trust in the creation. The person comes across the meaning embedded in the cosmos and as a result of this perception, the significance of the presence of the individual in the world is emphasized (12).

Psychodrama is one of the branches of art therapy, which is considered as a different and unique approach in the field of psychotherapy. Psychodrama is a therapeutic method developed by Moreno in the early 1920s, which has its roots in discovering one's conflicts, so that the person is able to release his/her repressed emotions in this way (13). A core principle of psychodrama is Moreno's concept of "spontaneity-creativity". Psychodrama, in Moreno's opinion, is extemporaneous and is inversely related to anxiety. In other words, the more spontaneous the person is, the less anxious is he/she. In fact, psychodrama and role playing is considered as an effective treatment for anxiety (14).

As studies show, psychodrama is effective for the treatment of depression (15), coping with trauma (11), and decreasing physical complaints, anxiety, depression, and general health promotion (16). Although psychodrama has its specific concepts, it has common roots with group psychotherapy. However, it should be noted that it is not a unique theoretical approach or school; in fact, it can be considered as a methodology that offers beneficial ways to understand human nature, human psyche, and human relations of different kinds (17).

In psychotherapy interventions, cultural characteristics of the patient and the social implications have significant impacts on the effectiveness of the treatment. According to the cultural and religious readiness of the Iranian society for understanding the concept of unity and keenness with its spiritual concepts, the present study combines the cognitive tasks of this approach with psychodrama techniques and studies the impact. Therefore, this study considers the effectiveness of unity-oriented psychodrama as a domestic treatment on sense of coherence of patients with multiple sclerosis.

2. Objectives

Accordingly, The objective of the present study is empowering the sense of coherence of MS patients using unity-oriented group psychodrama intervention.

3. Materials and Methods

3.1. Participants and Procedures

The present study was a quasi-experimental study with pre-test, post-test, and follow-up test along with the control group. The study population consisted of all members

of the MS Society of Iran located in Tehran, and the sample consisted of 20 members of the Association who were selected using the available sampling method and were randomly assigned to two experiment and control groups. Due to the possibility of physical contact between patients during the exercises and research population's religious-cultural limitations concerning the physical contact between men and women, researchers were forced to select a single-sex sample group.

Inclusion criteria were: Diagnosis of relapsing-remitting multiple sclerosis, being in remission phase, being independent from the wheelchair, minimum education: High school graduate, not consuming psychotropic drugs and/or receiving psychological treatments throughout the study, no participation in the same previous training program of the association for all participants, age between 20 to 50 years, consent for participation in the research, lack of suffering from other acute or chronic mental or physical disorders, lack of having problem in hearing or speech, and sex: Female. In addition, the exclusion criteria of the study were: Dependence to the wheelchair, lack of consent for participation in the research, and absence for more than three sessions.

Then, after receiving the written and signed consent, the participants of the experiment group were invited for taking part in psychodrama therapy sessions based on unity-oriented approach. Intervention based on the principles of psychodrama and unity-oriented approach was designed and started by members of the experimental group for a period of 12 two-hour sessions over six weeks. After the sessions were finished, the experiment and control groups were assessed by post-test, and two months later a follow-up test was done. Practicing psychodrama in each session consisted of three phases: Preparation, performance, participation, and termination. According to the roles presented by Kellerman, the functions of the director included: Analyst, producer, therapist, and group leader (18). The protagonist or a person from the group who presents his/her problem in the group is chosen by the director or voluntarily at the beginning of the performance phase.

3.2. Treatment

In the first session, in addition to familiarizing members with each other, a description of psychodrama and its techniques, unity-oriented psychology theory, rules, and structure of the sessions were mentioned. In the second session, after trying to build confidence and training the participants to exercise talking skills, it was attempted to put the group on the track of establishing a dialogue and presenting a problem. From the third session, until the

end of the sixth session, focus was on concentration exercises using non-verbal ways to express awareness of emotions, getting familiar with concepts of "unity in diversity" and "diversity in unity", getting familiar with the language of body and soul and the dialogue of soul and body in the form of psychodrama for unity-oriented connection to the universe, practicing death-awareness for understanding the immortality of the soul, and emotional and mental linkage with the source of being. Throughout these sessions, group participants became conscious of their own emotions and memories in the form of dramatic exercises. Sessions seven to 11 were focused on encouraging members to tell their problems and concerns in the form of role playing and using other psychodrama techniques, and participation of each member as an assistant helper in the process of playing and behavioral training by understanding one's own unitary being and coming to a unique understanding of the self. During the meetings, diverse techniques were utilized including role reversal, mirror technique, future-projection technique, monologue, and self-actualization technique. At the 12th session, in addition to reviewing and summarizing the sessions and sharing the achievements of the group during the sessions, members discussed their plans for the future and the session ended.

3.3. Measures

3.3.1. Sense of Coherence Scale (SOC)

This is 35-item questionnaire that is designed in the form of three or five options. Options are scored using three degrees of a scale of one to three. The questionnaire consists of three sub-scales including comprehensibility, manageability, and meaningfulness. The 29-item and 13-item of this questionnaire was designed by Antonovsky, however, Flensburg-Madsen et al., revised it in 2006. Revised *Sense of Coherence* Scale was used in the present study (19). Eriksson and Lindstrom (20) described and examined the validity according to the classification in face, construct, consensual, criterion, predictive validity, and responsiveness. According to their study, the face validity of this scale appears to be acceptable. In addition, the SOC scale seems like a cross-culturally applicable instrument. The consensual validity of the SOC scale seems to be moderate. Regarding the factorial structure of the scale, factor analysis in some studies has confirmed the one factor solution proposed by Antonovsky. It is important to note that Antonovsky's intention was to use the SOC questionnaire as a measurement of the whole, not examining the three subscales separately. The relation between the SOC scale and other standardized instrument for measuring health, stressors, quality of life, well-being, happiness, and behaviors endorses the criterion validity of SOC. Furthermore,

SOC has a very good predictive validity. Concerning responsiveness, SOC seems to be comparatively stable over time.

Flensburg-Madsen has reported the reliability of the questionnaire using Cronbach's alpha coefficient in the two studies, respectively, 0.87 and 0.86 (19). The internal reliability of the Persian version using Cronbach's alpha was 0.87 and its reliability using split-half method was 0.89, as reported by Ehteshamzadeh et al. (21).

4. Results

The data obtained were described with the use of appropriate methods of descriptive statistics such as mean and standard deviation. To test the hypothesis, repeated measures ANOVA (between-subjects) was utilized.

The results in Table 1 indicate that the mean scores of experiment group has increased from pre-test to post-test in sense of coherence variable and has decreased from post-test to follow-up but is still more than the pre-test, while the mean scores of control group has decreased slightly from pre-test to post-test and from post-test to follow-up.

As shown in Table 2, there is a significant difference between sense of coherence scores at pre-test, post-test, and follow-up ($F(2, 36) = 60.17, P < 0.05$), and according to the averages shown in Table 1 and Bonferroni follow-up test, the average scores of post-test and follow-up are significantly more than the average scores of pre-test; follow-up test scores were significantly lower than post-test scores.

Results presented in Table 3 show that the change process of death anxiety scores from pre-test to post-test in the control and experimental groups differs significantly ($F(1, 18) = 166.45, P < 0.05$), which according to the averages presented in Table 1, it shows the increasing process of change in scores from pre-test to post-test in the experimental group, and decreasing process of change in scores from pre-test to post-test in the control group. The process of change in sense of coherence scores from post-test to follow-up in both experimental and control groups had a significant difference ($F(1, 18) = 8.22, P < 0.05$).

Table 1. Descriptive Indices of Experiment and Control Groups' Sense of Coherence in Three Stages of Experiment^a

Group	Pre-Test	Post-Test	Follow-Up
Control (n = 10)	57.10 ± 6.756	55.20 ± 8.377	51.40 ± 6.310
Experiment (n = 10)	61.50 ± 7.382	80.90 ± 7.519	72.30 ± 7.134

^aValues are expressed as mean ± SD.

5. Discussion

As stated, the aim of the present study was to study the effectiveness of psychodrama based on unity-oriented approach on the sense of coherence of patients with multiple sclerosis. The results of this study showed that the mentioned intervention was effective in increasing sense of coherence score of MS patients, which consists of comprehensibility, manageability, and meaningfulness in post-test and its effectiveness is also significant in the follow-up stage.

MS, with its debilitating, chronic, and unforeseen features, imposes many challenges on patients in different life domains. Due to the young age of onset of this disease, it is hard for the patients to reschedule life, family, and job plans, as well as face the relapse of the illness and the lack of autonomy that leads to great concern and anxiety (22). All these concerns, plus the risk of imminent death in these patients causes a wave of diminished sense of coherence, that is, seeing one's world understandable, manageable, and meaningful becomes challenging.

The results of this study, in relation to the total score of sense of coherence, is not in line with results obtained by Mirhashemi (23), who studied the effectiveness of the solution-centered therapy on the sense of coherence MS patients. In its explanation it can be said that unity-oriented psychology, as a local school of thought and a new approach to psychotherapy in Iranian society, promises to help the growing number of clients who complain about the fear of death, loneliness and lack of meaning in life. Unity-oriented psychotherapy, with creating a sense of connection to the unitary universe and meaningful communication with the cosmos, brings peace to MS patients who are scared of death and give meaning to their beings and existences. In fact, the idea that man is immortal and a part of a bigger plan, and death is a developmental stage and a new life, fundamentally increases sense of coherence.

This local treatment system, by using the deep existential concepts with which native Iranian clients are familiar and connected throughout their lives, helps them understand different dimensions of their existence and the interconnectedness of their body and soul. Therefore, through this treatment they will learn how to actualize the potential capacities of their unique existence, and to specify the purpose of life and follow it. People who have undergone this treatment master in identifying the values of their unique existence and become able to make responsible choices for their lives. Since the question "Why me?" is one of the most challenging questions that occupies the minds of people with multiple sclerosis, reaching the capacity to accept the inevitable or unchangeable

Table 2. Results of Repeated Measures ANOVA to Compare Sense of Coherence Average in the Pre-Test, Post-Test, and Follow-Up

Source	Sum of Squares	df	Mean Square	F	P	Partial Eta Squared	Observed Power	Bonferroni Follow-Up Test
Factor 1	810.03	2	405.01	60.1	0.00	0.70	1.000	Post-test > pre-test
Error	242.33	36	6.73					Follow-up > pre-test, post-test > follow-up

Table 3. The Results of Process Over Time in Repeated Measures ANOVA for Comparing the Sense of Coherence Mean of Control and Experiment Groups

Time Process Changes	Sum of Squares	df	Mean Square	F	P	Effect Size	Observed Power
Pre-test → post-test							
Time and group interaction	2268.45	1	2268.45	166.45	0.00	0.90	1.00
Error	245.30	18	13.62				
Post-test → follow-up							
Time and group interaction	115.20	1	115.20	8.22	0.01	0.31	0.77
Error	252.00	18	14.00				
Pre-test → follow-up							
Time and group interaction	1361.25	1	1361.25	106.67	0.00	0.85	1.00
Error	229.70	18	12.76				

events, which is based on the unity-oriented wisdom of existence, helps these clients search for their life meaning and realize that they can turn their back to being passive and victims of the situation by accepting the illness and its bitter and challenging consequences through understanding and connection to the sole source of life, which makes them look for meaning and purpose in their lives and realize that they can turn their backs to accepting the role of a passive victim.

From among the components of the sense of coherence, the component of comprehensibility is a cognitive component (24) and one of the features of unity-oriented theory is its emphasis on recognizing the integral and interconnected nature of universe in which there is no accident at all; such a perception of the universe results in strengthening the meaningfulness of life, which is a crucial motivational factor in the sense of coherence and life of a person, which at the time of a severe crisis rescues person from meaninglessness by motivating the person to fight for life. In the unity-oriented worldview, all the creatures are managed by a single and integrated force and undergo their developmental stages; this worldview, during the treatment sessions, has helped patients see the world under the control of this unified and intelligent force and leave behind the sense of being abandoned, which led the sense of being in control and able to manage life (manageability).

The findings of the present study is in line with the findings of a study done by Flensburg-Madsen et al. (8, 19). They found that there is a strong correlation between sense of coherence and physical health of MS patients, and due

to multiple health problems and lack of control over their lives, they have a low sense of coherence. It seems that in unity-oriented psychodrama sessions, MS patients become engaged with their own innate being, and feel a sense of eternity and peace in the symbolic tasks. This sense of peace helps manage their problem in a better way and by feeling the interconnectedness with the source of life, feel greater internal integration and coherence, and distance away from confusion.

Psychodrama is a dynamic and empirical approach and emphasizes on “here and now”. Unity-oriented approach also places humans in here and now, due to the fact that essentially the concept of unity means becoming connected with a presence, which is flowing in the present time. Therefore, since patients with MS face a decrease in sense of coherence, loss of purpose, loneliness, and meaningless, unity-oriented psychodrama sessions by using experimental and emotional techniques, which creates a wave of feeling of meaningful connectedness and linkage to the universe, relieves these people who are afraid of imminent death and bestows meaning to their beings. This belief and thought that a human has an eternal existence and death is a transformational stage and in fact a second life, fundamentally reduces these patients’ anxiety of death and existential crisis. In addition, it helps them change their focus from anxieties concerning future to “here and now”.

MS patients during these therapy sessions felt a connection and solidarity with the universe through coming to this perception that every human being is a small unity placed in an ultimate unity of the endless universe and its

creatures. Moreover, this heart-warming bond resulted in psychological sense of coherence and decrease in anxiety of these patients. The ontological concepts of the unity-oriented school of thought, which is complex and abstract, was practiced experimentally and concisely in combination with psychodrama's practical methods during the sessions. These experiences, in most of the group sessions, caused a tangible and perceptual understanding of these abstract concepts.

In treatment sessions, psychodrama techniques like role playing, role reversal, monologue, mirror technique, future-projection technique, and empty chair technique were utilized to help the patients express their own challenging emotions and life events. In addition, the viewpoint of the members of the intervention group became integrated with unity-oriented worldview toward the life events, which helped them find meaning and purpose in their lives and reach a spiritual insight. Moreover, the adaptability of the participants was improved by meaningful acceptance of life challenges and their psychological well-being was strengthened. In other words, the experience of unity-oriented exercises for the patients resulted in creation of a connection with the universe and the security due to this connection, patience in tolerating the sufferings, acceptance, and giving meaning to the bitter realities of life. Unity-oriented psychology is based on components of Iran's cultural, social, and religious background and is rooted in the spiritual and mystical beliefs of Iranians. Since, the ethnic, religious, and cultural characteristics of the patients and their social implications was emphasized a lot in this psychological treatment, the use of this method was effective in improving the sense of coherence of MS patients.

Unity-oriented psychodrama, with presenting new theoretical and practical foundations in line with fulfilling its fundamental objectives, encourages members of the group to carry out practical and objective activities in order to increase the sense of coherence and helps them get rid of despair and loneliness. Furthermore, by linking and coordinating with life and the unitary oriented variety of being, they come to a new understanding of their own identity and their interpersonal relationships, and reach the meaning of love, self-valuableness and peace. In addition, they take advantage of their maximum power to control the lives in the remaining time, and with a coherent understanding of themselves and adaptation with hardships and difficulties, experience life meaningfully.

Limitations of this study include single-sex and limited sample, which means one should be cautious in generalizing the results. Furthermore, the follow-up test was taken in a short time after the experiment ended. It is suggested that future studies focus on both sexes in a larger sample

size. Besides, it should be noted that research projects on MS patients must be performed in cold seasons due to their sensitivity to hot weather.

Footnotes

Authors' Contribution: Saeed Dehnavi was the Psychotherapist and facilitator of intervention sessions. he also contributed to writing of the paper. Dr. Zadeh Mohammadi supervised the intervention sessions and contributed to writing of the paper. Marjan Hassaniraad was in charge of data analysis, assistance in interventions and translation of the paper into English.

Ethical Approval Code: 62820701922009.

Declaration of Interest: None declared.

Funding/Support: None declared.

References

1. Mahad DH, Trapp BD, Lassmann H. Pathological mechanisms in progressive multiple sclerosis. *Lancet Neurol.* 2015;**14**(2):183-93. doi: [10.1016/S1474-4422\(14\)70256-X](https://doi.org/10.1016/S1474-4422(14)70256-X). [PubMed: [25772897](https://pubmed.ncbi.nlm.nih.gov/25772897/)].
2. Kasper DL, Braunwald E, Fauci AS, Hauser SL, Longo DL, Jameson JL. *Harrisons manual of medicine*. McGraw-Hill Medical Publishing Division; 2016.
3. Burns MN, Nawacki E, Kwasny MJ, Pelletier D, Mohr DC. Do positive or negative stressful events predict the development of new brain lesions in people with multiple sclerosis? *Psychol Med.* 2014;**44**(2):349-59. doi: [10.1017/S0033291713000755](https://doi.org/10.1017/S0033291713000755). [PubMed: [23680407](https://pubmed.ncbi.nlm.nih.gov/23680407/)]. [PubMed Central: [PMC4123859](https://pubmed.ncbi.nlm.nih.gov/PMC4123859/)].
4. Marrie RA, Reingold S, Cohen J, Stuve O, Trojano M, Sorensen PS, et al. The incidence and prevalence of psychiatric disorders in multiple sclerosis: A systematic review. *Mult Scler.* 2015;**21**(3):305-17. doi: [10.1177/1352458514564487](https://doi.org/10.1177/1352458514564487). [PubMed: [25583845](https://pubmed.ncbi.nlm.nih.gov/25583845/)]. [PubMed Central: [PMC4429164](https://pubmed.ncbi.nlm.nih.gov/PMC4429164/)].
5. Ruet A, Deloire M, Hamel D, Ouallet JC, Petry K, Brochet B. Cognitive impairment, health-related quality of life and vocational status at early stages of multiple sclerosis: A 7-year longitudinal study. *J Neurol.* 2013;**260**(3):776-84. doi: [10.1007/s00415-012-6705-1](https://doi.org/10.1007/s00415-012-6705-1). [PubMed: [23081755](https://pubmed.ncbi.nlm.nih.gov/23081755/)].
6. Siegert RJ, Abernethy DA. Depression in multiple sclerosis: A review. *J Neurol Neurosurg Psychiatry.* 2005;**76**(4):469-75. doi: [10.1136/jnnp.2004.054635](https://doi.org/10.1136/jnnp.2004.054635). [PubMed: [15774430](https://pubmed.ncbi.nlm.nih.gov/15774430/)]. [PubMed Central: [PMC1739575](https://pubmed.ncbi.nlm.nih.gov/PMC1739575/)].
7. Boscaglia N, Clarke DM. Sense of coherence as a protective factor for demoralisation in women with a recent diagnosis of gynaecological cancer. *Psychooncology.* 2007;**16**(3):189-95. doi: [10.1002/pon.1044](https://doi.org/10.1002/pon.1044). [PubMed: [16869021](https://pubmed.ncbi.nlm.nih.gov/16869021/)].
8. Flensburg-Madsen T, Ventegodt S, Merrick J. Sense of coherence and physical health. A review of previous findings. *Sci World J.* 2005;**5**:665-73. doi: [10.1100/tsw.2005.85](https://doi.org/10.1100/tsw.2005.85). [PubMed: [16127599](https://pubmed.ncbi.nlm.nih.gov/16127599/)]. [PubMed Central: [PMC5936555](https://pubmed.ncbi.nlm.nih.gov/PMC5936555/)].
9. Korte J, Bohlmeijer ET, Westerhof GJ, Pot AM. Reminiscence and adaptation to critical life events in older adults with mild to moderate depressive symptoms. *Aging Ment Health.* 2011;**15**(5):638-46. doi: [10.1080/13607863.2010.551338](https://doi.org/10.1080/13607863.2010.551338). [PubMed: [21815856](https://pubmed.ncbi.nlm.nih.gov/21815856/)].
10. Oztekin C, Tezer E. The role of sense of coherence and physical activity in positive and negative affect of Turkish adolescents. *Adolescence.* 2009;**44**(174):421-32. [PubMed: [19764276](https://pubmed.ncbi.nlm.nih.gov/19764276/)].

11. Rattue P. *Medical News Today, Stress reduction therapy could significantly help MS patients*. 2012. Available from: <https://www.medicalnewstoday.com/articles/247866.php>.
12. Zadeh Mohammadi A. [*Unity-oriented psychology*]. Tehran: Qatreh Publications; 2011. Persian.
13. Somov PG. A psychodrama group for substance use relapse prevention training. *Arts Psychother*. 2008;**35**(2):151-61. doi: [10.1016/j.aip.2007.11.002](https://doi.org/10.1016/j.aip.2007.11.002).
14. Tomasulo DJ. Psychodrama, spontaneity & anxiety: The more spontaneous you are the lower your anxiety. *Heal Crowd: Psychol Today*. 2011.
15. Hamamci Z. Integrating psychodrama and cognitive behavioral therapy to treat moderate depression. *Arts Psychother*. 2006;**33**(3):199-207. doi: [10.1016/j.aip.2006.02.001](https://doi.org/10.1016/j.aip.2006.02.001).
16. Christenson GA. Conceptualizing the arts as tools for medicine and public health. *J App Arts Health*. 2014;**4**(3):247-64. doi: [10.1386/jaah.4.3.247_1](https://doi.org/10.1386/jaah.4.3.247_1).
17. Blatner A. *Foundations of psychodrama: History, theory, and practice*. Springer Publishing Co; 2000.
18. Kellerman PF. *Focus on psychodrama. The therapeutic aspects of psychodrama*. Philadelphia: Jessica Kingsley Publishers; 1992.
19. Flensburg-Madsen T, Ventegodt S, Merrick J. Sense of coherence and physical health. Testing Antonovsky's theory. *Sci World J*. 2006;**6**:2212-9. doi: [10.1100/tsw.2006.351](https://doi.org/10.1100/tsw.2006.351). [PubMed: [17370017](https://pubmed.ncbi.nlm.nih.gov/17370017/)]. [PubMed Central: [PMC5917116](https://pubmed.ncbi.nlm.nih.gov/PMC5917116/)].
20. Eriksson M, Lindstrom B. Validity of Antonovsky's sense of coherence scale: A systematic review. *J Epidemiol Community Health*. 2005;**59**(6):460-6. doi: [10.1136/jech.2003.018085](https://doi.org/10.1136/jech.2003.018085). [PubMed: [15911640](https://pubmed.ncbi.nlm.nih.gov/15911640/)]. [PubMed Central: [PMC1757043](https://pubmed.ncbi.nlm.nih.gov/PMC1757043/)].
21. Ehteshamzadeh P, Sabri Nazarzadeh R, Memarbashi M. [The relationship between sense of coherence and job performance by meditating of mental health and coping strategies]. *Q J Psychol Methods Models*. 2013;**13**:85-97. Persian.
22. Landoni MG, Giordano MT, Guidetti GP. Group psychotherapy experiences for people with multiple sclerosis and psychological support for families. *J Neurovirol*. 2000;**6 Suppl 2**:S168-71. [PubMed: [10871807](https://pubmed.ncbi.nlm.nih.gov/10871807/)].
23. Mirhashemi M. [*The effectiveness of solution-centered treatment on the resiliency and sense of coherence of MS patients*] [master's thesis]. Islamic Azad University of Semnan; 2013. Persian.
24. Lindstrom B, Eriksson M. Contextualizing salutogenesis and Antonovsky in public health development. *Health Promot Int*. 2006;**21**(3):238-44. doi: [10.1093/heapro/dal016](https://doi.org/10.1093/heapro/dal016). [PubMed: [16717056](https://pubmed.ncbi.nlm.nih.gov/16717056/)].