



Original Article

# The effectiveness of theater therapy on the emotional skills of schizophrenic patients

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## Abstract

**Introduction:** Theater therapy is one of the effective treatment methods in teaching communication skills. Due to the deficiency in verbal and non-verbal skills of the body, regulation and expression of emotions and as a result affecting the life satisfaction of people with schizophrenia, this study was conducted with the aim of the effect of theater therapy on their emotional skills.

**Materials and Methods:** In this clinical trial, cases were randomly selected from patients referred to Atieh Psychiatric Occupational Therapy Center and were divided into control and experimental groups. Theatrical therapy was performed in groups for 60 minutes in an eight-session program over two weeks. Bar-On emotional intelligence questionnaires were administered before and after the intervention in both groups and the results were evaluated after normality according to Kolmogorov-Smirnov test using paired t-test.

**Results:** In this study, 20 patients with schizophrenia including 6 females and 14 males participated. Each person was randomly divided into 10 groups of treatment and control (treatment group including 5 women and 5 men, control group 1 woman and 9 men). The data showed that there was no difference in any of these subscales of the Bar-An emotional intelligence questionnaire in the experimental group compared the control group.

**Conclusion:** According to the results of this study, it can be said that theater therapy in this group of patients has little effect on emotional intelligence; but it can be used as a complement to behavior change, and reducing depressive symptoms by methods such as self-presentation, role deviation, and future predictions that motivate them to talk and play with others.

**Keywords:** Cognitive regulation, Emotional intelligence, Schizophrenia, Theater therapy

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## Introduction

The inability to communicate effectively and control emotions is one problem that people with schizophrenia struggle with (1). Promoting knowledge and awareness of interpersonal

relationships, the ability to recognize and distinguish the emotions and motivations of others helps people to express their feelings and emotions appropriately and respond appropriately in the event of conflict (2). One of

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the creative methods in the psychological rehabilitation of these people is effective theatrical therapy techniques that can significantly affect these people's cognitive, emotional, and behavioral aspects (3).

Therefore, in the definition of rehabilitation theater therapy, it can be said that theater therapy is one of the rehabilitation methods for schizophrenia patients. It combines psychotherapy and social skills training and allows patients to better understand their identity and feelings about others (4).

Miller et al. explained how theatrical therapy techniques such as doubling, role-playing, and role-playing could improve communication skills and improve the daily life skills of these individuals (5). Zakharo and his colleagues also used theatrical therapy and integrated it into the rehabilitation of schizophrenic patients to correct cognitive deficits and negative symptoms, increase motivation, and reduce the labeling of schizophrenic patients. Their study showed that the quality and satisfaction of life of these people has improved (4).

In the theater, when a number of people experience real scenes together, they can identify and refine their emotions and those of the other. Continuous experience and execution of everyday events allow people to have a more tangible and real experience of what is happening and, as a result, to find a more realistic mindset about the past and future of their lives (1,6). Occupational therapy in these patients aims to improve their quality of life and acquire tens of social skills to achieve the highest individual performance (7).

Because these patients are unstable, slow, and superficial in developing emotional disorders and suffer from identity disorders, occupational therapists try to learn and practice behavioral skills in addition to their clinical treatment program, including their hospitalization and prescription and administration of antipsychotic drugs: their family, group, individual, and social (8).

Therefore, considering the importance of proper emotion control and self-expression in social and everyday environments and the lack of studies in this area, this study was conducted to assess the effectiveness of theater therapy on the emotional skills of people with schizophrenia.

## Materials and Methods

This study was performed as a clinical trial, pre-test-post-test in two control and experimental groups. Samples were randomly selected from the clients of the occupational therapy department of Atieh Welfare Center in Semnan, with the permission of the center's management, and the owner of the Student Research Committee of Semnan University of Medical Sciences with ethics number IR.SEMUMS.REC.1397.154 and Iranian clinical trial registration number IRCT20171219037954N3 number were selected. The experimental group received theatrical therapy services in 8 sessions for 60 minutes over two weeks. These sessions include entertaining, introducing members, describing theatrical therapy, its effects, techniques, self-expression, each participant's effort to pose a problem, build dialogue, build self-confidence, practice storytelling, and character skills, role-playing, and planning for the future. The discussion was about emotions. During this period, the control group also received routine occupational therapy services.

At all stages, by observing the ethical points, the purpose of the study, methods, and conditions of the test was fully explained to all participants; Participants were asked questions and answers to clear up any ambiguity, and then all volunteer participants were asked to approve a written informed consent form. Also, the test conditions were observed equally for all participants. Finally, the evaluation was performed using Bar-On emotional intelligence questionnaire, before and after the intervention in both groups.

Inclusion criteria included people diagnosed with schizophrenia with a psychiatrist certificate who are less than three and more than five years old, married, diploma, aged 30-50 years. The exclusion criteria included having other psychiatric disorders, acute disease conditions, poor cooperation, mental disability.

### Research instrument

*A) Positive and Negative Symptoms Scale (PANSS):* This scale is used to measure the positive and negative symptoms of patients with schizophrenia. Anderson standardizes this scale. The Negative Symptoms Scale consists of 20 questions that measure five negative symptoms in patients with schizophrenia, including emotional

limitation, verbal poverty, lack of willpower, insensitivity, lack of pleasure, social indifference, and attention deficit. At the end of each of the five groups of symptoms, there is a general question for measuring the set of symptoms. The Positive Symptom Scale has 30 questions that measure four positive symptoms in patients with schizophrenia, including hallucinations, delusions, abnormal behavior, and formal thinking disorder. Each of the negative and positive signs of this scale is scored from zero to five at six levels of zero, hesitant, quantitative, moderate, high, and severe. Zadeh Mohammadi, Heidari, and Majdtimouri (2001) obtained the average reliability coefficient of this scale in Iranian culture by two methods of test-retest and internal consistency equal to 0.77. They also reported the mean reliability coefficient separately for the negative symptom group as 0.78 and for the positive symptom group as 0.77. In this study, Cronbach's alpha coefficient for internal consistency for the whole scale was 0.87 and for positive and negative symptoms were separately 0.83 and 0.81, respectively (9).

*B) Bar-On Emotional Intelligence Questionnaire (EQ-i):* The first emotional intelligence scale was developed in 1980. This questionnaire has five scales and fifteen subscales. Each of these scales includes interpersonal skills (self-subscales, empathy, social responsibility, interpersonal relationships), coping with stress (subscales of stress tolerance, impulse control), adaptation (subscales of flexibility, problem-solving, and realism), and mood (subscales of happiness, optimism). This

questionnaire contains 90 questions, the answers to which are measured on a 5-point Likert scale (strongly agree, agree somewhat, disagree, and strongly disagree). According to the article by Nejati et al., The psychometric properties of the Bar-On questionnaire have been studied several times in Iran. In one study, Dehshiri obtained a retest reliability of 73% by studying 35 subjects over one month. Golparvar et al. Reported a Cronbach's, Spearman-Brown-Guttman alpha coefficient and a retest of 93%, 90%, 85%, and 85% for the 90-item sample of this questionnaire, respectively. Shamsabadi obtained the reliability coefficients of the subscales of this test between 55% and 83%, with an average of 0.70 (10). The reliability of the English version of this test is 75% - 85% (11).

## Results

In this study, 20 people with schizophrenia, including six women and 14 men, participated. Each person was randomly divided into ten experimental and control groups of 10 people (an experimental group consisting of 5 women and five men, a control group consisting of 1 woman and nine men).

The mean age of participants in the treatment group was 41.80 with a standard deviation of 8.36, and the control group was 45.20 with a standard deviation of 7.78. Also, the mean and standard deviation of the scores of the positive and negative symptoms scale in the treatment group and the control group are shown in Table 1.

**Table 1.** Mean and standard deviation of positive and negative symptom scale scores

	Variable	Mean	Standard deviation
Treatment group	Positive symptoms	13.52	5.33
	Negative symptoms	9.68	4.37
Control group	Positive symptoms	13.12	5.18
	Negative symptoms	9.72	4.31

Kolmogorov-Smirnov test was used to determine the normality of the distribution of scores. Since the distribution of scores with  $P >$

0.05 was normal; Paired parametric t-tests were used to compare changes before and after treatment.

**Table 2.** The scores of emotional intelligence in schizophrenic patents

Variable			Mean	Standard deviation	P
Problem solving	Treatment group	Pre-test	21.9	1.66	0.83
		Post-test	22.3	0.61	
	Control group	Pre-test	20.3	1.52	0.15
		Post-test	21.9	1.66	
Assertiveness	Treatment group	Pre-test	22.4	1.37	0.04
		Post-test	17.8	1.67	
	Control group	Pre-test	19.5	1.92	0.05
		Post-test	22.4	1.37	
In depended	Treatment group	Pre-test	17.4	0.99	00.63
		Post-test	16.3	1.79	
	Control group	Pre-test	17.7	0.94	0.71
		Post-test	17.4	0.97	
Stress Tolerance	Treatment group	Pre-test	18.8	1.24	0.54
		Post-test	17.4	1.38	
	Control group	Pre-test	17.9	0.95	0.32
		Post-test	18.8	1.24	
Reality Testing	Treatment group	Pre-test	21.4	1.15	0.6
		Post-test	20.2	1.68	
	Control group	Pre-test	21	1.45	00.78
		Post-test	21.4	1.15	
Emotional self-awareness	Treatment group	Pre-test	19.7	1.52	00.51
		Post-test	21.2	1.35	
	Control group	Pre-test	20.2	1.16	00.61
		Post-test	19.7	1.52	
Interpersonal relationships	Treatment group	Pre-test	17.3	0.65	00.28
		Post-test	18.7	1.00	
	Control group	Pre-test	17.8	0.88	0.45
		Post-test	17.3	0.65	
Optimism	Treatment group	Pre-test	23.4	1.09	0.12
		Post-test	25.7	0.89	
	Control group	Pre-test	21.1	1.2	0.06
		Post-test	23.4	1.09	
Self confidence	Treatment group	Pre-test	22.7	1.31	00.74
		Post-test	22.2	1.37	
	Control group	Pre-test	21.2	1.28	00.29
		Post-test	22.7	1.31	
Impulse control	Treatment group	Pre-test	23.3	1.16	00.88
		Post-test	23.6	1.24	
	Control group	Pre-test	20.4	1.66	00.05
		Post-test	23.3	1.16	
Self-actualization	Treatment group	Pre-test	17.0	1.31	0.45
		Post-test	16.9	2.05	
	Control group	Pre-test	17.8	1.42	0.82
		Post-test	17.0	1.31	
Flexibility	Treatment group	Pre-test	17.3	1.00	0.55
		Post-test	16.8	1.89	
	Control group	Pre-test	16.8	1.00	0.55
		Post-test	17.3	1.00	
Social responsibility	Treatment group	Pre-test	24.0	1.22	0.58
		Post-test	24.9	0.91	
	Control group	Pre-test	22.6	1.4	00.41
		Post-test	24.0	1.22	
Empathy	Treatment group	Pre-test	23.0	1.49	00.70
		Post-test	23.8	1.44	
	Control group	Pre-test	20.7	1.48	0.12
		Post-test	23.0	1.49	
Emotional expression	Treatment group	Post test	17.7	0.86	0.54
		Pre test	18.5	1.44	
	Control group	Post test	17.1	0.74	00.47
		Pre test	17.7	0.86	

The results of Table 2 show that the mean and standard deviation in all subscales of the Emotional Intelligence Questionnaire was not

significantly significant. This shows that theater therapy has not had much effect on this group in emotional intelligence.

## Discussion

This study aimed to evaluate the effectiveness of theater therapy on improving the emotional skills of people with schizophrenia. Findings from this study: Significant differences between problem-solving skills, independence, stress tolerance, self-actualization, emotional self-awareness, realism, interpersonal relationships, optimism, self-esteem, responsibility, empathy, impulse control and flexibility, happiness. It did not show the social relations and self-expression of the two groups. In explaining this issue, we can point to the duration of the study and the effectiveness of this method in the long run because behavior change is a complex and long-term process that its effects must be measured over a more extended period (12). By itself, the skill of assertiveness and self-expression increased in the experimental group because Moreno believed that clients should be allowed to express themselves freely through the role of hidden motives and emotional states (13). In this regard, Kyung Min and his colleagues conducted a study on the impact of role-playing on the social skills of people with schizophrenia using virtual reality. Ninety-one hospitalized patients with schizophrenia participated in this study. Forty-five people were in the role-playing therapy group using virtual reality, and 46 people were in the traditional role-playing control group. Both groups received interventions twice a week for ten weeks. This study showed that the treatment group had more motivation than the control group in generalizing social skills, conversation, and courage. As a result, it can be found that role-playing through virtual reality can be an effective complementary therapy in teaching social skills to individuals (14). Also, because individuals were randomly divided into two groups, this issue caused the intervention and control populations not to be gender-homogeneous, while some studies have confirmed the effect of gender on emotional intelligence (15). Given that there is a relationship between mental health and emotional intelligence (12), but despite the existence of common brain areas associated with emotional intelligence and cognitive activities, the level of emotional intelligence does not significantly affect cognitive disorders (16). Therefore, it can be said that theater therapy has little effect on emotional intelligence in this group of patients.

However, it can be used to complement changing behavior, reduce depressive symptoms, and improve emotional intelligence and cognitive activities using a variety of methods such as self-expression, role change, and a future prediction that motivates them to talk and play with others.

Researchers observed that individuals learned to make more vital eye contact with others (17). A study by Riesman et al. (18) showed that theater therapy could effectively focus on the present moment and control the symptoms of the disease. Also, the results of studies by Gibalt et al. (19) showed that mental representation in the simulated real environment could effectively reduce the defense mechanisms of denial, repression and provide therapeutic solutions to experience the unpleasant events of their lives. Quang theater therapy is also seen in the results of research as a group psychotherapy method in solving individual problems, especially emotional discharge, anger control, and resolving emotional conflicts (20). The research of Mortan et al. showed that the function of tragedy and drama is necessary for mental and emotional stimulation for psychological evacuation. How emotions, fears, and aroused emotions are imitated (21).

Gholami and his colleagues also conducted a study aimed at the effectiveness of theater therapy on the mental health of 30 divorced women. The samples were randomly divided into experimental and control groups in this study. First, two groups completed the Goldberg and Hiller General Health Questionnaire. Then eight sessions of theater therapy were performed for the experimental group, and finally, a post-test was performed for the groups, and the results were compared. The results showed that theater therapy affected the general health of divorced women and reduced physical symptoms and anxiety. Moreover, sleep disorders, social dysfunction, and severe depression have become (22). Lee Hong and colleagues also examined the effectiveness of theatrical therapy on improving the social functioning of patients with schizophrenia. In their study, 86 patients with schizophrenia were randomly divided into treatment (n= 44) and control (n= 42) groups. Routine treatment and nursing care were performed in both groups, and theatrical therapy was applied to the treatment group. Forty patients

in the treatment group and 46 other patients in the control group were tested with the Social Performance Scale in hospitalized patients with psychosis and the Psychiatric Brief Rating Scale. Analysis of variance from this study showed that theatrical therapy could improve social functioning and reduce the symptoms of psychosis in schizophrenia patients (23). Abedi and colleagues also discussed the effectiveness of theater therapy on anxiety in patients with chronic schizophrenia. In their study, 26 patients were randomly divided into treatment and control groups, and Beck Anxiety Self-Report Questionnaire measured their anxiety. The results of their study after 20 sessions of theater therapy showed the effectiveness of this treatment on reducing anxiety symptoms in these people (24). Tarashua et al. evaluated the effectiveness of theater therapy on reducing depression in 20 people with panic attacks over 3 hours, 25 sessions, and for six months using the Hamilton Depression Assessment, which reduces depression (13). As can be seen from the report of previous studies, the results of this study are consistent with other studies. One of the limitations of the study is the severity of positive and negative symptoms of some participants, which caused them to leave the treatment process and replace the new person in the study. Also,

limited time in the performance and lack of access to the theater and some necessary equipment sometimes caused a decline in the performance quality. Therefore, it is suggested to expand this treatment method and make more specialists familiar with it. In addition, this method should be performed on other samples with other psychiatric diagnoses such as depression and anxiety.

### Conclusion

According to the results, it can be said that theater therapy in this group of patients has little effect on emotional intelligence. However, it can be used to complement behavior change, reducing depressive symptoms by using various methods such as self-presentation, role deviation, and future predictions that motivate them to talk and play with others.

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