

## Abstract

**Objective:** This study aimed at comparing the effectiveness of schema therapy and mindfulness in psychosomatic symptoms and its dimensions (somatization, obsessive-compulsion, sensitivity in interpersonal relationships, depression, anxiety, hostility, phobic anxiety, paranoid and psychotic) in people with stimulants abuse.

**Method:** For this purpose, a quasi-experimental along with pretest-posttest, control group, and a three-month follow-up was employed. The statistical population of the study consisted of the patients who presented to the addiction center of dependent outpatients affiliated with the Welfare Organization of Ahvaz in 2014. From among this population, 45 patients were selected via purposive sampling method and were assigned randomly into two experimental groups and one control group. The schema therapy experimental group participated in 10 one-hour sessions and the mindfulness experimental group were treated in eight 45-minute sessions. The Mental Health Questionnaire was administered before the beginning of the treatments, in the final session of the interventions, and three months after the treatment. The control group received no intervention. **Results:** The results indicated that schema therapy and mindfulness were effective in the relapse prevention of stimulant abuse. Schema therapy was more effective than mindfulness. **Conclusion:** Schema therapy and mindfulness are effective in the reduction of psychosomatic symptoms due to the presence of common components in the two approaches

**Keywords:** schema therapy, mindfulness, psychosomatic symptoms, stimulants abusers

# On the Comparison of Effectiveness of Schema Therapy and Mindfulness in Psychosomatic Symptoms in People with Stimulants Abuse

Samira Sydasyaban, Gholam Reza Monshi, Parviz Asgari

## Samira Sydasyaban

Department of Psychology, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran

## Gholam Reza Monshi

Associate Professor, Islamic Azad University, Isfahan (Khorasgan) Branch, Isfahan, Iran, E-mail: [www.smanshaee@yahoo.com](mailto:www.smanshaee@yahoo.com)

## Parviz Asgari

Department of Psychology, Ahvaz Branch, Islamic, Azad University, Ahvaz, Iran



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## Introduction

For many years, humans have been consuming drugs in different ways in the hope of reducing their pains and changing their consciousness states (Davison & Neale, 2001). Despite the complications of addiction, such as mental and physical disorders, it will be added to the number of victims of this deadly trap day by day (Yousefi & Khaledian, 2012). There is a kind of bias in the consumption or non-consumption of narcotics or psychotropic substances which, to some extent, misleads a person and leads him/her to the use of defensive mechanisms of denial (Mokri, Ekhtiari, Edalati, & Naderi, 2011). The consumption behavior loses its pleasure stage by stage and becomes compulsory. In addition to the emergence of dependence, substance use causes varying degrees of physical and/or physical damage to the consumers. Under these circumstances, the full body of the addiction illness is visible through a combination of dependence and destruction. This devastation and dependence is observed to a greater extent in the abuse of substances, such as amphetamines and other types of stimulants.

Addiction to narcotics and stimulants is a chronic illness that is often associated with other psychiatric illnesses (Ilgen, Jain, Kim, & Trafton, 2008). Psychiatric disorders along with substance abuse disorders have harmful effects on physical and psychological health. Basic depression, anxiety, borderline personality disorder, and antisocial personality disorder are among the most common psychiatric diagnoses among addicts (Roberts & Xineg, 2007; Astals, Díaz, Domingo, Santos, Bulbena, & Torrens, 2009). ) In fact, psychosomatic symptoms are very common in addicted patients, and are so severe in many cases that can estimate, for example, the features of a major depression or anxiety disorder (Mc-Governetal, 2009).

In recent years, special attention has been paid to the psychological treatment of psychosomatic symptoms caused by drug abuse disorder. Researchers believe that the psychotherapies provided for drug use have rarely considered the consequent disorders despite the high prevalence of these disorders and their interaction with each other. This issue has made the interventions designed in the area of substance abuse disorders ineffective and has led to the incidence of recurrent relapses in patients (Hasin, Liu, Nunes, Mac- Cloud, & Samet, 2002, cited in Janis, Leigh, Gisarah,& Marlatt, 2009). Due to the high costs and serious damages of substance abuse throughout the world, cost-effective therapies are needed to treat substance abuse and addiction (World Health Organization, 2006). In recent years, there have been many advances in the treatment of substance use disorders. Such examples as medical, psychological, and social interventions are representative of these advances (Mc-Kay, 2009). Kamarzarin, Zare & Brooki (2012) showed that 20% to 0.9% of the drug addicts undergoing treatment experience relapse. Due to the multidimensional nature of drug dependence and the chronic, progressive, and relapsing nature of this disease,

therapies that emphasize only one aspect, such as pharmacology, have not yielded a successful performance in relapse prevention.

One of the most prominent psychological interventions in the treatment of addiction and relapse prevention in recent years has been cognitive therapeutic modeling, including schema therapy and mindfulness that helps patients acquire the required coping skills to manage risk situations and treat psychological disorders. This therapeutic approach has progressed in recent years and different types of therapies have originated from it that are widely used to treat depression, anxiety, fear, pain, and addiction. In fact, many substance abuse clients have certain patterns of thinking that keep the disorders active and may prevent the occurrence of any changing. These patterns of thinking are believed to be related to expectations, perceptions of allowing drug use, and individuals' beliefs about drug use. These beliefs include thoughts and ideas about pleasure seeking, problem-solving, prominence, and escape that may have been shaped in the childhood (Beck, Wright, Newman, & Liese, 1993, cited in Janis et al., 2009). Schema therapy is among the ones that affect psychological aspects; indeed, it is a modern and integrated therapy that emphasizes the roots of psychological problems, the use of stimulating techniques, and presentation of the concept of coping styles (Yang, Klosco, & Vishar, 2003; translated by Hamidpur & Andouz, 2009). Maladaptive schemas are powerful predictors of pessimism, depression, frustration, and anxiety among people, especially those who have experienced psychological and physical trauma during their lives. In addition, the existence of healthy patterns meets the need for the mental reconstruction of individuals in relation to the belief in each experience (Dalglish, 2004). In this type of therapy, the diagnosis and identification of early maladaptive schemas will be addressed and this will increase the rate of recovery and reduce the relapse rate (Horlly, & Baker, 2010). The conduct of this research leads to an increase in the individuals' level of knowledge and awareness based on the therapies and this research also examines the effectiveness of the two therapies in physical and psychological symptoms. In addition, these therapeutic methods help patients overcome mental and physical problems in private and social life. Gilbert, & Leahy (2008) indicated that schema therapy has the highest level of experimental support for treating stimulant users. Recent research on drug users suggests that schema therapy is superior to medical therapies and supportive care. In general, a growing body of evidence has been gathered that shows that schema therapy is a durable treatment alternative for people with drug use (Dagbaghi, Asgharnejad, Atef, & Bolhari, 2007).

In addition, one can point out the mindfulness therapy whose main mechanism is self-control (Crane, 2008). Mindfulness training requires metacognitive learning and new behavioral strategies to focus on attention, prevent mental ruminations and tendency to disturbing responses, expand new thoughts, and reduce unpleasant psychological symptoms (Aghajani, 2011). Mindfulness helps one to understand that negative emotions may occur, but are

not a permanent and stable constituent of personality. It also allows the individual to respond to the surrounding events with thinking and reflection rather than to respond imperceptibly to the incidents (Emanuel, Updegraff, Kalmbach, & Ciesla, 2010). Mindfulness is a method for the provision of a better life, the relief of pains, and enrichment and meaningfulness of life (Siegel, 2010). Research has also shown that mindfulness exercises are useful for a significant range of people with various problems. For instance, mindfulness can reduce physical and psychological symptoms, such as sadness and depression (Talebizadeh, Shahmiri & Ja'farifard, 2011), insomnia and sexual problems (Miklowitz, Alatiq, Goodwin, Geddes, & Fennell, 2011), chronic pain (Rosenzweig et al., 2010), and addiction to anything (Siegel, 2010). In this regard, Morone, Lynch, Greco, Tindle, & Weine (2015), and Feldman, Hayes, Kumar, Greeson, & Laurenceau (2007) have also shown that mindfulness can influentially mitigate a large number of physical, mental, mental, chronic health problems, and stress.

Various studies have shown that mindfulness is correlated with psychosomatic symptoms; however, it decreases neurotic symptoms (for example: Bear, Ruth, Gregory, Allen, & Kristin, 2004; Janis et al., 2005; Varplanken, Friborg, Oddgeir, Trafimoww, & Woolf, 2007; Kingston, Chadwick, Meron, & Skinner, 2007; Carmody, Reed, Kristeller, & Merriam, 2008). Moreover, related research findings (Feldman, Hayes, Kumar, Greeson, & Laurenceau, 2007; Avants, Beitel, & Margoline, 2009; and Witkiewitz, & Bowen, 2010; Witkiewitz, & Bowen, 2013) have shown that the training of mindfulness and schema therapy has been significantly positive in increasing the effectiveness of the treatment of stimulant dependence, and it is effective in relapse prevention of opioid use. Indeed, these methods are more effective than conventional cognitive behavior therapies. In the same way, these therapies have been effective in the decrease of addicts' psychosomatic symptoms, especially the symptoms of depression, anxiety, and hypochondriasis. In other studies, the training of mindfulness has been effective in reducing depression and anxiety (Mitmansgruber, Beck, Thomas, Stefan, & Schubler, 2011); reducing depression and anxiety and increasing self-esteem (Vollenweider, Liechti, Gamma Greer, & Geyer, 2012), and in reducing depression, anxiety, and drug use tendencies (Platter, & Kelley, 2013). Indeed, addiction to stimulants is a biological, psychological, and social issue; and many factors are effective in the etiology of addiction and lead to the onset of drug use and, then, addiction in interaction with each other. The individual, environmental, and social factors, as the underlying background factors, may lead to the purposeful design of programs on the prevention, diagnosis, treatment, and follow-up of addiction (Vernon & Kelman, 2010).

## Method

### Population, sample, and sampling method

A quasi-experimental research design along with pre-test, post-test, follow-up and the control group was used for the conduct of this study. The statistical population of the study included the patients who had presented to the outpatient addiction center in Ahvaz welfare organization in 2014. The number of 75 non-addicted patients was selected using non-probabilistic sampling method. All the population members were given SCL 90 questionnaire so that 45 married male patients with opiate dependency diagnosis who obtained higher scores in each subscale could be selected. Subsequently, these patients were randomly assigned to two 15-participant experimental groups (15 participants each group) and one control group (15). Then, the pretest was administered to all groups and, thereafter, the intervention was administered to the experimental groups, and the post-test was performed. Eventually, after the passage of 3 months, the follow-up was conducted, as well. The criteria for entering the study were the placement in the 19-to-40-year-old age group, the availability of criteria for the diagnosis of opiate dependence on the basis of the fifth edition of the Practical Guide and Diagnostic Manual for Psychiatric Disorders, the passage of more than one week from successful detoxification, and not taking regular antipsychotic medications at the time of admission to the treatment program.

### Instruments

Symptom Check-List (SCL-90-R): This scale contains 90 questions. It was first introduced by Derogatis, Lippman & Covi (1973). Minnesota Multidimensional Questionnaire was used to assess the convergent validity of this scale. The correlation between the scores of the two scales represented the acceptable validity of SCL-90-R. Each of the questions is scored on a 5-point Likert scale from "no" (zero) to "severely" (four). It consist of 9 dimensions of disease symptoms and 3 general indexes. This questionnaire has been used as a diagnostic tool to measure the symptoms in alcohol addicts, individuals with sexual dysfunction, cancer patients, heart failure patients with severe physical illnesses, and students in need of guidance and counseling (Fathi Ashtiani, 2009). The reliability of this instrument has been reported to equal 0.1, 0.91, and 0.97 through split-half, Guttman, and Cronbach's alpha METHODS, respectively (Fooladvand, 2007). In this research, the reliability coefficients of the questionnaire were obtained equal to 0.75, 0.85, and 0.90 through Cronbach's alpha, Spearman-Brown, and Guttman methods, respectively.

### Procedure

In the first experimental group, group schema therapy was presented for 10 sessions, including: First session: Establishing a relationship with the patient's perception and examining how problems are created and survive; Second session: Teaching the patient about the nature of addiction, determining the

patients and therapist's expectations of the therapy, teaching cognitive-behavioral patterns and creating a therapeutic agreement; Third session: Reviewing thoughts, consequences, and antecedents; identifying compulsions, avoidance, and fundamental beliefs; Fourth session: identifying distorted thoughts, evaluating the clients' thinking cycle and behavior, and training cognitive distortions and identifying them; Fifth session: Correcting ineffective thoughts, changing and modifying cognitive distortions; Sixth session: teaching the schema-driven pattern; teaching schema therapy; and conceptualizing the patient's problem in the form of schemas; Seventh session: identifying the early ineffective schemas; identifying schema-based areas, processes, behaviors, and styles; Eighth session: Modifying the schema of using emotional techniques, discussing past experiences; making imaginative dialogue with parents; discussing the current events; focusing on mental imagery and emotional evacuation; Ninth session: Modifying schemas; using behavioral techniques to remove continuous behavior of schemas; eliminating convictions and increasing healthy coping behaviors; Tenth Session: Modifying schemas; using cognitive techniques; critical review of supporting evidence of schemas; reviewing and examining the contradictory evidence with schemas; working on position/anti-position technique; making illustrative training cards in conflict with schemas; and profit and loss analysis of schemas.

In addition, mindfulness sessions included as follows: First session: Giving the pre-test, setting the overall routines by considering the aspect of confidentiality and personal life of individuals, inviting participants to introduce themselves, doing physical examination exercises, assigning homework, discussing and determining weekly sessions, distributing ribbons and pamphlets; Session 2: Performing body review on a daily basis, deeply breathing every day for 10 to 15 minutes, selecting a new activity and doing it mentally, writing a practice report in the registration sheet; Session 3: It started with the practice of seeing and hearing. In this exercise, participants were asked to look and listen in a non-judgmental manner for 2 minutes. This exercise was followed by meditation and was then followed by breathing with attention to physical senses. Talking about homework, doing the three-minute breathing exercise (this meditation consists of three stages: attention to the exercise at the moment of doing, attention to breathing, and attention to the body), doing one of the exercises of mindfulness; Fourth session: Doing sitting meditation with attention to breathing, body sounds, and thoughts (four-dimensional sitting meditation), talking about stress responses and one's reaction to difficult situations and alternative attitudes and behaviors, mindful walking; Fifth session: Doing sitting meditation, performing body mindfulness movements; Sixth session: Doing 3-minute spatial breathing, discussing homework in pair groups, doing exercises titled "Creation, thinking, separate views", performing four meditation exercises for 1 hour; Seventh session: Performing four-dimensional mediation and awareness of whatever that comes to the mind at the moment. In fact, it was

focused on the theme: What is the best way to take care of myself? The participants were asked to tell which of their life events were pleasant and unpleasant, and how can they design a program with the inclusion of enough pleasant experiences. Three-minute space breathing was also done at the end of this session; Eighth session: Performing body scan meditation, practicing a 3-minute space breathing, meditating on ways to overcome obstacles, asking questions about the whole session, such as whether the participants achieved their expectations? Do they feel that their personality has grown? Do they feel that their coping skills have been increasing and whether they want to continue their meditation exercises or not?

## Results

The number of 14 participants (11.7%) of the sample was under the age of 20 years, the number of 38 participants (31.7%) were between 20 and 30 years old, and the number of 68 participants (56.6%) were over 30 years old. Sixteen participants (13.3%) were unemployed, 26 participants (21.7%) were workers, 44 participants (36.7%) worked freelance, and 34 participants (28.3%) were employees.

The descriptive statistics of the research variables are presented in Table 1 for each test type and group.

**Table 1: Descriptive statistics of the research variables for each test type and group**

<i>Variables</i>	<i>Group</i>	<i>Pretest</i>		<i>Posttest</i>		<i>Follow-up</i>	
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
<b>Somatic complaints</b>	Schema therapy	3.02	0.38	1.60	0.46	1.61	0.51
	Mindfulness	2.85	0.37	2.09	0.35	2.03	0.32
	Control	2.97	0.26	2.99	0.25	3.02	0.21
<b>Obsession-Compulsion</b>	Schema therapy	2.95	0.27	1.33	0.33	1.46	0.50
	Mindfulness	2.81	0.36	2.08	0.44	2.03	0.41
	Control	2.95	0.36	3	0.23	2.98	0.25
<b>Interpersonal sensitivity</b>	Schema therapy	2.87	0.19	1.29	0.30	1.48	0.46
	Mindfulness	2.82	0.27	1.94	0.50	1.91	0.47
	Control	2.85	0.29	2.87	0.27	2.91	0.30
<b>Depression</b>	Schema therapy	3.02	0.36	1.60	0.27	1.49	0.60
	Mindfulness	2.73	0.33	1.96	0.42	1.68	0.56
	Control	2.89	0.23	2.86	0.26	2.87	0.24
<b>Anxiety</b>	Schema therapy	3.05	0.30	1.19	0.44	1.45	0.53
	Mindfulness	2.84	0.30	1.87	0.51	1.77	0.51
	Control	2.89	0.23	2.86	0.26	2.87	0.24
<b>Aggressiveness</b>	Schema therapy	2.92	0.39	1.48	0.52	1.49	0.50
	Mindfulness	2.91	0.37	2.04	0.52	2.01	0.49
	Control	2.75	0.53	2.86	0.47	2.84	0.48
<b>Phobic anxiety</b>	Schema therapy	2.74	0.48	1.58	0.46	1.74	0.50
	Mindfulness	2.91	0.28	1.89	0.57	1.95	0.43
	Control	2.91	0.30	2.94	0.26	2.95	0.26
<b>Paranoid</b>	Schema therapy	2.95	0.39	1.52	0.40	1.41	0.40
	Mindfulness	2.91	0.40	2.25	0.58	2.19	0.56
	Control	2.92	0.43	2.95	0.42	2.90	0.36
<b>Psychosis</b>	Schema therapy	2.95	0.36	1.57	0.46	1.52	0.45
	Mindfulness	2.91	0.40	2.25	0.58	2.19	0.56
	Control	2.93	0.43	2.96	0.42	2.90	0.36

To analyze the research hypothesis, multivariate covariance analysis was used. One of the assumptions for using this analysis is the equality of error variances. The results of Leven's test are presented in Table 2.

**Table 2: The results of Leven's test for examining the equality of error variances for each test type**

<i>Variable</i>	<i>Test type</i>	<i>F</i>	<i>Df</i>	<i>Sig.</i>
<b>Somatic complaints</b>	Pretest	0.58	57	0.56
	Posttest	0.50	57	0.61
	Follow-up	0.53	57	0.56
<b>Obsession-Compulsion</b>	Pretest	1.05	57	0.35
	Posttest	1.01	57	0.37
	Follow-up	1.20	57	0.18
<b>Interpersonal sensitivity</b>	Pretest	1.20	57	0.30
	Posttest	1.23	57	0.19
	Follow-up	2.33	57	0.10
<b>Depression</b>	Pretest	0.99	57	0.37
	Posttest	0.55	57	0.57
	Follow-up	1.01	57	0.16
<b>Anxiety</b>	Pretest	0.69	57	0.50
	Posttest	1.18	57	0.23
	Follow-up	1.12	57	0.26
<b>Aggressiveness</b>	Pretest	2.18	57	0.12
	Posttest	0.11	57	0.89
	Follow-up	0.15	57	0.85
<b>Phobic anxiety</b>	Pretest	1.12	57	0.30
	Posttest	1.20	57	0.10
	Follow-up	0.81	57	0.66
<b>Paranoid</b>	Pretest	0.16	57	0.85
	Posttest	1.28	57	0.11
	Follow-up	2.36	57	0.10
<b>Psychosis</b>	Pretest	0.22	57	0.79
	Posttest	2.15	57	0.14
	Follow-up	1.09	57	0.34

As it has been shown in Table 2, the assumption of the equality of error variances has been met for all components ( $P > 0.05$ ). Therefore, multivariate covariance analysis was performed with post-test scores. The results showed that there is a significant difference in the linear combination of the components ( $P < 0.05$ ,  $F = 21.540$ , Wilks's  $\lambda = 0.03$ ). To study the patterns of difference, univariate analysis of covariance was used as in Table 3.



**Table 3: Univariate covariance analysis results for examining patterns of difference in the effectiveness of mindfulness intervention and schema therapy**

<i>Variable</i>	<i>Sum of squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<b>Somatic complaints</b>	17.56	2	8.78	72.46	0.0005
<b>Compulsion</b>	23.79	2	11.89	113.44	0.0005
<b>Sensitivity</b>	22.08	2	11.04	131.89	0.0005
<b>Depression</b>	28.54	2	14.27	162.27	0.0005
<b>Anxiety</b>	29.25	2	14.62	92.71	0.0005
<b>Aggressiveness</b>	21.12	2	10.56	53.53	0.0005
<b>Public anxiety</b>	15	2	7.50	46.46	0.0005
<b>Paranoid</b>	20.11	2	10.05	106.46	0.0005
<b>Psychosis</b>	18.85	2	9.92	78.75	0.0005

As it is observed in the table above, there is a significant difference in all components ( $P < 0.001$ ). The Bonferroni post-hoc test was used to examine the difference between the groups (pairwise comparison of the means between the two groups). The results showed that there was a significant difference between the control group and the experimental group regarding the psychological symptoms and its dimensions (somatic complaints, obsession-compulsion, interpersonal sensitivity, depression, anxiety, aggression, public anxiety, paranoia, and psychosis). According to the descriptive statistics, the experimental groups had obtained lower mean values. Moreover, the mean of psychosomatic symptoms and its dimensions in the schema therapy group was lower than that of the mindfulness group. In other words, the effectiveness of schema therapy training in the improvement of psychosomatic symptoms was more than that of the mindfulness training.

To examine the stability of the effectiveness, multivariate covariance analysis was run on follow-up scores. The results of this analysis indicated that the difference was significant and the intervention was stable ( $P < 0.05$ ,  $F = 2.110$ , Wilks's lambda = 0.46). To study the patterns of difference, univariate analysis of covariance was used as in Table 4.

**Table 3: Univariate covariance analysis results for examining patterns of difference in the stability of the effectiveness of mindfulness intervention and schema therapy**

<i>Variable</i>	<i>Sum of squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<b>Somatic complaints</b>	0.09	2	0.04	2.08	0.13
<b>Compulsion</b>	0.29	2	0.14	2.86	0.06
<b>Sensitivity</b>	0.17	2	0.08	2.33	0.10
<b>Depression</b>	1.71	2	0.85	11.10	0.0005
<b>Anxiety</b>	0.47	2	0.23	3.20	0.04
<b>Aggressiveness</b>	0.08	2	0.04	0.25	0.77
<b>Public anxiety</b>	0.38	2	0.19	1.72	0.04
<b>Paranoid</b>	0.17	2	0.08	2.06	0.13
<b>Psychosis</b>	0.05	2	0.02	0.72	0.49

As it has been shown in Table 4, there was a significant difference in the components of depression, anxiety, and public anxiety. The Bonferroni post-hoc

test was used to examine the pairwise comparison of the groups. The results showed that there is a significant difference between the control group and the experimental groups in these three components. However, there was no significant difference between the two experimental groups.

### **Discussion and Conclusion**

This study aimed at comparing the effectiveness of schema therapy and mindfulness in psychosomatic symptoms in stimulant drug users. Regarding the findings of this study, it can be concluded that the scores obtained in the psychosomatic symptoms in the experimental groups had experienced a reduction compared to the control group's scores. Moreover, schema therapy was found to be more effective than mindfulness. This finding is consistent with previous findings reported by Dabaghi et al. (2007), Bear et al. (2004), Janis et al. (2005), Feldman et al. (2007), Varplanken et al. (2007), Kingston et al. (2007), Gilbert & Leahy (2012), Morone et al. (2015), Avants et al. (2009), Horlly & Baker (2010), Rosenzweig et al. (2010), Siegel (2010), Witkiewitz, & Bowen (2013), Miklowitz et al. (2011), Mitmansgruber et al. (2011), and Platter, & Kelley (2012). To interpret this finding, one may argue that, in fact, individual emotions and mood are socially useful and can be used to convey feelings to others, to produce social interaction, and to create and eliminate relationships with others (Rio, 2011). Most substance abusers have a negative thinking system about themselves as well as their current and future experiences. The negative barriers are interpreted as impassable barriers, even when there are more positive attitudes about the individual's experiences. They tend to the worst possible interpretation of what has happened to them. It can be said that the lack of experience, loneliness, grief, hostility, inability to communicate probably, and the lack of facilities for gaining positive emotions lead the individual towards drug use. Stimulatory effects of stimulant drugs increase false mood and a type of transient euphoria in the individuals, and motivate the use of stimulants and produce positive brain responses to substance use and, ultimately, addiction. The adjustment and regulation of these factors through psychological training, such as schema therapy and mindfulness can play an effective role in controlling the destructive functions of individuals because emotions act as solutions to the challenges, stresses, and problems of life (Rio, 2011). In other words, since emotions play an important role in life, the training of such methods to the individuals who use narcotics, especially stimulants can regulate psychosomatic symptoms and emotions while it has a relationship with acceptance and positive social interactions (Saarni, 2012). This can lead to effective meditation with tempting and stressful situations (Gross, 2010) and increase activity in response to social situations (Tugade & Frederickson, 2008). In this regard, the teaching of mindfulness and schema therapy can make individuals aware of their positive and negative emotions and can bring their timely acceptance and expression of these emotions, can play an important role in reducing destructive behaviors and

increasing the desired behaviors to prevent drug use. It can be argued that both of these training methods lead to the modulation of negative psychosomatic symptoms, consequent modification of the judgment and positive perception about the self among stimulant consumers due to the use of similar techniques, such as awareness, acceptance, and reconstruction of maladaptive foundations. This, in turn, can be effective in reducing their consumption behaviors. In addition, stimulant users cannot use their emotions in useful ways in different situations of life both in happiness and sadness, and this causes other problems, including negative perceptions of the self, concerns about social status, anxiety, and inappropriate family and social behaviors in them. They all can pave the way for tendency to substance use in order to reduce these nervous pressures. Moreover, although schema therapy and mindfulness have individually been adjusted in the origin, the presence of group factors facilitates the activation of schema therapy techniques and has significant compensatory effects on central schemes, such as exclusion, social isolation, distrust, and emotional deprivation. In fact, due to the establishment of close links and relationships between the group members, the possibility of real exposure and the linking of the initial experiences with schematic processes of here and now in a supportive environment will also increase. On the other hand, the increase of the learning opportunities leads to the reinforcement of the sense of self-efficacy and risk-taking among the members for the conduct of new behaviors. In the same way, the group members also learn to empathize and meet their emotional needs in the group instead of abandoning their emotions via taking refuge in problematic addictive behavior (Farrell, Shaw & Webber, 2010). An important point in the application of group therapy is that it is cost-effective, and facilitates and expedites the treatment process. Many addicted patients suffer from some kind of depression and have a unique feeling for their problems and thoughts. This unique feeling exacerbates the social isolation of these patients and strengthens the social isolation of being unique. Group therapy easily makes it possible for some of these people to come together in one place and interact with each other and talk about similar problems. In this regard, the loss of these negative emotions not only makes people more relaxed and comfortable but also helps them develop relationships outside of the healthcare environment. In addition, the group members help each other during the course of the interaction, support each other during the course of the treatment, and assure each other, give each other suggestions and insights.

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