



Research article

Comparing the effectiveness of structural family therapy and mindfulness-based family therapy in cohesion and adaptability in couples with marital dissatisfaction

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ABSTRACT

The present study was conducted with the aim of comparing the effectiveness of structural family therapy and mindfulness-based family therapy in cohesion and adaptability in couples with marital dissatisfaction. The research was a semi-experimental study with a pretest-posttest control group design and a two-month follow-up. The research population comprised all couples with marital dissatisfaction who referred to family counseling centers in Tehran (Iran) in the first 6 months of 2021. Out of this number, 30 couples with marital dissatisfaction were selected using convenience and purposive sampling and were randomly assigned to three groups: structural family therapy, mindfulness-based family therapy and the control group. The research tool was the Family Adaptability and Cohesion Evaluation Scale by Olson, Portner and Lavee (1996). In order to analyze the data, repeated measures analysis of variance was used. The findings demonstrated that there is a significant difference between the two experimental groups and the control group in cohesion and adaptability scores. This means that both experimental groups had a significant effect on cohesion and adaptability components ($p < 0.05$). Further, the results suggested that there is a significant difference between the two experimental groups of structural family therapy and mindfulness-based family therapy in terms of the effectiveness in the components of cohesion and adaptability. Accordingly, the effect of structural family therapy on couple's cohesion and adaptability was greater than that of mindfulness-based family therapy ($p < 0.05$).

1. Introduction

The family is considered the main unit of society, and the relationships between family members, their relationship with the social environment and how the family is structured all have a great impact on social construction [1] Although a satisfactory marriage is considered as one of the important causes of the mental health of society, if the married life has an unfavorable condition and is accompanied by dissatisfaction, it will have an irreparable effect [2]. One of the common problems in today's society, especially despite the spread of the corona virus and home quarantine, is marital dissatisfaction [3] (see Tables 1–9).

According to the studies, marital dissatisfaction, in addition to its destructive effects on couples' physical and mental health [4], is

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one of the most important factors leading to separation and divorce in couples [5], Given the importance of the concept of marital dissatisfaction in the durability and collapse of marital life, couples with marital dissatisfaction were used as the research sample. Many studies have investigated the factors affecting couples' marital dissatisfaction. One of the aspects that can affect the level of couples' satisfaction is their cohesion and adaptability since according to Olson's model [6], paying attention to the cohesion and

Table 1
Summary of structural family therapy protocol.

Session	Goal	Content	Task
First	Getting to know the members and stating the rationale and objectives of the training sessions	1) Getting to know the participating members and introducing them to each other. 2) Receiving the goals of the members to participate in the sessions. 3) Summing up and expressing the common goals of the groups.	Expressing the goals of participation in the session
Second	Teaching communication methods, displaying the dominant situation of families, introducing subsystems in the family	The four effective dimensions in relationships, which included objective facts, individual psychology, exchange patterns and relational ethics, were investigated and identified. Also, the family subsystems were introduced and the dominant situation of families was displayed and discussed.	Practicing communication skills and writing down the results of the practice
Third	Identifying the four effective dimensions in relationships (objective facts, individual psychology, exchange patterns and relational ethics) and teaching transactional patterns.	The four effective dimensions in couples' relationships were investigated and with the help of structural family therapy techniques such as incorporation, imitation and retelling, correct relationship patterns were taught.	Taking notes on some of the effects of family therapy techniques in improving people's daily life.
Fourth	Teaching intergenerational patterns, expressing common transactional patterns and existing triangles around family problems	The intergenerational patterns related to husband and wife, i.e. behavioral patterns transferred from the family of origin of husband and wife to the common life, as well as the existing triangles around family problems were identified and their role in marital problems was discussed.	Writing down the expectations of each couple from the spouse and raising them in the session, explaining to others as a solution the cases that (in the opinion of the couple) cause more cooperation on the part of each spouse.
Fifth	Summing up the four dimensions and intergenerational patterns as well as the reconstruction and change of the family	The four dimensions and effective intergenerational patterns in marital problems and treatment goals were summarized and the methods of reconstruction and change of the family were examined.	Writing and presenting two of the things that cause couples to react.
Sixth	Expressing the amount of relationship between each couple and their relatives	The manner and amount of relationship between spouses versus their relationship with the family members were studied and trained.	The couples were assigned to write and bring with them some of their experiences that brought them closer to their family of origin and distanced them from their spouse.
Seventh	Relational ethics, and balancing the family relationship with the spouse's relatives	Issues associated with relational ethics, including trust, justice, loyalty, responsibility and sense of being a creditor, were discussed in the family of origin of each husband and wife as well as their marital relationship. Also, in this session, the family relationship with the spouse's relatives and friends was examined.	In this session, the couples were tasked to write and bring to the session some of the solutions that increase or balance the family relationship with the spouse's relatives and cause to have a good relationship with mutual friends.
Eighth	Determining the obligations and rights of couples	Obligations refer to the energy, time and investments that each couple feels they have put into marriage; and rights refer to the achievements and benefits that each couple feels they have earned from their spouse; in the case of each husband and wife, the obligations and rights were identified and analyzed, and the couple was helped to balance obligations and rights through reorganizing their lifestyles in a way that would lead to a fair perception of the marital relationship.	In this session, the couples were tasked to name some of the obligations and rights they had in relation to their spouses.
Ninth	All family members support each other instead of getting support from children	While examining the tasks of the previous session, the main discussion of this session was about maintaining the subsystem of husband and wife with the boundaries of subsystems of children. In the end, by consolidating and stabilizing the changes, organizing the lifestyle and establishing a balance between obligations and rights, a fair perception of the marital relationship of the couple was created.	Each couple was asked to write down and bring with them two cases that lead to obtaining child support.
Tenth	Summing up the sessions and drawing conclusions	Group discussion about the changes made in people by participating in the session, summing up the sessions and drawing conclusions	End of the sessions

Table 2
Summary of mindfulness-based family therapy protocol.

Session	Goals	Content	Task
First	Introduction and automatic guidance	Introducing the program and briefly describing the 8 sessions, familiarizing the group members with each other and the counselor, determining the goals and rules of the group, familiarizing with the concepts of mindfulness-based cognitive therapy and explaining the automatic guidance and raisin meditation.	Practicing the raisin meditation at home
Second	Facing obstacles	Reviewing the previous session's assignment at the beginning of each session, identifying obstacles to practice and providing mindfulness program solutions for it and practicing mindful breathing meditation, discussing the difference between thoughts and feelings, doing sitting meditation.	Practicing mindful breathing meditation, sitting meditation at home
Third	Mindful breathing technique	10–15 min mindful breathing, teaching the inhale and exhale technique with relaxation and without thinking about anything else, and teaching the watching the breath technique.	Practicing the inhale and exhale and watching the breath techniques at home
Fourth	Implementing the mindfulness technique	Sitting meditation (awareness of breath, sound, body and thoughts), examining the effect of awareness of pleasant and unpleasant events on feelings, thoughts and body sensations.	Practicing awareness of pleasant and unpleasant events while sitting at home
Fifth	Permission/permission of presence (acceptance of thoughts and feelings)	Mindful yoga, discussion about seeing thoughts differently or thought replacement, sitting meditation (sound and thoughts).	Mindful yoga practice at home
Sixth	Thoughts are not facts	Sleep hygiene, 10–15 min mindful breathing	Sleep hygiene practice at home
Seventh	How can I best take care of myself?	Sitting meditation and awareness of everything that comes into consciousness at the moment, providing an exercise to prepare a list of pleasant and unpleasant life events, experience of awareness and acceptance without judgment (non-selective).	Making a list of events and practicing non-judgmental acceptance
Eighth	Acceptance and change (using what you have learned so far)	Body-checking meditation, 3-min breathing space exercise, discussing the ways to cope with obstacles to meditation, asking questions about the whole sessions, such as: "Have the participants achieved their expectations? Do they like to continue these meditation exercises? Have their coping skills increased?"; getting feedback from the participants and conducting posttests, preparing for the end of the sessions and the intervention.	Recommendation to implement what you have learned so far

Table 3
One-way analysis of variance to compare the mean age and length of marriage in three groups.

		Sum of squares	Degrees of freedom	Mean square	F statistic	Significance
Age	Between-group difference	35.46	2	17.73	0.45	0.642
Length of marriage	Between-group difference	9.86	2	4.93	0.73	0.490

Table 4
Mean and standard deviation of cohesion and adaptability in the pretest, posttest and follow-up in three groups.

Component	Stage	Structural family therapy		Mindfulness-based family therapy		Control group	
		Mean	SD	Mean	SD	Mean	SD
Cohesion	Pretest	30.10	6.27	23.80	4.09	25.40	6.55
	Posttest	38.60	4.67	31.60	6.02	22.80	6.98
	Follow-up	38.50	4.62	32.70	5.94	21.90	6.70
Adaptability	Pretest	40.20	4.39	34	4.08	19.30	3.49
	Posttest	27.70	7.51	22.10	6.41	20.10	3.60
	Follow-up	25.20	6.66	22.40	6.18	19.70	4.01

As can be seen in Table 4, the cohesion scores of couples in the two experimental groups (structural family therapy and mindfulness-based family therapy) have increased in the follow-up and posttest stages compared to the pretest. But in the control group, the cohesion scores of couples did not increase in the follow-up and posttest compared to the pretest. In addition, regarding the adaptability component, it should be stated that the adaptability scores of couples in the two experimental groups (structural family therapy and mindfulness-based family therapy) have decreased in the follow-up and posttest stages compared to the pretest. But in the control group, the adaptability scores of couples in the follow-up and posttest did not change significantly compared to the pretest.

emotional bond between members of cohesive families causes that family members become sensitive to each other's values and interests, and the higher the quality of this variable, the better the marital life of adults will be [7]. found that there is a significant relationship between cohesion and adaptability with couples' satisfaction with married life. Cohesion is described as an emotional bond among family members and a sense of closeness, which is expressed by a sense of belonging and acceptance in the family [8].

It is one of the components that reduces stress and shows the level of family health [9]. Adaptability is the family's ability to change

Table 5
Assumptions of parametric tests.

Variables	Test type	Normality of data distribution		Homogeneity of variance		Homogeneity of covariance matrix	
		Kolmogorov-Smirnov test	Sig.	Levene's test	Sig.	Mauchly's sphericity test	Sig.
Cohesion	Pretest	0.51	0.958	1.71	0.199	0.65	0.004
	Posttest	0.96	0.306	0.73	0.488		
	Follow-up	1.01	0.266	0.60	0.554		
Adaptability	Pretest	1.29	0.071	0.11	0.893	0.55	0.001
	Posttest	0.990	0.21	2.05	0.147		
	Follow-up	0.55	0.916	1.22	0.311		

Table 6
Homogeneity of regression slopes assumption.

Variable	Source of changes	Sum of squares	Degrees of freedom	Mean square	F	Significance
Cohesion	Group × pretest	95.32	2	47.65	2.44	1.108
	Error	468.27	24	19.51		
	Total	31227	30			
Adaptability	Group × pretest	26.63	2	10.32	0.25	0.774
	Error	956.05	24	39.83		
	Total	17593	30			

According to the scores of family cohesion and adaptability, the F value of the group-pretest interaction is 2.44 and 0.25, respectively, for cohesion and adaptability. Considering that the significance level of both components is greater than 0.05, it can be concluded that the null hypothesis indicating the homogeneity of regression slopes of the three groups is accepted and the alternative hypothesis is rejected, and the homogeneity of regression slopes assumption is met. It can also be said that there is no significant difference between the three groups in the pretest.

Table 7
Mauchly's test to investigate the sphericity of within-group variance of cohesion and adaptability components in the three groups.

Variables	Mauchly's test	Approximate X^2	Degrees of freedom	Significance	Greenhouse–Geisser test
Cohesion	0.65	10.96	2	0.004	0.74
Adaptability	0.55	15.52	2	0.0001	0.69

Table 8
Repeated measures analysis of variance to compare within-group and between-group effects in the experimental and control groups.

Effects	Variables	Source	Sum of squares	Degrees of freedom	Mean square	F	Sig.	Effect size
Between-group	Cohesion	Group	2294.68	2	1147.234	13.99	0.0001	0.51
		Adaptability	1939.46	2	969.73	18.31	0.0001	0.57
Within-group	Cohesion	Time	420.15	1.48	282.34	20.48	0.0001	0.43
		Time × group	529.84	2.97	199.19	14.45	0.0001	0.52
		Error	553.66	40.17	13.78			
	Adaptability	Time	1389.07	1.38	1006.86	42.25	0.0001	0.61
		Time × group	826.66	2.57	299.60	12.57	0.0001	0.48
		Error	887.60	37.24	22.82			

Table 9
Tukey's test results for pairwise comparison of cohesion and adaptability in the three groups.

Variables	Groups (I)	Groups (J)	Mean difference (I-J)	Standard error	Significance
Cohesion	Structural family therapy	Mindfulness	6.36*	2.33	0.029
		Control group	-12.36*	2.33	0.001
	Mindfulness	-6*	2.33	0.041	
Adaptability	Structural family therapy	Mindfulness	4.86*	1.87	0.039
		Control group	-11.33*	1.87	0.0001
	Mindfulness	-6.46*	1.87	0.005	

the power structure, roles, and discipline to meet the needs of the family [10], which is influenced by family values and cultural background. According to Olson's theory [11], a balanced family is the one whose members' adaptability is at an average level because going to extremes in family adaptation leads to weakness in this system [12]. Considering the importance of cohesion in increasing the level of family health and also the level of adaptability in maintaining family balance [13], the study of these two components among

unhappy couples is important.

A lot of evidence shows that couples in today's society often seek therapy to restore levels of trust and satisfaction in their relationship, especially issues related to emotional bonds (cohesion and adaptability) with important people in life [14]. For this reason, our need for effective and empirically supported approaches for couples has been emphasized [15]. As a result, the researcher in the present study is trying to improve the cohesion and adaptability factors in unhappy couples with the help of family therapy approaches. Since mindfulness is one of the complementary and standard ways to gain more awareness about the family and peace of mind of couples in their relationships [16], mindfulness-based family therapy was used to improve cohesion and adaptability in unhappy couples. The results of past studies also indicate the effect of mindfulness on promoting marital satisfaction [17] marital burnout [18] and the quality of couples' relationships [19]. Mindfulness is a conscious way to pay attention to the present time but without judgment based on immediate experiences of the present such as thoughts, emotions and feelings [20].

Mindfulness-based family therapy is a method that helps families recognize the conditions that cause stress and anxiety, gain better knowledge about themselves, and learn about their strengths and weaknesses and then find appropriate strategies to deal with these conditions [21]. In other words, mindfulness guides family members towards avoiding painful feelings and thoughts and changing unfavorable situations [22]. Therefore, it can be stated that families undergoing mindfulness-based therapy gain the necessary coping skills to control stress and anxiety and acquire the skill to control their worrying and anxious thoughts [23].

In addition to mindfulness-based family therapy, structural family therapy is also useful for families that have suffered mental injuries or experience high dissatisfaction [24] since in structural family therapy, therapists are trying to discover any pattern, routine or normal behavior that may negatively affect family dynamics, and create dynamism, love and satisfaction in life by creating healthier routines in family structures. The results of past studies also indicate the effect of structural family therapy on family functioning and marital satisfaction [25], reducing behavioral problems of family members and improving family functioning and the cohesion and coping strategies of incompatible couples [26]. Structural family therapy is based on the experiences and studies of Salvador Minuchin [27]. One of the special and unique techniques of structural family therapy is to implement family interaction patterns in the therapy session [28]. Structural family therapy is a fundamental approach among family systems theories that treats problems in the whole family and not only in each individual [29]. In structural family therapy, therapists try to uncover any patterns, routines or normal behaviors that may be negatively affecting family dynamics. They may seek to create a healthier routine in family structures so that they can create dynamism, love and stability in life [30] That is to say, the goal of structural therapy is to strengthen the structural foundation of the family by correcting dysfunctional patterns for better functioning in dealing with life stresses [31].

According to the researcher's investigations, the statistics published about divorce in the world and in Iran show a high rate of marital dissatisfaction of couples, which indicates that achieving cohesion and intimacy in couples is not easy and every day we witness higher rates of divorce and couples referring to counseling and psychotherapy clinics. On the other hand, the volume and variety of marital problems and the upward trend of divorce statistics in Iran require the use of effective treatments, and it is not possible to find effective treatments for couples with marital dissatisfaction unless different therapies, especially in the field of family therapy approaches, are compared with each other and based on the obtained results and the effectiveness of some treatments, a therapeutic approach is applied for incompatible families and couples so that divorce and incompatibility decrease in the society by using more practical therapeutic approaches. It should be noted that numerous studies have focused on various intervention methods and their impact on dissatisfaction and its associated variables. These studies can be classified into two general categories. The first category includes studies that have worked on the individual characteristics of family members. For example, studies on personality traits, schemas of couples or other emotional, cognitive and behavioral characteristics of couples are included in this category. The second category contains studies that consider the structure of relationships in families. These studies have tried to improve the relationships and structure of family members through intervention methods such as systemic family therapy or structural family therapy. However, little research has been conducted to simultaneously examine two individual and structural methods and compare them. Conducting a research to compare these two intervention methods based on two general assumptions of family therapy can help researchers choose the most accurate treatment method. Thus, this study is intended to answer the following research question: Is there a significant difference between structural family therapy and mindfulness-based family therapy in terms of the effectiveness in cohesion and adaptability in couples with marital dissatisfaction?

2. Research method

The present study, according to its goals and nature, was a semi-experimental research with a pretest-posttest and follow-up control group design. The research population consisted of all couples with marital dissatisfaction who referred to family counseling centers in Tehran (Iran) in the first 6 months of 1400 SH (2021). Based on the research objectives, 30 couples were selected from 95 couples, most of whom had referred to counseling centers due to marital violence and family disputes, and these 30 couples were present in the group by the end of the project. A total of 60 people, i.e. 30 couples, were selected through convenience and purposive sampling from the statistical population and were randomly assigned to three groups: structural family therapy (10 couples), mindfulness-based family therapy (10 couples) and the control group (10 couples). Among the couples who referred to the counseling centers, 30 couples (60 husbands and wives) whose scores on the Enrich Marital Satisfaction Scale were lower than average (placed in the range of incompatible couples) and were eligible were selected. It is necessary to explain that in the initial screening stage to select the research sample, couples answered the questionnaires individually and husband and wife whose marital satisfaction scores were low and at the same level were selected as the sample. However, in the process of conducting the research, the couples, through consultation with each other, answered the questionnaires in the pretest, posttest and two-month follow-up.

It should be noted that structural family therapy intervention was implemented for 10 sessions of 90 min based on the executive

protocol of structural family therapy by Minuchin [32]. Mindfulness-based family therapy intervention was also implemented for 8 sessions of 120 min based on the executive protocol of mindfulness-based family therapy by Segal et al. [33]. According to the proposed treatment protocols, the therapy sessions were held jointly by a family counseling specialist, who is an associate professor, and a doctoral student specializing in family counseling. It should be mentioned that the doctoral student in counseling, who was the main organizer of the structural family therapy and mindfulness-based family therapy sessions, completed continuous internships under the supervision of a counseling specialist, who is an associate professor, before starting the family therapy sessions and started the intervention and benefited from the guidance of the supervisor (associate professor in counseling and family therapist) when needed after fully mastering the treatment concepts of both therapy approaches.

3. Participants

The studied population comprised all unhappy couples who referred to counseling centers in Tehran in 2021. The research sample included 30 couples who were selected through convenience sampling from the statistical population. It should be noted that 30 couples were selected based on the research objectives from 95 couples, most of whom had referred to counseling centers in Tehran due to marital violence and family disputes, and these 30 couples were present in the group by the end of the project. Thus, 30 couples were randomly assigned to three groups: structural family therapy (10 couples), mindfulness-based family therapy (10 couples) and the control group (10 couples). The placement of 30 couples in two experimental groups and one control group was based on random assignment and by lot.

The inclusion criteria were as follows: Couples should obtain a score of less than 141 (showing their dissatisfaction) in the Marital Satisfaction Scale by Olson. [11]; the age range of the couple should be between 20 and 50 years; couples should express their consent to participate in the research; couples should not have a history of mental disorder diagnosed by a psychologist or psychiatrist, or a history of addiction to drugs and alcohol; couples should not have a history of divorce or remarriage or a history of receiving family therapy by a psychotherapist.

The exclusion criteria included the following: a history of addiction to any kind of drugs and alcohol, a diagnosed mental disorder, lack of consent to participate in the intervention courses, absence of more than one session during the intervention sessions.

4. Research tool

4.1. Family Adaptability and Cohesion Evaluation Scale

This scale is a 20-question tool developed by Olson [34], measure two major dimensions of family functioning, namely, cohesion and adaptability. This tool is developed to place families in the complex cyclic pattern. The items are scored on a Likert scale (almost always = 5 and almost never = 1). The total score of the scale is obtained by the sum of the scores of all the questions; the family cohesion score by the sum of the scores of the odd questions; and the family adaptability score by the sum of the scores of the even questions. The higher the cohesion score, the more intertwined the family is and the higher the adaptability score, the more chaotic the family is. Olson et al. (1985) obtained the reliability coefficient of the Family Adaptability and Cohesion Evaluation Scale using Cronbach's alpha method to be 0.98 for cohesion, 0.78 for adaptability and 0.90 for the whole scale (FACES-2). In a study, Martinez-Pampliega et al. [35] investigated the validity and reliability of Olson's cohesion and adaptability scale and found that this tool has good psychometric properties and the reliability coefficients of cohesion and adaptability were obtained to be 0.89 and 0.87, respectively. The construct validity of this scale is confirmed through confirmatory factor analysis, which provides good indicators of the two-dimensional structure established by the authors (GFI = 0.92; NFI = 0.89; RMSEA = 0.07).

4.2. Data analysis

Given that the experimental and control groups were evaluated in the three stages of pretest, posttest and two-month follow-up by the mentioned questionnaires, repeated measures analysis of variance was used to analyze the data.

5. Findings

5.1. Demographic information of subjects

Initially, the studied sample was examined according to demographic questions (length of marriage and age). The average length of marriage and age of couples were 7.40 and 31.70, respectively, in the experimental group receiving structural family therapy, 8.80 and 34.10, in the experimental group receiving mindfulness-based family therapy and 8 and 33.90 in the control group. Then, to ensure the initial equivalence of structural family therapy, mindfulness-based family therapy, and the control group in the variables of age and length of marriage, we compare the mean of the groups in these variables. Table 3 displays the results of this comparison.

Since the between-group difference of age and length of marriage in Table 2 is not significant, it can be mentioned that structural family therapy group, mindfulness-based family therapy group and the control group do not have significant differences in the variables of age and length of marriage.

5.2. Descriptive findings

After the demographic description, the data obtained from the scores of this research were analyzed at two descriptive and inferential levels. The mean and standard deviation of cohesion and adaptability are presented separately for the three groups in [Table 4](#).

6. Assumptions of parametric tests

Before conducting the repeated measures analysis of variance, the assumptions of this test were addressed. Three assumptions (normality of data, homogeneity of variance and homogeneity of covariance matrix) were examined in order to perform the repeated measures analysis of variance, the results of which can be observed in [Table 5](#).

As can be seen in [Table 4](#), the results of the Kolmogorov-Smirnov test demonstrate that the distribution of scores in all the research components is normal because the significance level of Kolmogorov-Smirnov test for these components is greater than 0.05. Therefore, the first assumption is met. Further, by checking the Levene's test for the equality of error variances, the assumption of equality of variances was met for all components.

6.1. Homogeneity of regression slopes assumption

In order to measure whether there was a difference between the groups in the pretest value or not, the homogeneity of regression slopes assumption was used, the results of which can be seen in [Table 6](#).

6.2. The research hypothesis about comparing the effectiveness of structural family therapy and mindfulness-based family therapy in adaptability and cohesion of couples with marital dissatisfaction

First, we compare the difference between the three groups (structural family therapy, mindfulness-based family therapy, and control group) in the change of cohesion and adaptability scores of couples with marital dissatisfaction. Since, in addition to applying the intervention for the experimental group, the variable of time was also used, the repeated measures analysis of variance was employed to analyze the data. In this method, Mauchly's test was used to check the sphericity (homogeneity of the covariance matrix), the results of which are given in [Table 7](#).

Given [Table 6](#), it can be stated that the assumption of sphericity is not established for any of the components ($P < 0.05$). So the Greenhouse-Geisser estimation method was applied to use the F test.

The results of the repeated measures analysis of variance to compare the difference between the three groups in the change of cohesion and adaptability scores are presented in [Table 8](#).

Based on the between-subjects results and [Table 7](#), it can be said that in the variables of cohesion and adaptability, the F value observed at the 0.01 level shows a significant difference between the experimental and control groups. The eta coefficient for cohesion and adaptability was obtained to be 0.51 and 0.57, and the partial eta squared values indicate an acceptable effect size ($\eta^2 > 0.14$). Further, based on the within-subjects results, it can be said that the group \times time interaction effect was also significant, meaning that time has had no effect in reducing the effectiveness of this treatment method, from the posttest to the follow-up.

The results of Tukey's Post Hoc test for pairwise comparison of the difference between the three groups in the change of cohesion and adaptability scores are presented in [Table 9](#).

According to the results of [Table 8](#), it can be stated that there is a significant difference between the two experimental groups (structural family therapy and mindfulness-based family therapy) and the control group in the scores of cohesion and adaptability, meaning that both experimental groups have had a significant effect on the components of cohesion and adaptability. Besides, the results obtained from [Table 8](#) indicate a significant difference between the two experimental groups of structural family therapy and mindfulness-based family therapy in terms of the effectiveness in the components of cohesion and adaptability, meaning that the effect of structural family therapy on couple's cohesion and adaptability has been greater than that of mindfulness-based family therapy.

7. Discussion and conclusion

The present study was conducted with the aim of comparing the effectiveness of structural family therapy and mindfulness-based family therapy in cohesion and adaptability of couples. According to the research results, it was initially found that both structural family therapy and mindfulness-based family therapy approaches are effective in couples' cohesion and adaptability. The studies by Seyyedmoharrami et al. [25] and Dehghani and Bernards [26] revealed that structural family therapy is effective in couple functioning. In their studies, Farazi et al. [36] and Jiménez et al. [37] obtained the finding that structural family therapy leads to an increase in the unity and cohesion of family members.

Concerning the effectiveness of structural family therapy, one can refer to the functions of the marital subsystem, which is one of the main topics of structural therapy. Two important tasks of the marital subsystem, i.e. satisfying the needs of each other (husband and wife) and psychosocial support for each other, were examined in the treatment session. Psychosocial support of husband and wife improved by strengthening family boundaries. In this regard, the results of the study by Chappelle and Tadros [30] suggested that structural family therapy has a great potential to address the power, boundaries and transactions related to family violence and can greatly improve the relationships between members by strengthening the boundaries. As a result, the support of husband and wife

(marital subsystem) for each other against other subsystems improved their cohesion. Goldenberg and Goldenberg [38] believe that the main factor in the harmonious functioning of the family is the matching of the needs and abilities of the members and the amount of their satisfaction with mutual relations. In the process of structural therapy, husband and wife come to the understanding that they should complement each other and family members, especially husband and wife, should act as a group and at the same time accept their mutual dependence on each other. Therefore, it can be said that structural family therapy, by modifying the family boundaries, was able to resettle people who had previously lost their primary roles into their own subsystems. The family system became fertile again and the family members were able to properly fulfill their responsibilities by being placed in their primary roles. The family boundaries were modified in such a way that in addition to the exchange of information and feelings, the individual identity of each family member was preserved in the position of parent and child. In support of this finding, Tadros and Finney [30] and Minuchin [39] maintained that disruption in the structure of a family can be caused by intertwined or disjointed boundaries. Thus, it is necessary to pay attention to hierarchies and boundaries in family therapy. In this respect, according to Minuchin [39] in structural therapy, the therapist pays special attention to the individual members of the family and addresses the communication synapses and tasks of its subsystems. These therapeutic interventions accelerate changes in the family and make changes in the position of family members towards each other by creating a transformation in the family structure, which causes a change in their expectations from each other. Therefore, it can be said that the resulting changes in the structure and adaptability of the family were made as a result of reconstruction interventions such as boundary building and strengthening the marital subsystem, parental subsystem and child subsystem. Further, teaching the clients to make rules that fit the family's life cycle created good order and cohesion in the family. Based on the foregoing, it can be concluded that structural family therapy could improve the cohesion and adaptability of family members by using the mentioned techniques.

Among other results of the current research, one can refer to the effectiveness of mindfulness-based family therapy in cohesion and adaptability of couples with marital dissatisfaction. The studies conducted by Allen et al. [40] and Karremans et al. [41] also indicated the effectiveness of mindfulness interventions in the proper functioning and improvement of relationships between couples. In their research, Yekta et al. [17] demonstrated that mindfulness interventions lead to increased empathy and intimacy between couples by reducing psychological distress. The study by Winter et al. [19] also confirmed the effectiveness of mindfulness-based family therapy in the quality of relationships between couples. In connection with the importance of mindfulness, Tickell et al. [42] stated that mindfulness-based therapy helps people learn how to recognize their feelings and separate themselves from their thoughts and states and pay attention to everything in the moment and without judgment and focus only on their goal. This separation can free people from thought patterns in which negative messages are constantly repeated. After developing an awareness of the separation between thoughts, emotions and self, people in therapy may realize that while their self and emotions may exist simultaneously, they need not be equal. In this treatment method, people easily accept negative thoughts by using mindfulness management skills and look for more useful reactions for them. In other words, this insight can help people neutralize negative thoughts by learning positive thoughts instead of negative thoughts. As Feruglio et al. [43] stated in a research, the use of mindfulness techniques such as meditation caused the subjects to get rid of rumination of negative thoughts and to replace negative thoughts with optimistic thoughts. Hence, it can be said that mindfulness exercises affect the cognitive system and information processing by increasing people's awareness of the present moment through techniques such as paying attention to breathing and the body and directing awareness to the here and now. In this research, attempt was made to temporarily release unhappy couples from their attitudes and beliefs that are rooted in the past and are affected by fears and worries about the future through techniques related to experiencing the present moment so that this attitude arises in them that they should accept all affairs (pleasant or unpleasant) without judgment. Acceptance of affairs without judgment led to the development of adjustment and cohesion and a balanced level of adaptability in couples.

In this regard, the results of the study by Kimbrough et al. [44] and Ismaeilzadeh and Akbari [45] demonstrated that mindfulness techniques led to reduced marital conflicts of couples by using mindfulness-based exercises, attention, encouragement and promotion of non-judgmental observation and acceptance of physical sensations, perceptions, cognitions and emotions. In support of this finding, Kabat-Zin [46] stated that the presence of mindfulness creates this attitude in people that they should accept things without judgment, which means creating in people awareness of perceptions, cognitions, emotions or feelings without judging and evaluating them as true or false, good or bad, healthy or unhealthy and important or unimportant. Accepting the pain of thoughts, feelings and tensions or being captive to bodily phenomena without trying to change, avoid or escape from them can prevent the occurrence of maladaptive behaviors. Therefore, it can be said that mindfulness training to unhappy couples made them believe that satisfaction is not a quality that depends on external elements and changes in the outside world and happens when a person abandons dependence on pre-determined thoughts, attitudes and mental programs, and as a result, puts aside the automatic behaviors he shows to reach pleasurable situations or escape from painful situations such as marital burnout, and reaches a kind of liberation.

In this regard, Stephenson [47] found in a research that to improve their current situation, people should not judge their performance emotionally and should stay calm and accept things impartially without judgment. In view of the above, it can be stated that accepting experiences without having emotional burden caused that the couples become more flexible and the adaptability factor becomes more balanced in them and the cohesion between the couples increases since by letting go of the past and its negative beliefs and paying attention to the present without judgment, the couples discovered more positive aspects in their married life and moved away from negative and unpleasant emotions and gradually became flexible about the rules of life and achieved relative satisfaction by trying to gain commitment and cohesion.

Another result of the present study was that although both mindfulness-based family therapy and structural family therapy have an effect on cohesion and adaptability of couples, the effectiveness of structural family therapy in cohesion and adaptability was greater than that of mindfulness-based family therapy. Other studies close to the present research, including the study by Seyyedmoharrami et al. [25], compared structural family therapy and solution-focused family therapy in terms of effectiveness in performance and

satisfaction of couples and found that both approaches are effective in performance and satisfaction of couples, but the effectiveness of structural family therapy was more than that of the solution-focused family therapy. In another study, Omidvar et al. [48] compared the effectiveness of mindfulness-based cognitive therapy training and cognitive-behavioral therapy training in couples' satisfaction and found that both methods are effective in this respect, but mindfulness-based cognitive therapy is more effective than cognitive-behavioral therapy. Moreover, Jahan & Sudejani [49], in a research compared the effectiveness of systemic-structural couple therapy and pluralistic family communication pattern training in couples' satisfaction with married life and found that both systemic-structural couple therapy and pluralistic family communication pattern had a significant effect on couples' satisfaction. However, the pluralistic family communication pattern was more effective than the systemic-structural couple therapy in couples' satisfaction. In explaining the research result indicating the greater effectiveness of structural family therapy compared to mindfulness-based family therapy in couple's cohesion and adaptability, it should be mentioned that cohesion and adaptability are two main dimensions of family structure [11] and cohesion is described as an emotional bond among family members and a sense of closeness, which is expressed by a sense of belonging and acceptance in the family [8]. Since structural family therapy tries to improve relationships and the structure of family members and seeks to create a healthier routine in family structures in order to create dynamism, love and stability in the lives of couples [30], it can be stated that structural family therapy (SFT) is more effective than mindfulness-based family therapy in this research. In confirmation of this finding, it should be added that numerous studies such as Kuroda et al. [50] and Donald et al. [51] introduced mindfulness as a therapy that further affects motivational and personal issues and is less able to influence family interactions and structure. Based on the foregoing, it can be said that the effect of structural family therapy on family structures such as cohesion and adaptability is greater than that of mindfulness-based family therapy.

This research was subject to certain limitations. First of all, not all the improvement observed in this research can be attributed to the experimental intervention because some of the improvements in couples are due to the passage of time, increased level of support received outside of the sessions, the presence of the same therapeutic interventionist in both treatment approaches, decreased level of conflicts with the family, and improved economic situation. The researchers in this study were not able to control some intervening variables that could be effective as a result of the experimental intervention. It is suggested to control these variables (e.g., financial and economic status, employment, etc.) in future studies. Considering that in the results of the present study, structural family therapy was a more effective method for improving the family structure, it is recommended that structural family therapy be implemented at any level for couples with marital dissatisfaction by spending more time and following up. This is something that should be taken into account in metropolis due to the high rate of divorce.

Ethical considerations

This research was carried out based on accepted and recommended ethical principles for conducting scientific research in all stages of design, implementation, analysis and compilation of results, and informed consent was obtained from the subjects before conducting the treatment course.

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Data availability

<https://www.dropbox.com/scl/fi/sq3cwo6ya0pyjfausz847/delghandi.sav?rlkey=hlpvzupwdea972plbyhj71e6b&dl=1>.

CRedit authorship contribution statement

Bahare Delghandi: Project administration. **Ebrahim Namani:** Supervision.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

Ebrahim Namani reports financial support was provided by Islamic Azad University, Mashhad branch. Bahare Delghandi reports financial support was provided by Islamic Azad University Mashhad Branch. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.heliyon.2024.e24827>.

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