

The Effectiveness of Schema Therapy on Differentiation of Self and Emotional Control among Couples with Marital Maladjustment

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Abstract

Introduction: The family is the most important constituent of the society and marital maladjustment is considered as a threat to growth and development in marital life. This study was conducted aimed to evaluate the effectiveness of group schema therapy on differentiation of self and emotional control in couples with marital maladjustment.

Methods: In a randomized controlled trial, during October 2018 to January 2019, among couples with marital maladaptation referring to counselling centers in Tehran, 16 couples were selected using purposeful sampling. Participants were assigned into two groups using block randomization. The experimental group received eight 90-minute sessions of Schema Therapy on weekly and based on Young Manual and the control group was placed on the waiting list. Questionnaires of Dyadic Adjustment, emotional control and differentiation were completed by the participants in two stages. Data were analyzed using multivariate analysis of covariance in SPSS 21 software.

Results: Primary outcomes showed that schema therapy had a significant effect on the four dimensions of differentiation of self; including emotional responsiveness ($p<0.05$), my position ($p<0.01$), emotional digression ($p<0.01$), and interactions with others ($p<0.01$). Secondary outcomes also showed the effectiveness of this intervention on emotional control in the form of emotional inhibition, aggression control, intellectual rumination and benign control ($p<0.05$) in couples.

Conclusion: The findings of this study are in the line with the previous studies suggesting the role of maladaptive schemas in marital problems. Schema therapy had a significant effect on differentiation of self and emotional control in couples with marital maladjustment.

Declaration of Interest: None

Keywords: Schema Therapy, Differentiation of Self, Emotional Control, Marital Maladjustment.

Introduction

Marriage has been described as the most important and fundamental relationship of the humanity (1). Marital relationship is described as the most important and most fundamental human relationship. Marital relationship is a relationship between a man and a woman in order to create a common life and form a family (2). Family is one of the main elements of the society. A healthy family with appropriate relationship will undoubtedly have positive consequences for the society. One of the major causes of failure in marriage is the lack of marital satisfaction. Lack of a healthy relationship between couples causes disconnection and subsequent loosening of family foundations. Marital satisfaction predicts the continuity and quality of couples' interactions and can reflect their happiness (3). Couples' intimacy and marital satisfaction can lead to reduced risk in married women (4). Conflicts in the marriage process are inevitable but can be resolved (5). Couples who are unable to resolve interpersonal problems and conflicts experience marital stresses. These conflicts are clinically important because they may cause damage to the quality of among couples life. Not surprisingly, millions of dollars in US government funding are spent trying to understand the nature of marital conflict and its consequences (5).

On the other hand, early maladaptive schemas do not lead to a specific mental disorder but increase one's vulnerability to mental disorders. Early maladaptive schemas are emotional and cognitive patterns that develop at the beginning of the development in the mind and are repeated in the course of life and affect how we interpret experiences and

relationships with others (6). Young believes that these schemas are formed mainly in childhood and based on individual's reality or experience, and is consistent throughout life. These constructs form the basis of the individual's cognitive structure and as a mediator, affect behavioral responses (7, 8). According to Beck's initial description of psychopathology; each of the psychiatric disorders is associated with highly generalized and pervasive habitual thinking schemas and patterns that determine the type of vulnerability associated to that disorder (8). For example, Hoffart Lunding et al. (9) showed that dysfunctional schemas affecting parent-child interaction can pose problems in future relationships including marital adjustment.

The concept of marital adjustment is one of the common concepts for showing happiness and stability in marriage (3). Marital adjustment has been described as multiple aspects of the marital relationship, as it is the foundation of a favorable family relationship and the upbringing of the next generation. Marital adjustment is an overall assessment of the current status of couples (3) and is very important and complex of the marital relationship. Satisfying sex, for example, is a key factor in the quality of human life (10). From a social and cultural point of view, the ability of sexual activity, expressing affection and consent are considered as important indicators in women (11). Marital dissatisfaction can lead to hopelessness, deprivation, lack of security, and reduced mental health and ultimately family breakdown (12). According to the results reported in Iran, many couples suffer from dissatisfaction with marital relationships, which explains

50-60% of divorces and 40% of infidelities and secret relationships (12).

Differentiation of self refers to the ability to experience intimacy with others while remaining in an emotional, yet independent, atmosphere. In such a way that people with high differentiation control their reactions logically, in contrast, people with low differentiation tend to exercise this control with emotional and affection reactions. Differentiation of self emphasizes early relationships in the family environment and affects subsequent relationships (13). The concept of differentiation of self refers to the situation in which a family member distinguishes his or her intellectual function from emotional functioning and avoids mingling with dominant family emotions. Differentiation is one of the main concepts of Bowen family systems theory that is divided into two interpersonal and intrapersonal dimensions. In the interpersonal dimension, differentiation of self refers to the balance between individual thoughts and emotions, whereas differentiation of self in intrapersonal dimension refers to the tendency for individuals to be together in interpersonal relationships (14). The findings of Priest's study (15) show that differentiation of self is a mediating variable in the relationship between the primary family and the intimate emotional climate of life.

Emotion control, on the other hand, refers to the ability to recognize emotions as well as control on how emotions are sensed, experienced, and expressed (16). Emotional adjustment/ maladjustment have been described as a multidimensional construct; this conceptualization includes the ability to modulate emotional arousal, emotion

awareness, and perception, as well as the ability to accept emotional responses and purposeful emotional responses regardless of emotional state (17). In clinical psychology, emotional control is associated with desirable therapeutic outcomes, and interventions that improve emotional control are highly valued (16). The findings of the Ghahari et al. (18) study have shown that low emotional adjustment is associated with higher marital conflict and problems. Dysfunction in emotional regulation may be due to early interpersonal damages during childhood that may cause persistent sensitivity of central nervous system to early life stressors (19). Unfortunately, standard cognitive-behavioral techniques are not effective in the treatment of emotional adjustment disorder. A new approach derived from cognitive-behavioral therapy is schema therapy that integrates psychoanalytic techniques and emotion-focused therapies (17). This approach promises to fill this gap in literature. Accordingly, given the importance of attention to factors affecting marital adjustment in the form of differentiation of self and emotional control and the existence of contradictory findings, And given that few studies have been carried out in support of the impact of schema therapy on differentiation of self and emotional regulation, the present study was conducted aimed to investigate the effectiveness of group schema therapy on differentiation of self and emotional control in couples with marital maladjustment.

Methods

The design of this study was a randomized controlled trial. In this regard, during the

period of October 2018 to January 2019, couples with marital maladaptation referring to counseling centers in Tehran, 16 couples were selected using purposeful sampling. Participants were assigned into two groups using block randomization method. The experimental group received eight 90-minutes sessions of Schema therapy on a weekly basis and based on Young Manual and the control group was placed on the waiting list. Questionnaires of Dyadic Adjustment, emotional control and differentiation were completed by the participants in two stages. Inclusion criteria were: 1) age range of 18-45 years; 2) detection of marital maladjustment ; 3) living in Tehran and its suburbs with a distance of thirty square kilometers from the center; and 4) ability to read and write. Exclusion criteria were: 1) acute psychiatric illness or personality disorders; 2) taking any medication affecting

emotional and sexual processes; 3) not receiving any psychological services in the last six months; 5) absence of informed consent to participate in the study; and 5) absence of more than 2 sessions in the treatment process. The experimental group received eight 90-minutes weekly sessions of Schema Therapy based on Young's Manuel (Table 1) and the control group was placed on the waiting list. Demographic checklist, structured clinical interview, Dyadic Adjustment Scale, emotional control and differentiation were used for data collection. In order to adhere to the ethical principles, after the intervention process, the control group received 5 sessions of Schema Therapy. All stages of the study were conducted according to the latest version of the Helsinki Declaration (20).

Table 1. The contents of schema therapy sessions

Row	Session content
1	Filling out the treatment contract sheet, running pre-test, and explaining the research goals
2	Introducing participants to the schema thoughts and filling in the Schema Thoughts Questionnaire as homework
3	Discussing the results of the questionnaire and drawing the circle of couples' mindsets
4	Understanding and discussing the definite needs of couples and formulating a table of needs and wants
5	Dealing with anger and working with the anger, nervous and impulsive children mentality by using chair-based experimental techniques
6	Drawing couples' mindsets cycle and executing pattern breaks using conflict card techniques and homework presentations
7	Review exercises, reviewing previous sessions
8	Running the post-test

1. Demographic checklist: This checklist was developed and used by the researcher to collect demographic information such as age, education, occupation, duration of marriage and duration of illness (21).

2. Structured Clinical Interview (SCID): It is a clinical interview used to diagnose DSM-IV-based Axis One disorders. The reliability coefficient between the evaluators for SCID has been reported to be 0.60 (22). Diagnostic agreement of this

tool in Persian was found to be optimal for most specific and general diagnoses with

reliability higher than 0.60, kappa coefficient for all current and lifetime diagnoses was 0.52 and 0.55, respectively (23).

3. Revised Dyadic Adjustment Scale (RDAS): The Dyadic Adjustment Scale was designed by Spanier. This scale includes 32 items that measure four components of dyadic consensus, dyadic satisfaction, dyadic cohesion, and affection expression (24). A score of less than 100 on this scale means that there is a problem in marital relations, incompatibility, and family disagreement. Lee et al. (25) reported the psychometric properties of this tool based on Cronbach's alpha coefficient equal to 0.84. The reliability of this tool was 0.81 in the present study.

4. Emotional Control Questionnaire: The Emotional Control Questionnaire was designed by Roger and Najarian. This questionnaire has 56 items that measure the four components of emotional inhibition, aggression control, intellectual rumination, and benign control (26). Each component contains 14 items. Questionnaire scores are 0 and 1, and higher scores indicate greater emotional control in the respondent. In the study of Ciarrochi et al. (27), internal consistency of the questionnaire through Cronbach's alpha in the components of emotional inhibition was 0.77, 0.72 for aggression control, 0.80 for intellectual rumination, and 0.63 for benign control. In this study, Cronbach's alpha coefficient for emotional inhibition was 0.71, 0.82 for aggression control, 0.69 for intellectual rumination, 0.80 for benign control, and 0.86 for total questions.

5. Differentiation of Self Questionnaire:

The Differentiation of Self Questionnaire was designed by Drake et al. (28) and contains 20 items and assesses four subscales of emotional responsiveness, my position, emotional digression, and intertwining. Scoring is in the 6-choice range. In the study of Lam and Chan-So (13) the internal consistency of the questionnaire was calculated as 0.78 by Cronbach's alpha. Also, the test-retest coefficient of the questionnaire after 4 weeks was 0.72 and its Cronbach's alpha was reported to be 0.85 (28). In the present study, the reliability of the questionnaire was calculated through Cronbach's alpha for emotional responsiveness as 0.81, my position as 0.75, emotional digression as 0.76, interaction with others as 0.91 and total questions as 0.86.

Statistical Analysis

Due to the existence of independent design in the form of pre-test and post-test as well as the spacing of the scales investigated, the parametric analysis of covariance test was used. Data were analyzed by SPSS 21 software and 0.05 was considered as significance level.

Results

Covariance analysis was used to analyze the data by eliminating the pre-test effect. Before using the parametric test of covariance analysis, its assumptions were examined. The assumption of normality of distribution was evaluated by *Shapiro-Wilk* test ($p > 0.05$). The assumption of homogeneity of the coefficients was also established. Also the results of Leven's test showed equality of variances ($p > 0.05$). Multivariate analysis of covariance was used to evaluate the differences between

the two groups in the scores of two differentiation and emotional control

indices. The results are presented in Table 2.

Table 2. Results of multivariate covariance analysis test on differentiation and emotional control indices

Test	Magnitude	F	Sig	Effect size	Power of test
Wilks	0.548	15.155	0.001	0.548	0.999
Lambda					

The results of multivariate analysis of covariance showed that participants' scores in two indices of differentiation and emotional control were significantly different in post-test stage ($P < 0.001$).

The evaluation inter-subject effects on differentiation of self-scores and emotional control are presented in Table 3.

Table 3. Results of the inter-subject effects on differentiation of self-scores and emotional control in the post-test stage

Variable	Source	Sum of squares	DF	F	Sig.	Effect size	Power of test
Differentiation of self	Group	58.042	1	11.659	0.002	0.310	0.908
	Group	55.424	2	5.581	0.010	0.300	0.812
	interaction * coproduction						
	Error	129.099	26	-	-	-	-
	Total	103486.000	32	-	-	-	-
Emotional control	Group	85.357	1	16.894	0.001	0.394	0.977
	Group	25.439	2	2.517	0.100	0.162	0.459
	interaction * coproduction						
	Error	131.366	26	-	-	-	-
	Total	34774.000	32	-	-	-	-

As can be seen from the findings in Table 3, schema therapy has a significant effect on differentiation of self ($P < 0.002$) and emotional control ($P < 0.001$).

group ($P < 0.001$). Also, the coefficient of influence indicates that 48.2% of the difference between the two groups is related to the treatment intervention.

Post-test multivariate analysis of variance showed that dimensions of differentiation of self in the experimental group were significantly different from the control

The results of inter-subject effects of post-test on dimensions of differentiation of self are presented in Table 4.

Table 4. The results of inter-subject effects of post-test on dimensions of differentiation of self

Variable	Source	Sum of squares	DF	F	P value	Effect size	Power of test
Emotional responsiveness	Group	5.581	1	5.240	0.032	0.152	0.904
	Group	0.333	2	0.820	0.521	0.121	0.104
	interaction * coproduction						
	Error	28.958	26	-	-	-	-
	Total	9188.000	32	-	-	-	-

My position	Group	9.884	1	15.130	0.001	0.352	0.960
	Group interaction * coproduction	13.325	2	0.525	0.564	0.121	0.507
	Error	14.371	26	-	-	-	-
	Total	10039.000	32	-	-	-	-
Emotional digression	Group	6.107	1	11.081	0.009	0.779	0.958
	Group interaction * coproduction	5.452	2	0.729	0.534	0.120	0.156
	Error	29.178	26	-	-	-	-
	Total	6114.000	32	-	-	-	-
Interaction with others	Group	6.124	1	13.083	0.007	0.327	0.959
	Group interaction * coproduction	2.658	2	2.211	0.198	0.111	0.167
	Error	32.869	26	-	-	-	-
	Total	64.000	32	-	-	-	-

As the results in Table 4 show, the intervention of schema therapy on four dimensions of differentiation of self, including emotional responsiveness ($P < 0.05$), my position ($P < 0.001$), emotional digression ($P < 0.01$) and interaction with others ($P < 0.01$) had a significant effect.

The results of multivariate post-test of dimensions of emotional control showed

that this index had a significant difference in the experimental group with control group ($P < 0.001$). Also, the coefficient of effect indicates that 27.6% of the difference between the two groups is related to the intervention.

The results of the post-test inter-effects of emotional control dimensions are presented in Table 5.

Table 5. Results of the post-test inter-effects of emotional control dimensions

Variable	Source	Sum of squares	DF	F	P value	Effect size	Power of test
Emotional inhibition	Group	31.949	1	10.018	0.014	0.544	0.962
	Group interaction * coproduction	8.963	2	1.521	0.131	0.112	0.567
	Error	20.509	26	-	-	-	-
	Total	2555.000	32	-	-	-	-
Aggression control	Group	32.306	1	8.341	0.026	0.536	0.929
	Group interaction * coproduction	0.664	2	3.521	0.151	0.069	0.521
	Error	20.952	26	-	-	-	-
	Total	2133.000	32	-	-	-	-
Intellectual rumination	Group	41.823	1	9.253	0.038	0.693	0.0900
	Group interaction * coproduction	4.046	2	3.251	0.166	0.58	0.271
	Error	47.083	26	-	-	-	-
	Total	2266.000	32	-	-	-	-

Benign control	Group	51.780	1	7.395	0.031	0.740	0.942
	Group interaction * coproduction	3.206	2	0.562	0.652	0.061	0.350
	Error	35.374	26	-	-	-	-
	Total	1910.000	32	-	-	-	-

As the results in Table 4 show, the intervention of schema therapy on four dimensions of emotional control including emotional inhibition ($P < 0.05$), aggression control ($P < 0.05$), intellectual rumination ($P < 0.05$) and benign control ($P < 0.05$) had a significant effect.

Discussion

This study was conducted in order to evaluate the effectiveness of group schema therapy on differentiation of self and emotional control in couples with marital maladjustment. Results showed that schema therapy had a significant effect on four dimensions of differentiation of self, including emotional responsiveness, my position, emotional digression, and interaction with others and emotional control including emotional inhibition, aggression control, intellectual rumination, and benign control in couples.

Primary outcomes of this study showed that schema therapy had an effect on differentiation of self-index in four dimensions. Although no similar study was found in the PubMed database, the findings of two studies (12, 29) indicate a relationship between early maladaptive schemas and differentiation, which is questionable given the significant association between differentiation and emotional control. In this regard, the findings of Keshavarz-Afsharet al. (29) showed that there is a significant relationship between early maladaptive schema components and family

functioning components as well as between differentiation components and family function components. Also, the findings of Masoumi's study (12) showed that the five domains of early maladaptive schemas predicted 57% of the variance of differentiation, with the domains of ostracism and exclusion, disrupted constraints, and other orientations positively predicted differentiation and self-efficacy / dysfunction and excessive alertness / inhibition did not significantly predict differentiation. Fundamental cognition structures are effective in forming interpersonal relationships such as tendency toward marriage and life partner (30). Also, in study done by Zolfaghari et al., results have (31) shown that schema therapy had significance effect on marital intimacy in couples. On the other hand, this result study of Khatamsaz et al. (32) in accordance with those of previous researches that showed schemas and fundamental cognition structures are effective in forming interpersonal relationships and marital satisfaction.

To explain these results we can say that the emotional basis of human, forms during childhood in the family system, therefore the couples lead to the formation of severely and early maladaptive schemas in their children's character based on the type of interactions with them (32).

Secondary outcomes of the present study showed that schema therapy intervention had a significant effect on emotional control index. Although studies on the effectiveness of schema therapy on emotional regulation are limited, the

findings of the review study by Dadomo et al. (33) showed that schema therapy can affect personality disorders through emotional regulation. Although theoretically, the emotional regulation is not the core or the primary goal of schema therapy, it is of clinical importance. The findings of Dadomo et al. (33) also suggest that impaired emotional regulation may be due to early interpersonal impairments in childhood. These early traumatic events cause continuous central nervous system sensitivity to stressful events in early life (19). Since standard cognitive-behavioral techniques are not effective in the treatment of emotional regulation disorder (34), schema therapy has attempted to fill this gap in research literature by integrating psychoanalytic techniques and emotion-based therapies (17). Consistent with our findings, Fassbinder et al. (35) showed that schema therapy is effective on emotional adjustment through affecting early experiences such as insecure attachment, child abuse, or emotional neglect. Schema therapy, by addressing the role of emotional components in the treatment process, can distinguish classic cognitive-behavioral approaches from mere attention to cognitive and behavioral components and integrate the emotion-centered intervention indices into them. Emotions are not only influence concurrent behavior, cognition and emotion but also future behaviors, cognitions and emotions. Therefore, emotional effects of events are an important topic for emotion regulation. The Emotional Schema Model is a social-cognitive model of how individuals perceive, interpret, evaluate, and respond to their emotions and the emotions of others (36). Schema therapy trainings

promote mental discipline by promoting psychological satisfaction and reduce emotional distress. Controllability of emotional resources allows couples to experience more desirable mental health and to be able to resolve marital problems such as marital conflict. These findings and their alignment with other researches indicate the undoubtable and decisive role of schemas in couples' marital dissatisfaction. Schemas affect behaviors of the spouses and direct them in the framework of marital relationship. Also, the effectiveness of schema therapy on marital relationship quality shows significance of communication in the family for its strength and stability in dealing with problems and crises. Informing patients about choosing the right interpersonal response avoids couples from problems such as marital maladjustment and equips couples with the right strategies. Therefore, it seems reasonable that group schema therapy may influence differentiation of self in couples with marital maladjustment.

This study has some limitations in the implementation process. Interviews and questionnaires were emphasized in the data collection process and biomarkers evaluation was not used, limitations that could be addressed in future studies. Due to the nature of the study and the available limitations, it was not possible to follow-up the results. The findings of the present study could be coupled with clinical applications in designing interventional approaches in couples with conflicts.

This study was conducted aimed to evaluate the effectiveness of group schema therapy on differentiation of self and emotional control in couples with marital maladjustment. The results showed that

schema therapy had a significant effect on the four dimensions of differentiation and emotional control. These findings can be coupled with clinical implications in understanding family dynamics and planning clinical interventions in family conflict resolution.

Conflict of interest

The authors did not declare any conflict of interest.

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