The Effectiveness of Schema Therapy on Schemas and Self-Differentiation in Individuals Committing Infidelity in Marriage

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A B S T R A C T

Objective: One of the effective methods in couples experiencing infidelity is schema therapy. Therefore, the purpose of this study was to determine the effectiveness of schema therapy on schemas and self-differentiation in individuals committing infidelity.

Methods and Materials: The present study was quasi-experimental. The population of the study consisted of infidelity clients who referred to the Sahel Counseling Center in Tehran during the winter of 2021 and spring of 2022. Forty participants were selected through purposive sampling and randomly assigned into two groups (each group consisting of 20 individuals), including experimental and control groups. The experimental group underwent schema therapy intervention, while the control group did not receive any intervention. Measurement tools included Young's Early Maladaptive Schema Questionnaire and the Skowron and Friedlander Self-Differentiation Questionnaire. Multivariate analysis of covariance was used for data analysis using SPSS software.

Findings: The results showed that schema therapy is significantly effective in modifying most of the early maladaptive schemas and also in enhancing all components of self-differentiation in individuals committing infidelity in marriage.

Conclusion: Overall, the results of this study indicate that schema therapy is beneficial in changing maladaptive schemas and self-differentiation, and thus can be effective in treating infidelity behavior and reducing the rate of infidelity recurrence.

Keywords: Schema Therapy, Early Maladaptive Schemas, Self-Differentiation, Infidelity.

1. Introduction

The family is one of the most crucial social institutions, formed through the bond between a man and a woman.

Proper relationships in society are based on proper family relationships, and the more suitable the intra-family relationships are, the more stable and robust the family and,

consequently, society becomes (Aminat Adeola et al., 2021). The success of marital union and the strength of the family institution are influenced by various factors at the intrapersonal, interpersonal, and environmental levels. One of the primary factors that disrupt the stability of the marital bond and family health is the breakdown of the exclusive commitment to sexual and emotional relationships within the marital framework, namely marital infidelity (Fincham & May, 2017). Infidelity or marital betrayal is defined as a kind of sexual, emotional, or sexually-emotional involvement with someone other than the spouse, kept hidden from the spouse, with secrecy being its main characteristic. In essence, infidelity generally equates to cheating, unfaithfulness, and illicit relationships, encompassing numerous behaviors that violate the expectations of a romantic relationship (Aminat Adeola et al., 2021; Barzegaran et al., 2021; Fincham & May, 2017). Ultimately, infidelity is a violation by spouses of norms regulating a level of emotional and sexual intimacy with individuals outside the committed relationship (Mapfumo, 2016). Conservatively estimated, infidelity occurs in 20 to 25 percent of all marriages and can have destructive effects on a relationship and the individuals involved (Zapien, 2017). From the perspective of researchers in the field of infidelity, it is a primary reason for divorce, conflict, and various forms of domestic violence, making it arguably the most significant disruptor of marital relationships (Aminat Adeola et al., 2021; Barzegaran et al., 2021; Fincham & May, 2017; Goodarzi, 2019; Navaei & Mohammadi Arya, 2016; Zapien, 2017).

Numerous psychological factors can be important in the emergence of infidelity. Among them are central and layered cognitions, commonly referred to as schemas. Schemas are constructs formed based on reality or experience, acting as mediators, influencing individuals' behavioral responses. Some schemas, particularly those mainly formed due to adverse childhood experiences, might be at the core of personality disorders and interpersonal problems. Schema theory in the occurrence of infidelity emphasizes that schemas related to marital relationships encompass fundamental beliefs about human nature and the nature of relationships, influencing and directing spousal behaviors within the marital context (Young et al., 2003). Early maladaptive schemas significantly affect individuals' perceptions of themselves and others through mechanisms of selective attention, encoding of stimuli, and selective retrieval of schema-related information (Arntz & Lobbestael, 2018). These schemas are associated with a wide range of interpersonal problems and intimate relationship issues (Thimm, 2013), causing problems in intimate relationships and leading individuals to experience repeated failures in their close and intimate relations (Bosmans et al., 2010). Theorists believe that schemas can influence an individual's decision to commit infidelity in various ways (Simeone-DiFrancesco et al., 2015). In this regard, Young and colleagues (2003) found that in spouses, in addition to primary schemas that arise in the context of marital relationships, schemas also form in their current relationships. Whenever the needs of primary schemas are not met during the relationship, or if the primary schemas are not aligned with the current schemas, it leads to incompatibility between the spouses and ultimately infidelity and divorce (Young et al., 2003). Studies have been conducted to examine the role of early maladaptive schemas in the occurrence of infidelity, including the research of Stiles (2004), which confirms a significant relationship in this regard (Stiles, 2004). The study by Navaei and Mohammadi Aria (2015) also indicates that considering the significant relationship between early maladaptive schemas and the justification of extramarital relationships, on one hand, early maladaptive schemas can be used to identify individuals at risk, and on the other hand, schema therapy can be employed in treating individuals affected by infidelity (Navaei & Mohammadi Arya, 2016). The research of Ahmadi, Mardpour, and Mahmoudi (2020) shows that schema therapy is effective in improving early maladaptive schemas, quality of life, and marital satisfaction in couples seeking divorce in Shiraz (Ahmadi et al., 2020); Hatami and Fadaei (2015) also confirmed the effectiveness of schema therapy in increasing marital intimacy and reducing marital conflict, stating that this therapeutic method is effective in reducing early maladaptive schemas (Hatami & Fadayi, 2015). Therefore, one of the primary hypotheses in infidelity interventions is that schema therapy can lead to the modification of early maladaptive schemas and the enhancement of self-differentiation in individuals committing infidelity, as well as reducing the rate of recurrence of infidelity experiences.

Schema therapy, a modern and integrated therapeutic method developed by Young, Klosko, and Weishaar (2003), is primarily based on the expansion of concepts and methods of classic cognitive-behavioral theory (Young et al., 2003). This therapeutic approach integrates principles and foundations of cognitive-behavioral school, attachment, Gestalt, object relations, structuralism, and psychoanalysis into a valuable therapeutic and conceptual model (Nikpour

et al., 2021). This therapy addresses the deepest level of cognition, targeting early maladaptive schemas and, using cognitive, experiential (emotional), behavioral, and interpersonal strategies, assists patients in overcoming these schemas (Barzegaran et al., 2021). Thus, it can be said that schema therapy is a unique approach for clients with psychological issues stemming from adverse childhood experiences (Fassbinder et al., 2016).

Since a schema is a collection of memories, emotions, bodily sensations, and cognitions, schema therapy aids in reducing the intensity of schema-related memories, emotional activation of schemas, strength of bodily sensations, and maladaptive cognitions (Safari Dizaj & Alipanah, 2023). Improving schemas also leads to a series of behavioral changes, such that individuals learn to replace maladaptive coping styles with adaptive ones (Panahali et al., 2013). As schemas improve, the intensity and frequency of their activation significantly decrease. However, when schemas are activated, the patient experiences less helplessness and quickly returns to a normal state (Young et al., 2003). In this context, the research emphasize the effectiveness of schema therapy in modifying early maladaptive schemas (Abooei Mehrrizi et al., 2021; Aghaee et al., 2019; Ahmadi et al., 2020; Barzegaran et al., 2021; Besharat Garamaleki et al., 2022; Fassbinder et al., 2016; Ghaderi et al., 2016; Giesen-Bloo et al., 2006; Hatami & Fadayi, 2015; Navaei & Mohammadi Arya, 2016; Nikpour et al., 2021; Panahali et al., 2013; Pourshahabadi & Einipour, 2020; Roelofs et al., 2016; Safari Dizaj & Alipanah, 2023; Sarabandi et al., 2022; Sharifi et al., 2020).

Another variable that can play a role in the emergence of infidelity behavior is differentiation. Differentiation, defined as an increase in independence and responsibility (Parsakia et al., 2023), is a personality characteristic that can be examined at two levels: intrapsychic and interpersonal. Intrapsychic differentiation involves a process within the individual, including components of "I-Position" (a clear sense of "self" and independence in thoughts and beliefs) and "emotional reactivity" (the predominance of individual emotions over reason and logic and responsiveness to emotions); while interpersonal differentiation involves a process in relationships between individuals, including components of "fusion with others" (loss of "self" independence and dissolution and merging in intimate relationships with others, especially significant individuals) and "emotional cutoff" (tendency to exit the relationship and emotional withdrawal in stressful situations) (Maser, 2011). Differentiated individuals are aware of their unique thoughts and feelings and express them without feeling compelled to conform to unreasonable expectations of others; in contrast, undifferentiated individuals usually become emotionally dependent on others and struggle to think, feel, and act for themselves (Huang et al., 2018). In this context, Zare Gharizi, Ebrahimi Moghaddam, and Al-Hussein (2020) concluded in their research that couples with a high level of differentiation have greater marital compatibility and, consequently, higher marital commitment, and vice versa (Zare Garizi et al., 0621). The study by Besharat, Panah Ali, and Hosseini Nasab (2021) also showed that in couples experiencing emotional divorce, differentiation needs to be studied and necessary training provided to couples (Besharat Garamaleki et al., 2022). The study by Peleg (2008) also indicates that individuals with high levels of differentiation experience greater marital satisfaction and commitment, while those with low differentiation experience more marital distress and are more likely to commit infidelity (Peleg, 2008). Abooei et al. (2021) stated in their research that schema therapy creates changes in cognitive and experiential, emotional, and behavioral areas, and by challenging maladaptive schemas and inefficient responses and replacing them with thoughts and responses of differentiation, is effective (Abooei Mehrrizi et al., 2021). Schema therapy can increase an individual's differentiation power by distinguishing between healthy and unhealthy behaviors, confirming the effect of this therapeutic method on improving differentiation. The results of the research by Pourshahabadi and Einipour (2021) also indicate that schema therapy has a significant effect on all four dimensions of self-differentiation; including emotional reactivity, I-Position, emotional avoidance, and fusion with others; as well as emotional control in couples with marital incompatibility (Pourshahabadi & Einipour, 2020). Furthermore, research emphasize the relationship between schemas and self-differentiation (Abooei Mehrrizi et al., 2021; Barzegaran et al., 2021; Pourshahabadi & Einipour, 2020; Sarabandi et al., 2022).

In line with the importance and necessity of conducting this research, on one hand, the study and search in research records and reliable databases indicate that such research has not been done before, thus highlighting the need for its implementation. On the other hand, considering the extensive consequences of infidelity from familial and psychological perspectives, examining and testing intervention methods to reduce the root causes of committing infidelity can help preserve the family structure and form a healthy trend in spousal relationships. Educating

patients about choosing appropriate interpersonal responses keeps couples away from problems such as marital incompatibility and equips them with suitable strategies. With this description, the researchers in this study seek to test the hypotheses that:

1- Schema therapy is effective in modifying early maladaptive schemas in individuals committing infidelity in marriage.
2- Schema therapy is effective in enhancing self-differentiation in individuals committing infidelity in marriage.

2. Methods and Materials

2.1. Study Design and Participants

The present study was a quasi-experimental research with a pre-test, post-test, and follow-up design, accompanied by a control group. The study population included male and female clients who had committed infidelity and sought counseling at the Sahel Counseling Center in Tehran during the winter of 2021 and spring of 2022. These individuals had self-reported emotional and sexual infidelity, confirmed by their spouses, and at least three months had passed since the infidelity, with the spouse being aware and the consequences of the infidelity being a major factor in seeking counseling. The minimum sample size for quasi-experimental research is 15 individuals per group; however, to account for potential attrition, 40 individuals were selected using purposive sampling and randomly assigned to either the experimental or control group. Participants provided informed consent to participate in the research. Inclusion criteria were having a university education, spouse's awareness of the infidelity, a minimum of three months elapsed since the infidelity experience, being 25-55 years old, not planning a divorce (to justify receiving intervention for sustaining the marriage and change), and exclusion criteria included a diagnosis of potential psychological disorders such as psychosis or personality disorders through clinical interviews, receiving concurrent treatment with the study, and absence from more than two sessions during implementation.

2.2. Measures

2.2.1. Early Maladaptive Schemas

This questionnaire, designed by Young (1994), assesses 15 early maladaptive schemas. Items are rated on a 5-point Likert scale from "Does not apply at all" to "Describes me perfectly." Higher scores indicate a more pronounced presence of a maladaptive schema. This questionnaire's total score can also be used for comparison. In a study by Welburn et al. (2002), all 15 subscales of the questionnaire showed sufficient to excellent internal consistency. Cronbach's alpha for all schemas was calculated between 0.76 and 0.93. Nunnally (1978) considers an alpha coefficient above 0.70 as good (Barzegaran et al., 2021).

2.2.2. Self-Differentiation

This questionnaire was initially designed and operationalized by Skowron and Friedlander in 1998 with 43 items, later revised by Skowron and Smith in 2003, and the final questionnaire was designed by Jackson in 2003 with 46 items based on Bowen's theory. The Skowron and Friedlander Self-Differentiation Scale consists of 4 subscales: Emotional Reactivity, I-Position, Emotional Cutoff, and Fusion with Others. It is scored on a 6-point Likert scale. In the study by Skowron and Smith (2003), the total test reliability coefficient was 0.92, and the reliability of each subscale for Emotional Reactivity was 0.89, I-Position 0.81, Emotional Cutoff 0.84, and Fusion with Others 0.86. In a study by Momeni, Kavoosi, and Amani (2015), Cronbach's alpha reliability for Emotional Reactivity was 0.77, I-Position 0.63, Emotional Cutoff 0.74, and Fusion with Others 0.66. Also, in the research by Sharifi, Asghari Ebrahimabad, and Solaymani (2020), Cronbach's alpha for each of the scales was reported as 0.87, 0.88, 0.87, and 0.86, respectively (Momeni et al., 2015; Sharifi et al., 2020).

2.3. Intervention

2.3.1. Schema Therapy

The therapeutic sessions were conducted over 24 sessions. The content of the schema therapy sessions is presented in the Table 1.

Table 1

Schema Therapy Sessions

Session Number	Summarized Session Description
1	Introduction to schema therapy concepts and session overview.
2	Focus on schemas related to abandonment, mistrust, abuse, and instability in relationships.
3	Addressing emotional deprivation and defectiveness/shame schemas.
4	Exploring social isolation/alienation and dependence/incompetence schemas.
5	Examining vulnerability to harm/illness and undeveloped self/enmeshment schemas.
6	Discussing failure and entitlement/grandiosity schemas.
7	Addressing self-control and insufficient self-discipline/subjugation schemas.
8	Focusing on self-sacrifice and approval-seeking/attention-seeking schemas.
9	Examining negativism/pessimism and emotional inhibition schemas.
10	Addressing unrelenting standards/hypercriticalness and punishment schemas.
11	Exploring punitiveness schemas and their impact on relationships.
12	Focusing on self-aggrandizement and entitlement schemas.
13	Addressing schemas related to emotional deprivation and defectiveness/shame.
14	Examining schemas of vulnerability to harm/illness and undeveloped self/enmeshment.
15	Discussing schemas of failure and entitlement/grandiosity.
16	Focusing on self-control and insufficient self-discipline/subjugation schemas.
17	Examining negativism/pessimism and emotional inhibition schemas.
18	Addressing unrelenting standards/hypercriticalness and punishment schemas.
19	Exploring punitiveness schemas and their role in personal relationships.
20	Discussing self-aggrandizement and entitlement schemas in cognitive-behavioral context.
21	Addressing schemas related to emotional deprivation and defectiveness/shame.
22	Examining schemas of vulnerability to harm/illness and undeveloped self/enmeshment.
23	Focusing on self-control and insufficient self-discipline/subjugation schemas.
24	Addressing unrelenting standards/hypercriticalness and punishment schemas in experiential context.

2.4. Data analysis

Multivariate analysis of covariance was used for data analysis using SPSS software.

3. Findings and Results

In Table 2, the descriptive statistics indices related to the pre-test, post-test, and follow-up of variables in the experimental and control groups are reported.

Table 2

Descriptive Indices of Research Variables

Variables	Groups	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD	Follow-up Mean	Follow-up SD
Emotional Deprivation	Experimental	42.90	11.92	28.70	11.72	28.56	11.09
	Control	42.70	13.72	41.88	12.75	41.23	13.23
Abandonment	Experimental	74.00	21.23	50.60	24.35	51.09	24.41
	Control	73.23	21.92	71.75	22.55	71.01	22.90
Mistrust/Abuse	Experimental	61.55	18.06	47.00	20.37	46.23	20.38
	Control	60.76	18.09	59.83	19.13	59.11	19.87
Social Isolation	Experimental	27.30	13.29	22.10	11.00	22.89	12.23
	Control	28.66	12.97	28.87	10.13	28.17	10.39
Defectiveness/Shame	Experimental	49.50	18.21	34.20	20.33	34.43	21.28
	Control	48.45	20.49	47.80	18.12	47.96	17.18
Dependence/Incompetence	Experimental	46.75	17.35	33.95	22.57	33.65	22.05
	Control	45.65	18.36	44.70	16.45	44.61	16.50
Vulnerability to Harm/Illness	Experimental	33.45	15.16	25.95	15.38	24.45	15.85
	Control	33.09	14.08	32.17	14.58	32.99	14.12
Enmeshment/Unrelenting Standards	Experimental	37.10	13.56	27.30	12.39	27.69	12.00
	Control	36.19	12.34	34.87	12.75	34.02	13.15
Failure	Experimental	38.30	11.60	28.40	10.13	30.77	8.97

	Control	38.06	11.52	37.24	11.90	39.18	11.64
Entitlement/Grandiosity	Experimental	43.30	17.25	34.75	14.33	34.40	13.42
	Control	43.09	14.40	42.20	15.86	43.51	15.60
Insufficient Self-Control/Discipline	Experimental	54.10	12.42	39.90	13.55	38.21	13.08
	Control	53.84	11.08	54.55	14.11	54.03	14.66
Subjugation	Experimental	47.30	11.11	32.95	11.00	32.96	12.06
	Control	48.01	9.90	47.81	9.96	47.12	9.09
Self-Sacrifice	Experimental	60.40	20.23	42.60	21.12	45.11	19.19
	Control	59.03	19.67	58.25	20.12	57.89	19.67
Emotional Inhibition	Experimental	41.90	8.74	27.75	9.51	26.45	8.33
	Control	40.12	9.89	39.10	9.80	39.88	11.12
Unrelenting Standards/Hypercriticalness	Experimental	62.60	18.28	49.15	18.23	50.19	17.12
	Control	61.97	22.36	60.55	19.52	61.86	18.37
Emotional Reactivity	Experimental	33.35	8.76	45.25	6.77	44.25	6.46
	Control	34.20	8.69	34.80	8.88	34.50	8.08
Self-Position	Experimental	41.20	8.56	62.25	5.97	62.05	5.56
	Control	40.35	8.18	41.90	7.77	41.35	7.12
Emotional Cutoff	Experimental	42.10	7.48	53.55	8.30	53.50	8.07
	Control	43.05	7.51	42.10	8.49	42.60	8.35
Fusion with Others	Experimental	39.45	12.24	54.40	6.90	53.95	6.45
	Control	40.05	9.12	41.05	9.03	41.45	9.34

As observed, the pre-test means of the groups in the dependent variables were almost identical. However, after the intervention, in the post-test phase, the means of the experimental group in several subscales changed, and the significance of these changes is presented based on the results of the multivariate analysis of covariance (MANCOVA).

Regarding the assumptions of the MANCOVA test, the results of the Kolmogorov-Smirnov test indicated that the assumption of normal distribution of sample data in the research variables in both experimental and control groups was met ($p < 0.05$). To examine the assumption of homogeneity of variances, the Levene's test was used. The results showed that in the post-test phase for the dependent variables, the assumption of homogeneity of variances was met ($p < 0.05$). The results of the Box's M test for examining the homogeneity of variance-covariance matrices indicated that in the post-test phase, this assumption was also met ($p < 0.05$). Finally, the examination of the homogeneity of regression slopes assumption showed that the interaction of the pre-test with the group variable in the post-test phase for the dependent variables was not significant ($p < 0.05$), meaning the assumption of homogeneity of regression slopes in the dependent variables was met. After ensuring that the necessary assumptions for MANCOVA analysis were met, the results of this test were presented.

Table 3

MANCOVA Results

Dependent Variable	Sum of Squares	Degrees of Freedom	Mean Square	F	Significance Level	Eta Squared
Post-test Emotional Deprivation	489.326	1	489.326	13.26	0.019	0.366
Post-test Abandonment	1494.069	1	1494.069	16.37	<0.001	0.416
Post-test Mistrust/Abuse	285.891	1	285.891	9.08	<0.001	0.283
Post-test Social Isolation	247.319	1	247.319	24.80	<0.001	0.519
Post-test Defectiveness/Shame	970.916	1	970.916	14.79	<0.001	0.391
Post-test Dependence	677.964	1	677.964	8.86	0.007	0.278
Post-test Vulnerability to Harm	103.316	1	103.316	3.60	0.070	0.135
Post-test Enmeshment	486.803	1	486.803	13.46	<0.001	0.369
Post-test Failure	385.633	1	385.633	9.57	0.005	0.294
Post-test Entitlement	129.712	1	129.712	7.25	0.013	0.240
Post-test Self-Control	473.192	1	473.192	4.45	0.046	0.162
Post-test Subjugation	461.229	1	461.229	11.75	0.002	0.338
Post-test Self-Sacrifice	889.193	1	889.193	14.58	0.002	0.388
Post-test Emotional Inhibition	600.205	1	600.205	13.35	<0.001	0.367
Post-test Unrelenting Standards	745.155	1	745.155	4.42	0.047	0.161

Post-test Emotional Reactivity	1200.245	1	1200.245	23.043	<0.001	0.404
Post-test Self-Position	1692.731	1	1692.731	46.060	<0.001	0.575
Post-test Emotional Cutoff	3685.92	1	3685.92	129.53	<0.001	0.792
Post-test Fusion with Others	1780.153	1	1780.153	43.186	<0.001	0.560

As can be seen from the Table 3, except for the post-test mean scores of Emotional Deprivation and Vulnerability to Harm, which are not significant, there are significant differences in the rest of the subscales after removing the effect of the pre-test (P ≤ 0.05). Therefore, it can be said that schema therapy has significantly reduced the early maladaptive schemas, except for Emotional Deprivation and Vulnerability to Harm, in the post-test phase. Considering the eta squared, the highest effectiveness was for the Social Isolation subscale (51.9%) and the least significant

effectiveness was related to the Overcompensation standards (16.1%). In self-differentiation as well, schema therapy significantly changed all subscales of differentiation in the post-test phase. In this variable too, based on eta squared, the highest effectiveness was for the Emotional Cutoff subscale (79.2%) and the least effectiveness was related to Emotional Reactivity (40.4%). To test the findings related to the persistence of treatment effects in the follow-up phase, repeated measures ANOVA was used.

Table 4

The Results of Bonferroni's Post-Hoc Test

Variables	Test Comparison	Mean Difference	Significance Level
Emotional Deprivation	Pre-test vs. Post-test	14.20	<0.001
	Pre-test vs. Follow-up	14.34	<0.001
	Post-test vs. Follow-up	0.14	0.125
Abandonment	Pre-test vs. Post-test	23.40	<0.001
	Pre-test vs. Follow-up	22.91	<0.001
	Post-test vs. Follow-up	0.49	0.105
Mistrust/Abuse	Pre-test vs. Post-test	14.55	<0.001
	Pre-test vs. Follow-up	15.32	<0.001
	Post-test vs. Follow-up	0.77	0.105
Social Isolation	Pre-test vs. Post-test	5.20	<0.001
	Pre-test vs. Follow-up	4.77	<0.001
	Post-test vs. Follow-up	0.43	0.105
Defectiveness/Shame	Pre-test vs. Post-test	15.30	<0.001
	Pre-test vs. Follow-up	14.07	<0.001
	Post-test vs. Follow-up	1.23	0.105
Dependence/Incompetence	Pre-test vs. Post-test	12.80	<0.001
	Pre-test vs. Follow-up	13.10	<0.001
	Post-test vs. Follow-up	0.30	0.105
Vulnerability to Harm/Illness	Pre-test vs. Post-test	7.50	0.007
	Pre-test vs. Follow-up	8.64	0.005
	Post-test vs. Follow-up	1.14	0.125
Enmeshment/Unrelenting Standards	Pre-test vs. Post-test	9.80	<0.001
	Pre-test vs. Follow-up	9.50	<0.001
	Post-test vs. Follow-up	0.30	0.105
Failure	Pre-test vs. Post-test	7.90	0.013
	Pre-test vs. Follow-up	7.29	0.015
	Post-test vs. Follow-up	0.61	0.105
Entitlement/Grandiosity	Pre-test vs. Post-test	8.55	0.019
	Pre-test vs. Follow-up	8.69	0.018
	Post-test vs. Follow-up	0.14	0.125
Insufficient Self-Control/Discipline	Pre-test vs. Post-test	14.20	<0.001
	Pre-test vs. Follow-up	15.89	<0.001
	Post-test vs. Follow-up	1.69	0.125
Subjugation	Pre-test vs. Post-test	14.35	<0.001
	Pre-test vs. Follow-up	15.05	<0.001
	Post-test vs. Follow-up	0.70	0.105
Self-Sacrifice	Pre-test vs. Post-test	17.80	<0.001

	Pre-test vs. Follow-up	17.92	<0.001
	Post-test vs. Follow-up	0.12	0.125
Emotional Inhibition	Pre-test vs. Post-test	14.15	<0.001
	Pre-test vs. Follow-up	14.67	<0.001
	Post-test vs. Follow-up	0.52	0.105
Unrelenting Standards/Hypercriticalness	Pre-test vs. Post-test	11.45	0.047
	Pre-test vs. Follow-up	12.71	0.043
	Post-test vs. Follow-up	1.26	0.105
Emotional Reactivity	Pre-test vs. Post-test	11.90	<0.001
	Pre-test vs. Follow-up	10.95	<0.001
	Post-test vs. Follow-up	0.95	0.105
Self-Position	Pre-test vs. Post-test	21.05	<0.001
	Pre-test vs. Follow-up	20.15	<0.001
	Post-test vs. Follow-up	0.90	0.105
Emotional Cutoff	Pre-test vs. Post-test	11.45	<0.001
	Pre-test vs. Follow-up	12.55	<0.001
	Post-test vs. Follow-up	1.10	0.105
Fusion with Others	Pre-test vs. Post-test	14.95	<0.001
	Pre-test vs. Follow-up	15.60	<0.001
	Post-test vs. Follow-up	0.65	0.105

The results of Table 4 analyzed the persistence of treatment for the variables. According to the table's results, there is a significant difference between the pre-test and post-test, and the pre-test and follow-up phase for the total score of all variables ($P < 0.05$). This indicates that schema-focused therapy was effective in significantly changing the studied variables. Also, according to the results of the above table, there is no significant difference between the post-test phase and the follow-up phase for all variables ($P > 0.05$). Consequently, the effect of schema-focused therapy was sustainable in the long term.

4. Discussion and Conclusion

The results of the current research demonstrated that schema therapy significantly impacted most subscales of early maladaptive schemas. These findings are consistent with previous studies (Aghaee et al., 2019; Ghaderi et al., 2016; Hatami & Fadayi, 2015; Navaei & Mohammadi Arya, 2016; Pourshahabadi & Einipour, 2020; Roelofs et al., 2016).

In explaining these findings, consistent with Young's (199) perspective, schema therapy causes individuals who have committed infidelity to reevaluate and modify their schemas and coping styles, leading to the differentiation of schemas and coping strategies and manipulation of memories, emotions, and cognitions. Schema therapy helps the adulterer to perceive their early maladaptive schemas as incongruent and, by challenging these schemas, develop a healthy voice in their mind, thereby enabling them to determine the role of these schemas in the occurrence of infidelity and prevent future instances (Young, 1999). This

therapeutic approach also helps adulterers to modify their unrealistic expectations. In this part of the treatment, cognitive techniques change their self-perception. During the sessions, individuals articulate evidence confirming or refuting their schemas and establish a dialogue between the primary schema and the healthy aspect that brings a sense of worthiness. Moreover, this approach, through cognitive strategies, helps adulterers to perceive the justifiability of their infidelity experience as lesser, while better assessing their coping capacity in response to infidelity temptation. Challenging thoughts that predispose to infidelity helps them better control the feeling of vulnerability against infidelity triggers. Additionally, cognitive strategies by highlighting the benefits of change increase the motivation for change in the adulterer (Abooei Mehrrizi et al., 2021; Aghaee et al., 2019).

Moreover, this therapeutic approach helps adulterers evaluate the validity of their schemas and understand the extent of these schemas' role in inciting and committing infidelity. With this approach, the adulterer perceives the schema as an external truth that can be combated with objective and experiential evidence. One reason for the success of schema therapy is its targeting of these underlying constructs using cognitive, behavioral, and experiential techniques. By focusing on changing maladaptive schemas formed in childhood, maladaptive coping styles, and elucidating their impact on processing and confronting life events, schema therapy provides an opportunity to improve the early maladaptive schemas associated with infidelity (Ahmadi et al., 2020).

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Furthermore, experimental techniques help adulterers reorganize emotionally, self-examine, gain new learnings, regulate interpersonal affect, and self-soothe, setting the stage for schema improvement. Additionally, adulterers can test schema hypotheses and, with schema activation related to current issues, create opportunities for emotional insight and subsequent schema improvement, effectively preventing the recurrence of infidelity (Ghaderi et al., 2016).

Overall, schema therapy, by identifying the underlying factors of behavior and personality in adulterers and making them aware of the impact of these unresolved schemas on their infidelity tendencies and interpersonal relationships, alerts them to consider these schemas more carefully in interpersonal dealings and solving the problem of infidelity and its prevention. This aligns with what Schaap et al. (2016) mentioned in their research, equipping couples to root out problems stemming from their early maladaptive schemas and equipping them with appropriate interpersonal response choices prevents marital issues and equips individuals with correct strategies (Schaap et al., 2016).

Additionally, the results of the current research indicated that schema therapy significantly impacted all subscales of self-differentiation. These findings are consistent with the previous research (Abooei Mehrrizi et al., 2021; Barzegaran et al., 2021; Pourshahabadi & Einipour, 2020; Sarabandi et al., 2022).

In explaining the effectiveness of schema therapy on the self-differentiation of adulterers, it can be said that schema therapy creates changes in the cognitive, experiential, emotional, and behavioral areas of these individuals. This therapeutic approach, by challenging maladaptive schemas and ineffective responses and replacing them with appropriate and healthier thoughts and responses, is effective. Schema therapy, by improving key and destructive components such as negative emotions and thoughts, seems to generally lead to better well-being and, consequently, mental health in adulterers (Pourshahabadi & Einipour, 2020).

Schema therapy, by integrating cognitive, behavioral, Gestalt, and psychoanalytic approaches into a unified therapeutic model, can enhance an individual's ability to differentiate between cognitive and emotional processes. The goal of schema therapy, which is to identify the roots of schemas and dysfunctional thoughts, is an optimal tool to help individuals who have committed infidelity in identifying schema-triggering situations, recognizing negative infidelity behaviors and their stimuli, and how to replace them with healthier behaviors. This leads to increased awareness of schemas in individuals and paves the way for change (Abooei Mehrrizi et al., 2021). Consequently, schema therapy can enhance the self-differentiation capacity of individuals who have committed infidelity by distinguishing between healthy and unhealthy behaviors. Therefore, it seems logical that schema therapy would effectively impact self-differentiation in individuals who have committed infidelity.

In another explanation, theorists consider schemas as cognitive structural and organizational components through which humans can define, interpret, classify, and evaluate their experiences. This structured organization is often adaptive, facilitating information processing and requiring fewer controlled cognitive resources. These schemas are broadly reflective of an individual's absolute negative views of themselves, the world, and the future. The technique of schema therapy targets central beliefs for change. Individuals undergoing schema therapy use cognitive techniques to test their schemas (Barzegaran et al., 2021; Pourshahabadi & Einipour, 2020; Sarabandi et al., 2022). When individuals who have committed infidelity experience better quality of life and mental health through schema therapy, their independence and self-differentiation increase, thereby fostering emotional independence. Individuals with higher self-differentiation cope more easily with infidelity-related triggers and extramarital relationships. Therefore, self-differentiation should be taught to individuals who have committed infidelity so that they can make clearer and more conscious decisions, free from excitement and hedonism, in infidelity-provoking situations.

5. Limitations & Suggestions

Considering the findings of the present study on the effectiveness of schema therapy on the studied variables, it is recommended that through psychological assessments in couples, individuals with early maladaptive schemas be identified and then exposed to specialized schema therapy interventions to prevent the formation of infidelity. Additionally, to modify maladaptive schemas in individuals who have committed infidelity, schema therapy interventions should be employed by psychologists proficient in schema therapy. The limitations of the current research include its restriction to participants in Tehran, not controlling potential cultural and psychological variables affecting the dependent variables, and not using random sampling. Therefore, to increase the generalizability of the results, it is suggested that this research be conducted in

other statistical populations, controlling the mentioned factors and employing random sampling methods.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Authors' Contributions

Fateme Tahmasebizadeh played a crucial role in shaping the research design, collecting data, and administering the schema therapy intervention. Amir Panah Ali brought expertise in research methodology and data analysis to the study. Behzad Shalchi assisted in data collection and overall research coordination. Seyed Davoud Hosseini Nasab contributed to data analysis and its interpretation.

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