

Comparison of the Effectiveness of Schema Therapy and Cognitive-Behavioral Therapy Before Marriage on Emotional Maturity and Body Image of Single Women

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ABSTRACT

Objective: The increasing delay in the age of marriage and the decreasing interest and willingness of single women to marry have led to a rise in the age of marriage, resulting in an increase in the number of single women with higher ages. This study aimed to compare the effectiveness of schema therapy and cognitive-behavioral therapy before marriage on the emotional maturity and body image of single women.

Methods and Materials: This quasi-experimental study employed a pre-test and post-test design with a non-equivalent control group. The study population included single women from District 1 of Tehran in 2022. The research sample consisted of 60 participants selected through convenience sampling based on a call from the study population, and they were randomly assigned to two experimental groups and one control group. Participants completed the Emotional Maturity Questionnaire (Yashvir Singh and Mahesh Bhargava, 1991) and the Body Image Questionnaire (Fisher, 1970) before the intervention, after the intervention, and at follow-up. The first experimental group received schema therapy and the second experimental group received cognitive-behavioral therapy in eight 90-minute sessions based on the schema therapy protocol (Leahy, 2013) and the cognitive-behavioral therapy protocol (Beck, 1964), respectively. Data were analyzed using one-way ANCOVA and one-way ANOVA with post hoc tests using SPSS software.

Findings: The results indicated that schema therapy and cognitive-behavioral therapy significantly (mean difference with $p < 0.05$) reduced emotional maturity instability and improved body image (mean difference with $p < 0.05$) in single women.

Conclusion: Based on the findings, it is concluded that schema therapy before marriage and cognitive-behavioral therapy can be effective therapeutic methods for improving the emotional maturity and body image of single women and can be used as important and key interventions in the pre-marriage domain.

Keywords: Emotional Maturity, Body Image, Cognitive-Behavioral Therapy, Schema Therapy.

1. Introduction

One of the most important decisions in an individual's life is choosing a spouse and marital partner. People marry for many reasons, such as love, happiness, companionship, having children, physical attraction, or the desire to escape an unhappy situation. In all societies, there are women who remain unmarried, reach a definite and final age of singleness, and almost lose hope of getting married. Being married or single at an older age can moderate an individual's health level (Rao, 2017). In this regard, the experience of singleness and not getting married, especially for women, has resulted in psychological violence, increased isolation, an unclear future, and feelings of burden and inferiority (Qaderzadeh et al., 2017). Additionally, attempting suicide with drugs is a serious health problem, particularly among young adults and single women (Sawad et al., 2022).

One of the psychological characteristics of single women that can be affected by their conditions and issues is their emotional maturity. Emotional maturity is defined as the ability to manage one's emotions and assess others' feelings in interpersonal communications to make appropriate decisions. The most prominent signs are tolerance of adversities and indifference to stimuli that negatively affect the individual (Joy & Mathew, 2018). In other words, a person who has reached complete emotional maturity can establish correct social relationships, accept responsibility for themselves and others, and succeed in interacting with others (Ebrahimi, 2020). In fact, emotional maturity is a process through which an individual's personality continuously strives to achieve greater emotional health (Pастey & Aminbhavi, 2006). Therefore, individuals with emotional maturity are those who have good control over their emotional lives. Additionally, failing to achieve emotional maturity can impact the lives of women.

In addition to emotional maturity, the body image of single women can also be influenced by their conditions and issues. Since appearance is an important part of an individual's identity and is immediately apparent in social interactions, the importance of this construct is very significant. The importance and attention to this area vary among different social classes. Research has shown that body image dissatisfaction is higher among women and girls (MacNeill et al., 2017). Negative body image, especially among girls, is prevalent and has serious consequences in key areas of life, including psychological and physical health (Alleva et al., 2020). Furthermore, changes in body image

following observable changes in the body can significantly affect an individual's personality and behavior (Graves et al., 2021). Body image is an individual's perception of their physical appearance, but more important than thoughts and feelings is the individual's experience as a result of this perception, meaning knowing whether these feelings are negative, positive, or a combination (Shafiqabady et al., 2023; Tan et al., 2019). Moreover, most studies that have examined the factors influencing the formation and persistence of body image concerns and dissatisfaction have emphasized socio-cultural values as an important and determining factor (Blowers et al., 2003). Therefore, given that the cultural context of each society nurtures and emphasizes its specific values, attention to the factors and conditions of these concerns and their consequences in the cultural context of Iranian society, especially among single women who are more susceptible to such attitudes and behaviors, seems necessary. Although these criteria affect both genders, physical attractiveness and body satisfaction are recognized as important elements of self-concept among women (Stefano et al., 2016; Tan et al., 2019).

As mentioned, the conditions and issues of single women can affect their psychological characteristics such as emotional maturity, body image, willingness to marry, and fear of marriage. Therefore, any factor or intervention that can influence these variables and improve them will create better conditions for the psychological well-being of single women, leading to more appropriate coping with these conditions and issues. One type of intervention that can be effective in this regard is schema therapy. Leahy's emotion-focused schema therapy (2018) suggests that individuals may differ in how they conceptualize their emotions, or in other words, individuals have different schemas about their emotions. Based on these schemas, they interact with the outside world in different ways, resulting in different behaviors. Many people, due to difficult childhood experiences and unsuccessful adult relationships, consider intimacy and a good marriage to be an illusion. Therefore, being aware of one's fundamental attitudes and beliefs about marriage and correcting them is essential for having a satisfying marriage (Leahy, 2002; Leahy, 2018). Research shows that correcting schemas and replacing them with adaptive beliefs can reduce the fear of marriage in women (Mokhtari et al., 2021). Additionally, individuals' awareness of their attitudes and beliefs about marriage and adopting a realistic and logical approach can significantly contribute to a satisfying marriage (Rajabi et al., 2021).

In other words, schema therapy makes clients aware of their emotions. Given that schema therapy, as an effective therapeutic model for marriage, has received less attention and research, studies indicate that over time, individuals experience doubts in choosing a spouse, partly due to cognitive distortions, types of schemas, and their impact on spouse selection criteria and unrealistic and inefficient expectations (Mehra et al., 2018). In schema therapy training, avoiding control over difficult experiences is emphasized (Mertens et al., 2020). Therefore, being aware of one's fundamental attitudes and beliefs about marriage and correcting them is essential for having a satisfying marriage (Mehra et al., 2018). Schema therapy focuses on self-destructive schemas, emotions, and actions stemming from childhood that are repeated throughout life. These are called early maladaptive schemas and contribute to the development and progression of psychological damage (Smith et al., 2019). These schemas form our first cognitive structures, activated in response to events (Batool et al., 2017).

Another effective therapeutic intervention that can help correct dysfunctional attitudes in spouse selection and improve emotional maturity and body image in single women is cognitive-behavioral therapy (CBT). This therapy combines the cognitive restructuring approach of cognitive therapy with behavior modification methods in behavior therapy. In this intervention, the therapist challenges both the behaviors and thoughts causing distress to reveal and change them, resulting in adaptive behavior (Nishihara et al., 2019). Awareness of one's attitudes and beliefs about marriage and adopting a realistic approach can significantly contribute to a satisfying marriage (Rajabi et al., 2021; Rajabi et al., 2013). According to cognitive theories, selective attention combined with the process of acquiring body image information leads to increased negative emotions, resulting in unhealthy behaviors aimed at changing body shape. Therefore, cognitive-behavioral body image therapy has been developed to help individuals with body dissatisfaction (Wilhelm et al., 2011). According to Hoffman, Grossman, Bergman, and Bodner (2020), loneliness is more intense among young people, highlighting the importance of considering these factors in youth marriages (Hoffman et al., 2021). Given that the average age of marriage is increasing according to statistical data, identifying, assessing, and measuring pre-marital patterns and damages and implementing effective interventions is crucial (Gottman & Gottman, 2015). Therefore, discovering factors that moderate emotional and social loneliness and the need for

psycho-social investment to increase the willingness to marry is a concern for marriage and family researchers. Applying these factors in pre-marital counseling is essential (Odero, 2018). Since neither of these intervention methods has been used simultaneously with these changes, this study examines the effects of both treatment methods. The lack of research on body image in the Iranian culture, the lack of research in this field, and the gap in understanding single women's fears about their body image raise the research question: Is there a difference in the effectiveness of schema therapy and cognitive-behavioral therapy before marriage on emotional maturity and body image? This research aims to increase awareness among single women, develop and organize a systematic therapeutic or educational program, and enhance understanding of concepts related to the transformation of emotional maturity and body image in single women, taking at least small positive steps in this field.

2. Methods and Materials

2.1. Study Design and Participants

This quasi-experimental study employed a pre-test and post-test design with a non-equivalent control group. This design is similar to the pre-test and post-test with control group design, except that the selection of subjects from the population is not random (Hafez Nia, 2003). The study population included all single women visiting the Velenjak Health House Counseling Center in District 1 of Tehran in April and May 2022. The sample was selected using convenience sampling based on a call from the study population and was randomly assigned to three groups (Experimental Group 1: pre-marital schema therapy; Experimental Group 2: pre-marital cognitive-behavioral therapy; and Control Group). Each group consisted of 20 women. The sample size was determined using the Cochran formula, with a statistical population of approximately 75 people, and 60 individuals were selected as the sample according to the formula. Inclusion criteria included voluntary registration and completion of an informed consent form to participate in the study, minimum high school education, age (30 years and older), no history of marriage, scoring "one standard deviation below the mean of volunteers" in the pre-test for body image and willingness to marry, scoring "one standard deviation above the mean of volunteers" in the pre-test for emotional maturity, no physical or psychological illnesses, no substance abuse, and no sexual abuse. Exclusion criteria included getting married

during the research process, developing chronic physical or psychological illnesses, and irregular attendance in therapy sessions (two absences).

In this study, after screening and selecting the samples, the first experimental group underwent therapeutic intervention based on the schema therapy protocol (Leahy, 2002; Leahy, 2018), which helps identify and treat dysfunctional thoughts and beliefs, in eight 90-minute sessions. The second experimental group received therapeutic intervention based on the cognitive-behavioral therapy protocol (Beck, 1976) in eight 90-minute sessions, while the control group did not receive any therapeutic intervention. After implementing the interventions, a post-test was administered to the three groups, and finally, one month later, the tests were administered again during the follow-up phase.

2.2. Measures

2.2.1. Emotional Maturity

This scale, consisting of 48 questions, was developed by Yashvir Singh and Mahesh Bhargava in 1991. It aims to measure the level of emotional maturity (instability, emotional regression, personality disintegration, social adjustment, and lack of independence) among students. The scoring options for this questionnaire are: never "1", probably "2", unsure "3", often "4", very often "5". The total score is considered the emotional maturity score of the subject, where lower scores indicate higher emotional maturity. The interpretation of the emotional maturity stability scores is as follows: 50-80, very stable; 81-88, relatively stable; 89-106, unstable; 107-140, very unstable. The validity of this scale was determined against external criteria, namely the "Gha" adaptation questionnaire for college students by Sinha and Singh. The "Gha" questionnaire measures the emotional adjustment of college students and consists of 21 questions. The obtained correlation between the total scores in the 21 questions of the "Gha" domain and the total scores in the emotional maturity scale was 0.67 (Singh & Bhargava, 1990). Reliability was measured through test-retest on students, including 20-24-year-old girls and boys. The time interval between these two tests was six months, and the obtained correlation between these two administrations was 0.75. In Heydari et al.'s (2004) study, content validity was confirmed through a pilot implementation and feedback from respondents and five psychology professors, and reliability was calculated through the test-retest method and Cronbach's alpha (alpha

= 0.92). To determine the reliability of the scale, Cronbach's alpha was used, resulting in a reliability coefficient of 0.33. The reliability of the questionnaire based on Mohammadi's study in 2005, using Cronbach's alpha method, was 0.89. Jokar and Samani's study in 2007 reported a Cronbach's alpha of 0.89 (Ebrahimi, 2020). In the present study, the reliability coefficient of the above tool was calculated to be 0.92 using Cronbach's alpha.

2.2.2. Body Image

The Body Image Questionnaire was developed by Fisher in 1970 and consists of 68 questions designed to assess an individual's attitude toward various aspects of body image. This questionnaire includes three subscales: self-body (all questions except those presented in the other two subscales), satisfaction with different body parts (questions 60 to 68), and the individual's attitude toward weight (questions 20, 56, 57, 58, 59, 66). Questions 1 to 57 are based on a Likert scale: completely disagree "1", disagree "2", neutral "3", agree "4", completely agree "5". Questions 57 to 60 are also based on a Likert scale: never "1", rarely "2", sometimes "3", often "4", almost always "5". Questions 60 to 68 are based on a Likert scale: very satisfied "1", somewhat satisfied "2", no opinion "3", somewhat dissatisfied "4", very dissatisfied "5". The score range for this questionnaire is between 68 and 340, with a cutoff score of 204. The reliability and validity of the Body Image Questionnaire were determined using Cronbach's alpha, Spearman-Brown coefficient, and Guttman split-half coefficient in Nazarpour and Khazaei's (2012) study, resulting in 0.918, 0.861, and 0.861, respectively. Asgari, Pasha, and Aminian (2009) calculated the validity of this test in Iran, with the correlation coefficient for the first and second administrations being 0.81 for first-year students, 0.84 for second-year students, 0.87 for third-year students, and 0.84 for the total student sample. Given the significance level of these coefficients ($p < 0.001$), a significant correlation between the scores from the first and second administrations can be accepted. The reliability of this questionnaire was calculated using two methods, Cronbach's alpha and split-half, resulting in 0.97 and 0.87, respectively. The validity of this questionnaire in Hosein Chari and Fadakar's (2005) study, in a sample of 733 Iranian students, using Cronbach's alpha and split-half methods for the total score in the student sample, was reported as 0.71 and 0.69, respectively. Additionally, Hosein Chari and Fadakar (2005) examined the construct validity of the questionnaire using factor analysis in their study

(Hashemian et al., 2021). In the present study, the reliability coefficient of the above tool was calculated to be 0.918 using Cronbach's alpha.

2.3. Intervention

2.3.1. Schema Therapy

The schema therapy protocol (Leahy, 2002; Leahy, 2018), which helps identify and treat dysfunctional thoughts and beliefs, was conducted in eight 90-minute sessions.

Session 1: Establishing Connection and Initial Assessment

In the first session, the focus is on establishing rapport and conducting an initial assessment. Participants are introduced to each other and the group rules, including confidentiality, respect, and attentive listening. A contract is established with the participants. The session also involves identifying the current problems the participants are facing and discussing their dysfunctional attitudes towards emotional maturity and body image.

Session 2: Introduction to Schemas and Dysfunctional Patterns

The second session involves educating participants about schemas and dysfunctional patterns. The facilitator connects current issues and dysfunctional attitudes toward marriage and schemas by providing examples related to emotional maturity and body image. This helps participants understand the impact of their schemas on their current problems.

Session 3: Cognitive Strategies for Addressing Dysfunctional Marriage Attitudes

In the third session, cognitive strategies for addressing dysfunctional attitudes toward marriage are discussed. The facilitator introduces the logic behind cognitive techniques and employs empathic confrontation. Participants learn how these strategies can help modify their negative beliefs about marriage.

Session 4: Evaluating Coping Responses

The fourth session focuses on evaluating the pros and cons of coping responses. A dialogue is established between the healthy aspect and the schema aspect of the participant. Appropriate values in selecting a spouse are discussed, and cognitive techniques are used to reinforce these values.

Session 5: Introduction to Experiential Techniques

In the fifth session, the logic behind experiential techniques is explained. Participants engage in activities like emotional level combat with schemas affecting emotional maturity and body image. Imagery exercises related to

marriage interest, the present moment, and choosing an ideal spouse are conducted.

Session 6: Introduction to Behavioral Techniques

The sixth session introduces behavioral techniques and outlines their objectives. Participants are guided on creating a list of behaviors, prioritizing them, and identifying the most problematic patterns. Techniques for breaking these patterns are discussed.

Session 7: Practicing Behavioral Techniques

In the seventh session, participants practice behavioral techniques to change attitudes and behaviors. They engage in role-playing and visualization exercises to practice healthy behaviors and overcome obstacles to change.

Session 8: Review and Consolidation

The final session involves a review and consolidation of previous sessions. Techniques and exercises from previous sessions are revisited, and participants provide feedback and ask questions about the sessions' duration and content. The session concludes with a summary and reinforcement of the key concepts learned.

2.3.2. Cognitive Behavioral Therapy

The cognitive-behavioral therapy protocol (Beck, 1976) was conducted in eight 90-minute sessions.

Session 1: Introduction and Group Rules

The first session is focused on introductions and establishing group rules, including confidentiality, respect, and attentive listening. A contract is established with participants. The session explains how thoughts create feelings.

Session 2: Grading Emotions and Belief in Thoughts

The second session involves grading emotions and the degree of belief in specific thoughts. Participants learn to identify and rate their emotional responses and the strength of their beliefs.

Session 3: Differentiating Thoughts from Reality

In the third session, participants are taught to differentiate their thoughts from reality. This helps them to recognize cognitive distortions and challenge their validity.

Session 4: Identifying Variations in a Specific Belief

The fourth session focuses on identifying fluctuations in a particular belief. Participants learn to track changes in their beliefs and understand the factors influencing these changes.

Session 5: Categorizing Cognitive Distortions

The fifth session involves categorizing cognitive distortions. Participants learn to identify and label different types of cognitive distortions that affect their thinking.

Session 6: Downward Arrow Technique

In the sixth session, the downward arrow technique is introduced. Participants learn to sequentially calculate the probability of their thoughts and examine underlying assumptions.

Session 7: Making Predictions

The seventh session focuses on making predictions. Participants practice predicting outcomes based on their thoughts and testing these predictions against reality.

Session 8: Review and Consolidation

The final session involves reviewing and consolidating previous sessions. Techniques and exercises from earlier sessions are revisited, and participants provide feedback and ask questions about the sessions' duration and content. The session concludes with a summary and reinforcement of the key concepts learned.

2.4. Data analysis

After reviewing the assumptions for conducting parametric tests, the data from the pre-test and post-test phases were analyzed using one-way ANOVA and post hoc tests with SPSS version 22.

3. Findings and Results

Regarding the sample population consisting of different occupations, including housewives, employees, and students with varying education levels, the participants were classified into three age ranges with 5-year intervals. In terms of occupation, in the schema therapy group, there were 10 employees, 6 housewives, and 4 students. In the cognitive-behavioral therapy group, there were 13 employees, 5 housewives, and 2 students. In the control group, there were 7 employees, 5 housewives, and 8 students. In terms of education, in the schema therapy group, there were 6 high school graduates, 7 associate degree holders, 5 bachelor's degree holders, and 2 master's degree holders. In the cognitive-behavioral therapy group, there were 9 high school graduates, 2 associate degree holders, 6 bachelor's degree holders, and 3 master's degree holders. In the control group, there were 6 high school graduates, 5 associate degree holders, 7 bachelor's degree holders, and 2 master's degree holders. Regarding age, 30-34 years - 24 participants were in each of the three groups, 35-39 years - 21 participants were in each of the three groups, and 40-43 years - 15 participants were in each of the three groups.

Table 1

Descriptive Statistics for the Variable Emotional Maturity

Variable	Stage	Group	Mean	Standard Deviation	Minimum	Maximum
Emotional Maturity	Pre-test	Schema Therapy	123.25	49.37	59	232
		Cognitive-Behavioral	104	18.41	77	135
		Control	95.5	21.26	62	133
Emotional Maturity	Post-test	Schema Therapy	112.70	42.61	56	206
		Cognitive-Behavioral	93.85	15.64	71	125
		Control	94.95	20.51	63	131

As shown in Table 1, the mean, standard deviation, minimum, and maximum scores for the variable emotional maturity are displayed.

To compare the effectiveness of schema therapy and cognitive-behavioral therapy before marriage on the emotional maturity of single women, one-way ANCOVA

was used. The assumption of the homogeneity of regression slopes was also met ($F(2, 54) = 2.43, p = 0.098$).

The results of Levene's test showed that the significance level in the post-test is greater than 0.05, indicating homogeneity in the distribution of the emotional maturity variable.

Table 2

Results of Tests of Between-Subjects Effects

Source of Variation	df	Mean Square	F	p-value	Eta Squared
Covariate (Pre-test emotional maturity scores)	1	46028.21	2286.12	0.001	0.976
Main Effect (Treatment)	2	411.33	20.43	0.001	0.422
Residual Error	56	20.13			

The results presented in Table 2 indicate that, after removing the effect of pre-test emotional maturity scores as a covariate, the main effect of the treatment variable on the

post-test emotional maturity scores is significant ($F(2, 56) = 20.43, p = 0.001$).

Table 3

Multiple Comparisons Using Bonferroni Post-Hoc Test After Adjusting for Pre-test Effect

Group	Group	Mean Difference	Standard Error	p-value
Schema Therapy	Cognitive-Behavioral	2.69	1.45	0.201
	Control	-6.28*	1.50	0.001
Cognitive-Behavioral	Control	-8.98*	1.42	0.001

According to the results presented in Table 3, both schema therapy and cognitive-behavioral therapy groups significantly reduced instability in emotional maturity

compared to the control group. However, there is no significant difference between the two treatment methods.

Table 4

Descriptive Statistics for the Variable Body Image

Variable	Stage	Group	Mean	Standard Deviation	Minimum	Maximum
Body Image	Pre-test	Schema Therapy	207.25	32.03	165	312
		Cognitive-Behavioral	209.75	15.94	167	237
		Control	213	22.42	178	259
Body Image	Post-test	Schema Therapy	215.75	31.41	166	315
		Cognitive-Behavioral	221.15	19.97	174	269
		Control	212.95	21.97	180	260

As shown in Table 4, the mean, standard deviation, minimum, and maximum scores for the variable body image are displayed.

To compare the effectiveness of schema therapy and cognitive-behavioral therapy before marriage on the body image of single women, the delta method, or the comparison of the difference between post-test and pre-test, was used.

The deltas of the groups were analyzed using one-way ANOVA. Due to the non-establishment of regression slopes ($F(2, 54) = 9.77, p = 0.001$) and the non-establishment of covariance matrices ($F(6, 80975) = 4.943, p = 0.001$, Box's $M = 31.24$), it was not possible to use ANCOVA and mixed ANOVA tests.

Table 5

Descriptive Statistics for Body Image Based on the Difference Between Post-Test and Pre-Test (Delta)

Variable	Group	Mean	Standard Deviation	Minimum Difference	Maximum Difference
Body Image	Schema Therapy	8.5	5.1	1	19
	Cognitive-Behavioral	11.40	8.92	0	35
	Control	0.05	3.11	-6	7

As seen in Table 5, the delta values resulting from different groups are shown.

The results of Levene's test showed that the significance level is less than 0.05, indicating heterogeneity in the distribution of the body image variable.

Table 6

Results of One-Way ANOVA Tests

Source	df	Mean Square	F	p-value
Between Groups	2	78.72	18.42*	0.001
Within Groups	57	38.46		
Error	59			

The results presented in [Table 6](#) indicate significant differences between the groups. To examine the differences

between the groups pairwise, due to the non-compliance with homogeneity of variances, Dunnett's T3 test was used.

Table 7

Multiple Comparisons Using Dunnett's T3 Test

Group	Group	Mean Difference	Standard Error	p-value
Schema Therapy	Cognitive-Behavioral	-2.9	2.29	0.511
	Control	8.5*	1.33	0.001
Cognitive-Behavioral	Control	11.45*	2.11	0.001

According to the results presented in [Table 7](#), both schema therapy and cognitive-behavioral therapy groups significantly increased body image scores compared to the control group. However, there is no significant difference between the two treatment methods.

success rate in increasing emotional maturity and preventing relapse. Cognitive therapy, in contrast, follows a top-down approach, starting with surface concerns such as anxiety before addressing underlying assumptions and schemas. However, schema therapy takes a bottom-up approach, directly targeting the deepest level of schemas ([Mokhtari et al., 2021](#); [Smith et al., 2019](#); [Taylor et al., 2017](#)).

4. Discussion and Conclusion

This study aimed to compare the effectiveness of schema therapy and cognitive-behavioral therapy before marriage on the emotional maturity and body image of single women. The results indicated that both schema therapy and cognitive-behavioral therapy before marriage had a positive and significant impact on emotional maturity. Comparing the two experimental groups showed no significant difference in emotional maturity scores between the cognitive-behavioral therapy and schema therapy groups. The findings of this study are consistent with those of [Goswami and Roy \(2019\)](#), who found that cognitive-behavioral therapy is effective in improving emotional maturity and reducing stress in high school students ([Goswami & Roy, 2019](#)). Furthermore, the results are consistent with the study by [Bharat, Netravathi, and Pallavi \(2020\)](#), which found a significant difference in emotional maturity between married and unmarried young women ([Bharath et al., 2020](#)).

The study also found that both schema therapy and cognitive-behavioral therapy had a positive and significant impact on body image among single women. Comparing the two experimental groups showed no significant difference in body image scores between the cognitive-behavioral therapy and schema therapy groups. The results are consistent with the study by [Shafiabadi, Hasani, and Yari \(2023\)](#), which demonstrated that both emotion-focused cognitive-behavioral therapy and mindfulness-based cognitive therapy effectively improved body image and cognitive emotion regulation in adolescent girls seeking cosmetic surgery ([Shafiabady et al., 2023](#)).

Additionally, the findings showed that schema therapy significantly increased emotional maturity in the experimental group compared to the control group. According to [Young](#), schema therapy emphasizes deep-level cognition and aims to correct core issues, leading to a higher

In explaining the second hypothesis, it can be stated that cognitive-behavioral protocols and techniques emphasize correcting negative self-perceptions and reassessing social self-evaluation. Cognitive-behavioral therapy aims to replace negative and irrational thoughts and distortions with positive and logical thoughts, teaching individuals to challenge ineffective thoughts and replace them with positive ones, thereby improving body image. Previous research has supported the effectiveness of schema therapy in improving body image ([Moulton et al., 2018](#)). Individuals using schemas are resistant to change and maintain negative content in their beliefs, leading to a wide range of individual,

interpersonal, and social dysfunctions, increasing the likelihood of chronic personality disorders and criminal behavior (Stefano et al., 2016; Wilhelm et al., 2011).

In explaining this hypothesis, when a society's cultural context emphasizes the value of physical attractiveness, particularly for women, it gradually fosters concern about body image. Negative experiences such as being negatively evaluated or mocked by others create a negative body image that acts as a schema. Schema therapy, using experiential techniques, helps reconstruct these memories and schemas, allowing for the expression and release of suppressed negative emotions and improving body image among single women. Cognitive interventions, through cognitive restructuring and correcting thinking styles in interpreting body image and eating behaviors, effectively influence attitudes toward marriage (Wilson et al., 2002).

5. Limitations & Suggestions

Based on the findings of this study, it is recommended that mental health professionals and those active in the field of marriage design and apply appropriate methods inspired by schema therapy and cognitive-behavioral therapy to enhance the mental health of these women. The Ministry of Health, Welfare Organization, and the Psychological and Counseling Organization should implement cognitive-behavioral therapy and schema therapy to familiarize psychologists, doctors, and nurses with these concepts. Therefore, it is recommended that those responsible for marriage issues use psychological therapeutic approaches, such as schema therapy, to increase body image and reduce emotional maturity instability. The present study's findings indicate that schema therapy is a suitable method for improving emotional maturity and body image. It seems that schema therapy, due to its affordability, effectiveness, accessibility, and practicality, can be used alongside other therapeutic methods in psychological service centers and clinics to improve many psychological characteristics.

This study faced limitations. The sampling was limited to single women visiting the Velenjak Health House Counseling Center in District 1 of Tehran, limiting the generalizability of the results. Another limitation was the inability to homogenize the intervention and control groups in terms of demographic variables and treatment stage due to the small sample size. Future research is suggested to be conducted over a wider geographical area to ensure greater generalizability of the results. It is also recommended to conduct similar research on other samples, especially men.

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Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

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. This article is derived from the first author's doctoral dissertation and has an ethics code of "IR.IAU.B.REC.1400.024". All ethical principles of research were observed.

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.

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Authors' Contributions

All authors contributed equally.

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