

Investigating the effectiveness of based-on-mentality schema therapy on feelings of loneliness, depression and self-concept of unmarried girls

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Esmail Sadri Damirchi*¹; Zahra Moradi²; Mohammadreza Noroozi Homayoon³

1. Professor, Department of Counseling, Faculty of Educational Sciences and Psychology, University of Mohaghegh Ardabili, Ardabil, Iran. *Corresponding Author:* e.sadri@uma.ac.ir.

2. PhD Student in counseling, Department of Counseling, Faculty of Educational Sciences and Psychology, University of Mohaghegh Ardabili, Ardabil, Iran.

3. PhD Student in Counseling, Faculty of Educational Sciences and Psychology, University of Mohaghegh Ardabili, Ardabil, Iran.

Abstract

Aim: The present study aimed to investigate the effectiveness of schema therapy based on mentality in reducing feelings of loneliness and depression, as well as improving self-concept, among single women over 40 years of age in Khorramabad.

Methods: This study employed a semi-experimental design with pre-test and post-test measurements, including experimental and control groups. The statistical population consisted of all single women over the age of 40 who had never been married as of 2022. A random sampling method was used to select 30 participants. The instruments used for data collection included the UCLA Loneliness Scale, the Beck Depression Inventory, and the Beck Self-Concept Scale. The intervention consisted of schema therapy based on mentality.

Results: The results from both multivariate and univariate analysis of covariance indicated that the schema therapy based on mentality had a significant impact on reducing feelings of loneliness and depression and improving self-concept ($P < 0.001$).

Conclusion: Based on the findings of this study, it can be concluded that schema therapy based on mentality effectively reduces feelings of loneliness and depression while enhancing the self-concept of single women.

Keywords: Based-on-mentality schema therapy, feeling of loneliness, depression, self-concept, single girls.

Introduction

Man is a creature based on need and the need for interaction during human evolution has always been discussed by human scientists, the desire for intimate relationships in all humans from the time of birth to death has been agreed upon by all (Golmohamedian & Saqzai, 2021). Marriage is the factor of family formation reproduction and survival of the human race and one of the important and fateful choices of every person. This choice is considered one of the growth processes that are important in the evolution of the inner and personality dimensions of a human being (Adamczyk, 2018). Marriage is a natural human desire and need that all schools, especially heavenly schools, encourage and encourage their followers to do. In primitive and tribal societies, a person started a family when he felt the need. But gradually with the increase of individual freedom and independence, the age of marriage increased and marriage as an institution underwent changes and transformations. Several factors were involved in this change. In the past years, marriage was a way to reach maturity, enter adulthood and become independent from the paternal family, and for this reason, people were eager to get married and start a family from a young age. Now, education and employment have provided alternative ways, especially for women, and for this reason, people tend to marry later. Although forming a family is very important in terms of customs and religion, sometimes this does not happen for some people at the age of marriage, and for this reason, some women and men at the age of marriage do not get married and remain single forever. Like (Hosseini and Yazidi, 2015). Being single permanently will have many consequences for the society and the individual. Past research shows some of the problems and injuries that single people face. Because the chances of getting married at 50 are at a minimum, demographers have defined an index called the generality of marriage, which means the proportion of people who have married at least once by the age of 50, who can get married. For comparison, the proportion of people who have been married at least once in the age group of 45-49 years has been used for both sexes and from the difference, definite celibacy has been obtained. Definite celibacy means those who have no hope of marriage and the probability of marriage among them is very low (Hosseini and Yazadi, 2015).

During the last century, due to processes such as industrialization, urbanization, globalization, technological progress, etc., the institution of the family has experienced extensive and deep changes (Gholami, Amir Mazaheri & Haghghatian, 2021). The increase in marriage age and the phenomenon of long-term celibacy, despite the emphasis and importance of marriage on the part of society and family, are among the developments that have been created as a result of major changes at the level of society. This delay in marriage, which in some cases leads to absolute celibacy, brings social pressure and painful conditions to unmarried girls. The experiences gained from the long-term celibacy of girls, on the one hand, the behaviors and attitudes that the people around and the family have towards single girls, on the other hand, the special feelings and experiences of single girls in their upbringing and their perception of these behaviors. and includes attitudes (Khosravi, Khezhnezhad & Darni, 2021). Past research shows some of the problems and injuries that single people face. Due to Iran's cultural situation and being exposure to harm, especially girls, and their limitations to marriage and having children, this can cause

Many harms and problems for them (Mokhtari, Yosefi, & Manshaee, 2021). The statistics confirm the delay in marriage and show that 220 thousand people of the country's population have not married until the age of 50 and are considered unmarried (Mokhtari et al., 2021). Staying single may lead to an increase in anxiety and nervous pressure and the prevalence of depression, behavioral disorders and sexual vulnerability, and with the passing of the happy period of life, it reduces the motivation to start a family and girls who have reached an advanced age from access to discourage family formation (Lee et al., 2020). The risk of absolute celibacy or monogamy has not been taken seriously in our society and no complete studies have been conducted in this regard, but what is clear is that monogamy has many consequences. One of the consequences of absolute celibacy is the feeling of loneliness, which is a common phenomenon in 21st-century humans (Erfani Adab & Fathi Azar, 2016).

People who do not benefit from having positive, stable and important relationships, feel dissatisfied and deprived and ultimately feel lonely (Heinrich, & Gullone, 2014). People who experience a high sense of loneliness usually perform poorly in social relationships (Di Stasio, Rinaldi, Sciaraffa, & Cheong, 2020). Loneliness is an unpleasant state that originates from the difference in interpersonal relationships that people want and the relationships they have with others in real conditions. This feeling is important because it is related to both the emotional states of people and social poverty, behavior and health in people (Qualter et al., 2013). Behaviors such as avoiding contact with others can be mentioned as obvious signs of loneliness. The feeling of loneliness arises when the contact and relationship with others are false, in such a way that a common emotional experience is not imagined for this two-way relationship of a person with others, and a person does not have a real and sincere relationship in the process of contact with others (Di- Settio, Rinaldi, Shiraf and Chong, 2020) in a research conducted by Erfani Adab and Fathi Azar (2016) under the title of Pathology of Singleness in Girls over 35 (Explaining the Concept of Loneliness and Its Causes), the participants in the research, The feeling of loneliness as a painful experience including loneliness, despair, depression, hopelessness and aimlessness, helplessness, loneliness, fear, life without pleasure, sleepless nights, heartbreak, anger, sigh and regret. defined Delay in marriage causes people to gradually lose their natural inclinations and become depressed and isolated. If marriage is done with the right criteria and with love, it is effective in preventing depression. It is said that people who are married face a much lower risk of suffering from mental illness, especially depression (Hosseini and Yazidi, 2015). Depression is one of the most common mental problems and psychiatric diseases, which is characterized by a lack of pleasure, avoiding friends and family, lack of motivation and failure tolerance, decreased libido, decreased or increased appetite, decreased energy, and premature fatigue. and sleep disorders etc. are associated (Xiang et al., 2018). One of the important characteristics of depression is the lack of flexibility in various fields. Depressed people report low mood or inability to enjoy life and often consider their environment as an unchanging environment; According to these people, the world is static, boring, empty and useless. As a result, depressed people consider their situation hopeless and their behavioral habits often collapse (Karami, Zarei, Fallah Chay & Sadeghifard, 2019).

Girls who are single due to not getting married and sometimes not being chosen by the desired person may have family problems, boredom, depression and negative attitudes and self-image. Self-concept causes serious problems regarding the attitude toward one's experiences, peer acceptance, body self-concept and other problems (Silván-Ferrero, Recio, Molero & Nouvilas-Pallejà, 2020). One of the main keys to human personality and behavior is the image that a person has of himself in his mind. Even the great things he does, he thinks of himself. The better he thinks of himself, the more successful, practical and creative he will be. Therefore, what a person thinks about himself is very important and affects all aspects of a person's life (Abdullahzadeh, Agha Mohammadian, Talebian Sharif, 2017). Self-concept is self-perception. In other words, self-concept is an objective point of view of the skills, characteristics and characteristics that a person has. Self-image is the way a person perceives himself, his behavior and his attitude toward the quality of others' images. Studies that examine the personality of healthy people indicate that self-concept has a fundamental role in the health and mental health of people, in such a way that by reducing the number of symptoms and signs. Because they will become anxious, lonely, shy, introverted, etc., and if they persist, they will cause serious problems (Pinquart & Behle, 2019). Also, studies show that one of the problems that affect the efficiency of people and prevent the healthy formation of identity and the flourishing of talents and intellectual and emotional powers is the problem of recognizing the image of oneself (Asayesh, Dokhtmohammad & Sareshteh, 2021). Therefore, it seems that it is necessary to use a method that targets some of the unpleasant emotional and emotional problems to help reduce and heal the emotional pain of these people.

Schema therapy is one of the topics that has been expressed and claims effectiveness and treatment in the field of emotional issues and problems. Mindfulness schema therapy is complementary to schema therapy and its goal is to help people form a healthy mindset (Nikamal, Salehi and Bermas, 2018). This therapy is a method described by Young, Klosko, & Weishaar (2003) and is a therapy that aims to treat healthy coping behaviors and improve schema mentality. They are a real organized pattern of thinking, feeling and behavior, which originates from a set of independent schemas (Hanaei et al., 2015). Schema therapy is an integrated intervention that, in addition to cognitive techniques, uses experimental techniques to bring schemas to active awareness and overcome emotional distance (Khodabandelow, Najafi & Rahimian Boogar, 2018). Young that the schemas he refers to as structures, patterns, or are stable and durable structures that act as lenses on a person's perception of the world, himself and others. These schemas are formed during childhood experiences and control a person's response to environmental events (Young, 2007). In this belief, it is believed that people experience difficult and painful emotions, but what distinguishes them from others is the interpretation and reaction to these emotions and the same mental schemas (Leahy, 2010). Leahy (2007) proposes two categories of strategies for dealing with unpleasant emotions: problematic strategies and adaptive strategies. Schema-therapy mainly works on mentalities, because mentalities are visible to us. Monitoring and managing conceptualization based on mentality is easy for both the therapist and the people. In this model, our current circumstances can be driven by schemas rather than the external environment. Schemas are the context for the emergence of mentalities. The diagnosis of mentality helps the

therapist in identifying the action. This method expresses the problems in a simple language for investigation and creates the environment for change by using empathy (Letafati beris, Ghamari kivi, Kiani & Sheykholslamy, 2021).

The research findings with the conceptual title of celibacy experience from the perspective of girls aged 30 and above show that injury in marriage and celibacy have become part of the life experience of girls and boys. But this has created different conditions for girls and caused them to experience social pressure, burden, judgment and prejudice, feeling alone, negative self-concept, emptiness and wandering (Khosravi et al., 2021). According to the mentioned materials, psychological interventions are necessary to improve the mental state of these individuals. Considering that this type of intervention has not been previously implemented to reduce the psychological problems of this demographic in Iran, this research aims to examine the effectiveness of mentality-based schema therapy in reducing feelings of loneliness, depression and improving self-concept among unmarried women over the age of 40. This demographic may face unique psychological challenges due to their specific life circumstances and implementing an effective intervention crucial to enhancing their quality of life. Therefore, this study hypothesizes that mentality-based schema therapy will significantly improve loneliness, depression, and self-concept among unmarried women.

Methods

This research was a semi-experimental research with pre-test and post-test methods with experimental and control groups. Due to the lack of precise statistics on all unmarried women over 40 years old in the city of Khorramabad, sampling was done using the convenience sampling method. Therefore, among those who were willing to cooperate, a number were selected. Among these people, after checking the entry criteria (being single and never married, agreeing to participate in the project and not having psychiatric disorders) and the exit criteria (absence of 3 or more meetings, unwillingness to participate in meetings and marriage in 30 people were randomly selected as a sample and then randomly replaced in two experimental and control groups (15 people in each group). One group was given mindfulness schema therapy (experimental group) and the second group did not receive any intervention (control group). For the present research, the necessary preparations were first prepared to carry out the work. Before conducting the interventions, the reasons and method of conducting the research were explained to the clients and they were assured that their information would remain confidential after the informed consent of the subjects (including the fact that the person can withdraw from the continuation of the treatment sessions and there are no consequences for him) the sessions started. The interventions were conducted by Zahra Moradi one of the authors of this article, who was counseling students with licenses to intervene. she had relevant education, necessary training in mindfulness-based schema therapy, and sufficient experience in this field. At first, both the experimental and control groups completed the loneliness, depression and self-concept questionnaires as a pre-test under the same conditions. Then, for the experimental group, 8 90-minute sessions of mindfulness-based

schema therapy were conducted once a week, and the control group did not receive any intervention. After completing the schema therapy sessions, loneliness, depression and self-concept questionnaires were completed again as a post-test by both groups. The research tools included loneliness, depression and self-concept questionnaires.

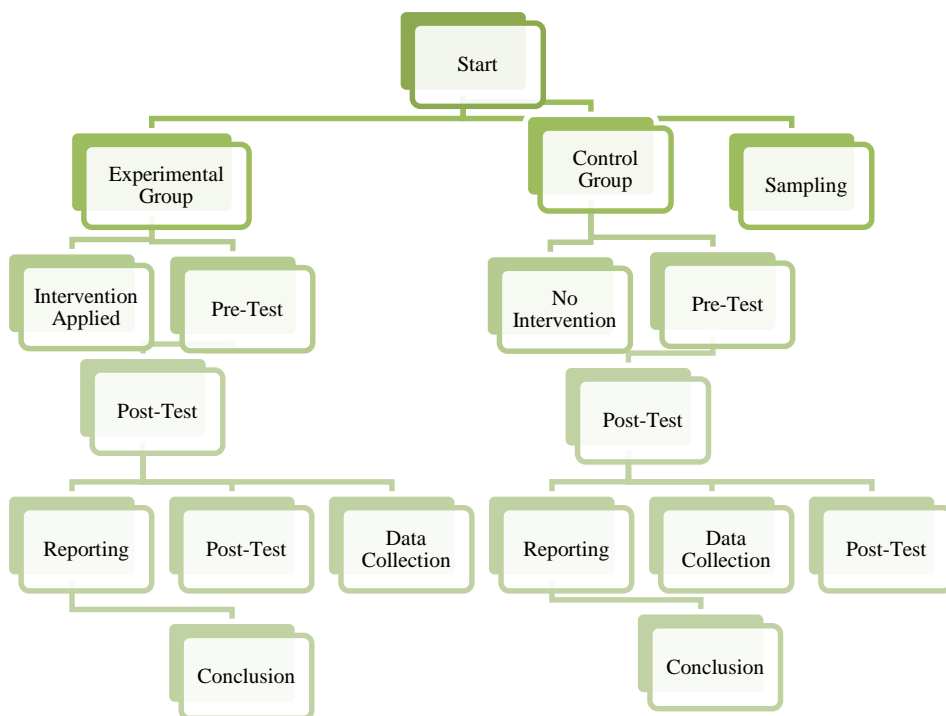


Figure 1. Consort Diagram

Research tools

1- Loneliness Questionnaire (UCLA): This scale was created by Russell, Curtona & Peplau in 1980, which includes 20 questions and 4 options, 10 positive sentences and 10 negative sentences. The method of scoring and interpretation of scores in this questionnaire is never scored (1), rarely scored (2), sometimes scored (3) and always scored (4). But the score of questions 1, 5, 6, 9, 10, 15, 16, 19, 20 is the opposite. It means never (4), rarely (3), sometimes (2) and always (1). The range of scores is between 20 (minimum) and 80 (maximum). Therefore, the average score is 50. A score higher than the mean indicates a greater intensity of loneliness. The validity and reliability of this test in the new revised version were reported as 78%. The reliability of the test was reported by Russell, Pilova and Ferguson (1978) to be 89%. This scale was translated by

Shekarkan and Mirdrikund and was used after preliminary implementation and corrections (Nadri, Haqshen, 2018).

2- Beck Depression Questionnaire: This questionnaire is a revised version of the Beck Depression Questionnaire (1996), which was developed to measure depression in teenagers and adults. This questionnaire has 21 items on a four-point scale (completely similar to me = 3, similar to me = 2, different from me = 1, and completely different from me = zero) (Beck, 1996). This questionnaire measures the physical, behavioral and cognitive symptoms of depression. A score less than 13 indicates the absence of depression, 14 to 19 indicates mild depression, 20 to 30 moderate depression, and scores greater than 30 indicate high and severe depression (Beck, 1996). There is no theoretical consensus for the cut-off point of this scale, but the suggested opinion of the researchers is a score of 18, which is said to correctly diagnose and classify 92% of people with depression (Scogin & Beutler, 2006). Beck et al reported the internal consistency of this scale as 0.93, its retest reliability as 0.75, and its content validity using factor analysis as 0.76. The reliability of this questionnaire has been reported as 0.84 through Cronbach's alpha and 0.70 based on odd and even questions. The concurrent and discriminant validity of this test in Iran has been investigated and the corresponding coefficients have been reported as 0.63 and 0.78 respectively (Emad and Hadianfard, 2019).

3- Beck's self-concept test: It was prepared in 1978 by Beck and Steer based on Beck's cognitive theory, has 24 items. The 24 items of the self-concept scale are appearance, knowledge, intelligence, wit, intelligence, popularity, sexual attraction, personality, laziness, selfishness, appearance, cheerfulness, independence, orderliness and cleanliness, success, kindness, Learning, jealousy, hard work, ability to read, completing tasks, self-awareness, athleticism, cruelty. Based on the research of Beck et al. (1992), this scale investigates and measures 5 aspects of characteristics, which are: mental ability, job efficiency, physical attractiveness, social skills, flaws and virtues. Huh Based on the grading method, each question contains 5 comments and is graded from completely positive to completely negative. The minimum score obtained by the subject on this scale will be 25 and the maximum score will be 125. Beck et al. (1985) obtained a reliability coefficient of 88% and 65% using the test-retest method. Also, the internal consistency coefficient of the scale is reported to be 80%.

Data Analysis

In this section, the data analysis procedures are outlined. Appropriate statistical methods were applied to test the research hypotheses. First, the normality of the data was examined using the Kolmogorov-Smirnov test. This test was conducted to determine whether the data followed a normal distribution. The results of this test indicated that the data were normally distributed, allowing the use of parametric statistical tests. To compare the differences between the experimental and control groups in the pre-test and post-test, an Independent T-test was employed. This test was used to compare the mean scores between the two groups. Additionally, to assess the within-group changes over time, a Paired T-test was conducted. This test compared the mean scores of the pre-test and post-test within each group (experimental and control). Finally, to ensure the impact

of the intervention and to control for confounding variables, an Analysis of Covariance (ANCOVA) was performed. This analysis helped to evaluate the effectiveness of the intervention while controlling for potential confounding factors.

Findings

In Table 1, the demographic characteristics of the research participants are summarized.

Table 1. Demographic Characteristics of Research Participants

Age Group	Number of Participants	Employment Status	Number of Participants	Education Level	Number of Participants
40-42	12	Unemployed	4	Illiterate	3
43-45	8	Self-Employed	12	Below Diploma	7
45-47	6	Homemaker	7	Diploma	11
48-50	3	Student	2	Bachelor's Degree	6
51-53	1	Employee	5	Master's and PhD Degrees	3

This research was analyzed using descriptive statistics, mean and standard deviation tables, using multivariate analysis of covariance and univariate covariance analysis, and using SPSS 24 edition software.

Table 2. The mean and standard deviation of loneliness, depression and self-concept in the pre-test and post-test of the experimental and control groups

Components	pre-exam		After the test		
	examination Group	Average	The standard deviation	Average	The standard deviation
Feeling lonely	The witness group	63.2	4/37	40.7	13.11
	examination Group	66.3	3.47	63.9	2.76
depression	The witness group	31.1	31.3	23.8	5.17
	examination Group	32.6	3.86	34.2	3.23
self-image	The witness group	45.5	56.5	68.7	14.15
		47.7	5.11	43.9	5.25

As can be seen in Table 2, the mean score of loneliness in the pre-test stage for the experimental group is 63.2, which has decreased to 40.7 after the intervention of mindfulness-based schema therapy. In the control group, this average was 66.3 in the pre-test stage, which is 63.9 in the post-test stage. The average depression in the pre-test stage for the experimental group was 31.1, which after the intervention decreased to 23.8, and for the control group, it was 32.6 in the pre-test stage and 34.2 in the post-test stage. The average self-concept in the pre-test stage for the experimental group was 45.5, which increased to 68.7 after the intervention, and for the control group, it was 47.7 in the pre-test stage and 43.9 in the post-test stage. To use the inferential statistics of multivariate and univariate covariance analysis, the assumptions of this analysis were examined. The Shapiro-Wilk test was used to assume the normality of the distribution of scores, which was confirmed in both the experimental and control groups ($p < 0.05$). The assumption of equality of variances (post-test) was checked using Levine's test, this assumption was confirmed in the post-test stage ($p < 0.05$). The pre-test scores were considered as simultaneous variables and their effect on the post-test scores was controlled using covariance analysis. The scatter diagram showed that the assumption of linearity of the relationship between the simultaneous variables (corresponding pre-test scores) is maintained. Also, the homogeneity of the slopes of the regression line between the dependent variables and the simultaneous variables in both experimental and control groups was established by drawing a scatter diagram. Therefore, an analysis of the covariance test was used to check the effect of schema therapy on mind-oriented therapy, the results of which are presented below.

Table 3. Multivariate covariance results for feelings of loneliness, depression and self-concept in the post-test stage

Test	Value	Error degree of freedom	The degree of freedom of the hypothesis	F	Significance level	Effect size	Statistical power
Pillai effect	0.81	26	3	37.94	0.001	0.81	0.99
Wilkes Lambda	0.18	26	3	37.94	0.001	0.81	0.99
Hotlig	4.37	26	3	37.94	0.001	0.81	0.99
The biggest root of error	4.37	26	3	37.94	0.001	0.81	0.99

As can be seen in Table 3, after removing the effect of the pre-test and other test variables, there is a significant effect for loneliness, depression and self-concept by multivariate covariance analysis. This multivariate effect shows that mindfulness-based schema therapy has an effect on loneliness, depression and self-concept and there is a significant difference between the loneliness, depression and self-concept of subjects in the experimental group and the control group ($p > 0,001$ $F=37.94$). To determine the significant difference between the feelings of loneliness, depression and self-concept of the experimental group and the control group, a univariate analysis of covariance test was used, the results of which are presented in Tables 4, 5 and 6.

Table 4. Univariate covariance results for the variable feeling lonely according to group membership

Variables	sum of squares	Degrees of freedom	mean square	F	Significance level	Effect size	Statistical power
Loneliness pre-test	1192.7	1	1192.7	0.67	0.77	0.47	0.221
Group membership	2062.5	1	2062.5	18.71	0.0001	0.61	1
Error	1323.3	27	110.29	-	-	-	-

According to the results of Table 4, by controlling the pre-test score, there is a significant difference between the experimental and control groups in the feeling of loneliness ($p < 0.001$). According to the obtained results, it can be claimed that the schema therapy of mindfulness has reduced the feeling of loneliness by 61% in the experimental group in the post-test phase.

Table 5. Univariate covariance results for depression variable according to group membership

Variables	sum of squares	Degrees of freedom	mean square	F	Significance level	Effect size	Statistical power
Depression pretest	188.3	1	188.3	0.75	0.68	0.36	0.266
Group membership	475.5	1	475.5	22.87	0.0001	0.58	1
Error	332.4	27	20.79	-	-	-	-

According to the results of Table 5, by controlling the pre-test score, there is a significant difference in depression between the experimental and control groups ($p < 0.001$). According to the above result, it can be concluded that the mindset-based schema therapy approach has reduced depression by 58% in the experimental group in the post-test phase.

Table 6. Univariate covariance results for the variable of self-concept according to group membership

Variables	sum of squares	Degrees of freedom	mean square	F	Significance level	Effect size	Statistical power
Self-concept pretest	1564.9	1	1564.9	0.62	0.81	0.049	0.196
Group membership	2449.5	1	2449.5	16.54	0.0001	0.60	1
Error	1628.9	27	148.09	-	-	-	-

According to the results of Table 6, by controlling the pre-test score, there is a significant difference in self-concept between the experimental and control groups ($p < 0.001$). According to this result, it can be said that mindfulness-based schema therapy has increased self-concept by 60% in the experimental group in the post-test phase.

Discussion

The present study was conducted to investigate the effectiveness of mindfulness-based schema therapy on feelings of loneliness, depression, and self-concept in unmarried girls over 40 years old. The results of the research showed that mental-oriented schema therapy significantly affected the feelings of loneliness and depression, reducing these negative emotions and increasing self-concept in the subjects. This therapy approach, through cognitive and emotional techniques, challenges and changes maladaptive schemas and ineffective responses, leading to an overall improvement in psychological health. However, this study also differs from previous research by focusing specifically on unmarried women over 40 years old, a demographic that has been less explored. Moreover, the specific emphasis on mindfulness-based schema therapy adds a unique aspect to the existing body of research. These results are in agreement with the results of Nikoogoftar & Sangani (2020) regarding the effectiveness of schema therapy in reducing feelings of loneliness, with the results of Titov et al. (2015), Beasley & Ager (2019), Ojaghloo, Ghodrati, & Tahaei, Arch & Craske (2020), Gosselin (2021) and Karaei and Qanatir (2021) are consistent about the effectiveness of schema therapy on reducing the feeling of loneliness. In explaining the above results, it can be said that in the schema therapy approach, challenging incompatible schemas and ineffective responses and replacing them with efficient and developed thoughts and responses, generally improves psychological health. When single girls feel that they are not chosen to live with someone else, they feel that they are not lovable and do not have a sense of belonging, or they lose the social signs of connection with others and value, and serious problems are associated with them feeling lonely. Since the main effect of schema therapy is on emotions and the use of experimental and emotional techniques covers most of this therapy, these techniques help to make a person aware of his and others' emotions, accept their flaws and characteristics, and be able to regulate their emotions in stressful situations. Emotional techniques in therapy sessions helped the person with emotional re-organization, better interaction, interpersonal emotion regulation and self-relaxation to prepare the ground for the correct use of more adaptive emotion regulation strategies. Schema therapy helped the subjects to realize that they can make changes in their lives, give up some desires, accept some losses, regain their goals and self-understanding, and face things that they thought were very scary and that they should make better use of their lives. Also, the subjects were taught that having a feeling of loneliness is more derived from the individual's mentality than an absolute reality. Therefore, by participating in the meetings, the subjects concluded that they could live with their existing conditions, move on the path of progress and feel less alone. In the process of schema therapy sessions, choosing close friends and deepening relationships with family members were emphasized. They were also taught how to have good emotional relationships with family and friends so that they feel less alone in their lives. These interventions affected the communication with the family members and how to express their needs, then the response to their emotions was done correctly, as a result, all these paths led to the reduction of the feeling of loneliness and the social relations in terms of the density of people and the quality of relationships increased.

Also, the results of the present study showed that schema therapy reduced depression in unmarried girls. The above results are in agreement with the results of Mohagheghi & Kharghani (2021) based on the effectiveness of schema therapy on people's depression, with the results of Mozamzadeh, Gholamrezai & Rezaei (2018), with the results of Farhadi, Pasandideh, & Vaziri (2022), Dickhaut & Arntz (2014) and Malogiannis et al. (2014) based on the effectiveness of schema therapy on reducing depression. In explaining the above results, it can be said that schema therapy using an experimental technique that reconstructs childhood cognitions and memories leads to the expression of repressed emotions and emotions, which ultimately leads to emotional self-censorship and problems. It helps a lot in expressing emotions and emotional coldness. In the therapy sessions of the current study, schema therapy provided the basis for change by working on the multifaceted dimensions of the person, which included cognitive, emotional and behavioral dimensions. In the cognitive dimension, schema therapy helps people to become aware of the root of their thoughts and question the cognition and unconscious thoughts resulting from it by testing the validity of the schema and finding a new definition of the evidence that confirms or rejects the schema. And find a new perspective on themselves, the world and the future. The unmarried girls participating in the research believed that because they were not chosen by the right person for marriage, then they must have fundamental flaws, and this provided the bed for their depression. In these therapy sessions, the subjects were helped to deal with this wrong schema, and it was explained to them that marriage is a phenomenon that is affected by various conditions and dimensions, and a person who is not married does not necessarily mean that he is a desirable person. There is no one. It is possible that the person has not been exposed due to limited social relations, or the person himself has set difficult conditions for marriage, and many other cases, none of which means that this person is no one's choice. Emotional dimension: based on Young et al.'s (2003) perspective, the goal of schema therapy is to help satisfy the patient's unsatisfied emotions. When these emotional needs are satisfied to some extent during the treatment process, it prepares the ground for the improvement of schemas because incompatible schemas are created due to the lack of satisfaction of emotional needs. In these sessions, the subjects were taught not to tie the satisfaction of their emotions and emotions only to marriage, to replace emotional relationships with friends and family with marital emotional relationships, and to satisfy their need for love and affection in this way. Behavioral dimension: Also, in these sessions, the subjects were helped to use their maximum abilities and spend their energy on the path of progress and other aspects of their lives. This made the subjects focus less on staying single and have less depression. Also, experimental techniques helped the subjects prepare the ground for schema improvement through emotional reorganization, new self-evaluation, interpersonal emotion regulation, and self-relaxation. On the other hand, the subjects have been selected to test schema hypotheses using techniques, and by stimulating the schemas and relating to possible issues and problems of singleness, the field for emotional insight and subsequent improvement of the providers' schemas. The use of mental images made the subject understand the main schemas, and their evolutionary roots and relate these roots to their current life. In addition to this, it is to improve the person's understanding and help him move from rational cognition to emotional experience. In the imaginary

dialogue technique, the occurrence of main emotions such as anger creates the ground for emotional experience and causes distance from schemas. Mental imagery to break the pattern also prevents extreme compensation and confrontational styles, and on the other hand, it causes a shift away from extreme compensatory and compensational confrontational styles. Also, by using the letter-writing technique, the clients found an opportunity to express their rights and know their knowledge, and this reduced the cost. In emotional terms, schema therapy using experiential strategies challenges the belief that is tied to a belief, so that the person can fight on the cognitive level on the emotional level after that in the meeting of his schemas. This technique helps the person's emotional technique, makes his unsatisfied needs, recognizes the formation of incompatible schemas, and reduces the damage in the person (Mozamzadeh et al., 2018).

Also, the results of the present study showed that the mindset-oriented therapy scheme increased the self-concept of single girls over 40 years old. The results of this research with the results of Gol, Aghamohammadian Sharbaf, Sedaghat & Rasooli (2019) regarding the effectiveness of schema therapy on increasing self-concept, with the results of Ghanbari, Tizdast, Khalatbari & Rahmani (2022), with the results of Pakandish, Krasikian & Jamhari (2019), is in line with the results of Shams Azar, Ghahari, Shahbazi & Ghezselflo (2018) regarding the effectiveness of schema therapy on self-concept. In explaining the effectiveness of mental-oriented schema therapy on self-concept, the role and effect of schema therapy in increasing the redesign of individual standards and increasing self-confidence and self-perception of the individual can be cited. This approach helped people become bolder than in the past and question the vicious cycle of negative self-image and self-criticism, as well as draw high-level expectations from themselves, with a new look at themselves, real standards and expectations Redesign a more accessible one that does not require difficulty and annoyance. Participating in therapy sessions in this study, exchanging opinions, discussing with people who were in a similar situation to the person's situation, the ability to hear different opinions, asking for opinions from members, approval and acceptance of members by the leader and other group members, is the basis for change. There was a gradual improvement in self-concept and its dimensions (mental ability, physical attractiveness, understanding of strengths, social skills and job efficiency) in the people present in the group. In the present study, schema therapy techniques for modulating the identified schemas include abandonment/instability, emotional deprivation, stubborn standards/extreme fault-finding, mistrust/misbehavior, social isolation/alienation, and failure. , dependence/incompetence and punishment were used to provide the basis for a real sense of worth that is revealed in self-image by bringing all kinds of schemas to active awareness and overcoming the emotional distance. Mindfulness-based schema therapy was formed with an emphasis on changing dysfunctional schemas and explaining how they affect processing and facing problems, and also with an emphasis on replacing more adaptive and newer cognitive patterns instead of ineffective strategies as an opportunity to improve value. Provided his In these sessions, the subjects were taught to accept their marriage conditions and value their abilities and acquired skills. It was explained to them that marriage is derived from internal and external conditions and factors, that even though a person has the personal and internal conditions of marriage, his family, social,

and economic conditions may have limited his marriage issue, which is related to him. A person does not have a negative self-image, and as a result of training these sessions increased self-image.

Conclusion

In summarizing the discussed topics and the obtained results, it can be said that the approach of mind-oriented schema therapy helped to reduce feelings of loneliness and depression, as well as to increase self-concept in single girls over 40 years old. Therefore, this treatment method can be used to reduce feelings of loneliness and depression and increase self-concept in unmarried girls who are facing the phenomenon of permanent celibacy. However, there are some limitations in this study. First, the small sample size of only 30 unmarried women over 40 years old in Khorramabad may limit the generalizability of the results to a larger population. Second, the geographical limitation of this study, being conducted solely in Khorramabad, might make it difficult to generalize the findings to other regions with different cultural and social conditions. Third, the reliance on self-reported data could introduce response bias. Additionally, the relatively short duration of the therapeutic interventions does not allow for the assessment of long-term effects.

Based on these limitations, several suggestions for future research are proposed. First, future studies should include larger sample sizes and be conducted in various geographical areas to enhance the generalizability of the findings. Second, employing mixed methods (quantitative and qualitative) could provide a deeper understanding of individuals' experiences. Third, it is recommended to examine the long-term effects of mind-oriented schema therapy through extended follow-up periods. Finally, investigating the effects of this therapy on different age and gender groups could yield valuable insights.

Disclosure Statements

Informed consent was obtained from the participants before conducting the research. A participant who refused to participate in the research or resisted to participate was not allowed to participate in the research. In general, the points related to ethics in research during the research, such as accuracy in citation, trustworthiness in the use of sources, appreciation of others, respect for the privacy of sampled people, and compliance with ethical values in data collection, have been taken by the researchers.

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