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The Effectiveness of Schema Therapy on Depression, Self-Esteem, and Distress Tolerance in Fatherless Depressed Adolescents

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ABSTRACT

Objective: Losing a loved one due to death is a universal human experience, and many consider it one of the most stressful life events. This study aimed to investigate the effectiveness of schema therapy on depression, self-esteem, and distress tolerance in fatherless depressed adolescents.

Methods and Materials: This applied research utilized a quasi-experimental design with pre-test and post-test and a control group. Using cluster random sampling, 30 adolescents (19 girls and 11 boys) who had lost their fathers in the past 1 to 2 years and scored high on the Beck Depression Inventory (1961) were selected from high schools in Arak city. They were randomly assigned to experimental and control groups. As a pre-test, participants completed the Coopersmith Self-Esteem Inventory (1967) and the Simons and Gaher Distress Tolerance Scale (2005). The experimental group received 10 weekly sessions (90 minutes each) of group schema therapy based on the Young et al. (2012) protocol. **Findings:** According to the findings, schema therapy significantly impacted depression (F = 17.25), self-esteem (F = 36.34), and distress tolerance (F = 17.74) in adolescents.

Conclusion: These findings suggest that effective treatments, such as schema therapy, can reduce the negative outcomes associated with the experience of father loss.

Keywords: Depression, Distress Tolerance, Schema Therapy, Self-Esteem, Adolescent.

1. Introduction

Adolescence refers to individuals between 10 and 19 years old and is characterized as a time of significant biological, psychological, and social changes (Farella Guzzo & Gobbi, 2021). During this period, parents shape adolescent development through their parenting methods (Soenens et al., 2017). In other words, parents help

adolescents successfully master developmental tasks by providing security, warmth, feedback, and defining expectations and limits (Noppe & Noppe, 2004). Noppe and Noppe (2004) further add that while adolescents are developmentally similar to adults, they lack the necessary experiences to process and integrate experiences related to parental death adequately (Noppe & Noppe, 2004). Beazley and Beazley (2002) explain that when an adolescent loses a



parent, grief engulfs their life, posing negative consequences such as depression and delinquency (Markowitz & Ryan, 2016). For example, the loss of a father may result in the mother's or children's assumption of the father's duties and responsibilities, altering the family communication system and changing the family's authority and decision-making reference (Brajša-Žganec, 2014). Furthermore, Brajša-Žganec (2014) demonstrated that fatherless adolescents exhibit lower social adaptation and weaker self-concept, with depression being a common disorder among them (Brajša-Žganec, 2014). Marks et al. (2007) showed that the death of a father leads to reduced personal mastery for both girls and boys and is associated with increased depressive symptoms and decreased mental health, especially in boys (Marks et al., 2007).

Thus, the death of a loved one can impact many aspects of an individual's life. Adolescent grief, in particular, may affect several social aspects of their lives, including school performance and peer relationships. For instance, Karakartal (2012) showed that this group of adolescents was less successful in school and exhibited less interest in social activities (Karakartal, 2012). Additionally, experiencing parental death during adolescence can lead to lower self-esteem and greater hopelessness (Brent et al., 2012). For example, Fraser (2014) demonstrated that the relationship between daughters and their fathers impacts self-esteem, with the presence and support of the father being associated with higher self-esteem levels in daughters (Fraser, 2014).

Among the factors aiding adolescents in navigating the crisis of fatherlessness is distress tolerance. Distress tolerance refers to an individual's capacity to endure unpleasant internal experiences and states, such as negative emotions, frustration, and physical discomfort. It manifests in two forms: the ability to tolerate negative emotions and behavioral manifestations of tolerating unpleasant internal states triggered by stressful situations, such as grief (Bernstein et al., 2009). It should be noted that individuals lacking adaptive strategies to cope with the negative emotions inherent in early maladaptive schemas may have difficulty regulating these emotions and may eventually find them intolerable. In other words, maladaptive schemas may impact an individual's distress tolerance. That is, maladaptive cognitions about oneself, the world, and the future may weaken the development of good distress tolerance (Simons et al., 2018). Therefore, addressing adolescents who have experienced parental loss is crucial.

A diverse range of therapeutic approaches has been developed to improve the emotional and behavioral

symptoms of bereaved children and adolescents, including behavioral, cognitive, developmental, and biological approaches. Cognitive-behavioral therapy is one such approach for dealing with the death of a loved one (Currier et al., 2009, 2010). However, Dozois and Beck (2017) noted that some findings regarding the effectiveness of cognitivebehavioral therapy are inconsistent, suggesting the need for further investigation and possibly more effective treatments (Dozois & Beck, 2008). Schema therapy, in this context, may be an effective treatment for fatherless depressed adolescents. Research indicates that the schemas of selfsacrifice, abandonment, and vulnerability to harm are significant predictors of complicated grief (Boelen et al., 2006). Schema therapy is based on classical cognitivebehavioral therapy and emphasizes the developmental roots psychological problems during childhood adolescence, using evocative techniques and introducing the concept of maladaptive coping styles (Simpson et al., 2010).

Early Maladaptive Schemas (EMS) can be considered part of an individual's negative semantic structure or belief system. In brief, schemas are cognitive structures that include abstract representations based on past experiences and guide processing and organization (Zargarinejad & Ahmadi, 2020). EMS is defined as a broad and pervasive theme or pattern consisting of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others, developed during childhood or adolescence, significantly dysfunctional (Malogiannis et al., 2014; Simpson et al., 2010). Therefore, EMS are negative cognitive-emotional semantic structures created early in life and used to understand daily life experiences. According to Young's schema model, EMS develop when primary psychological needs in childhood (e.g., attachment, realistic limits, autonomy, self-guidance, playfulness) are not adequately met. They reflect the child's adaptation to adverse early relationships with caregivers, family members, and peers. Over time, EMS are integrated into the individual's identity and become resistant to change. When EMS are activated by events resembling those that caused the schema, they are associated with high levels of distress, such as depression, anger, or anxiety (Young, 1999). They also hinder the fulfillment of the individual's primary psychological needs (Calvete et al., 2013).

Young et al. (2003) identified 18 EMS, categorized into five broad domains. EMS may also impact reactions to losing a loved one. It has been suggested that rather than eliminating positive worldviews (Malogiannis et al., 2014; Taylor et al., 2017), loss can confirm or even strengthen pre-



existing negative assumptions about oneself and the world, thereby contributing to distress and complicated grief symptoms (Currier et al., 2009, 2010; Mancini et al., 2011). From this perspective, loss can activate negative semantic structures formed through early stressful experiences (e.g., EMS) that interfere with and hinder the natural integration and adaptation to the loss.

Although schema therapy has been successfully used for depression (Kindynis et al., 2013; Malogiannis et al., 2014), the adolescent phase, a transitional period between childhood and adulthood, is characterized by biological, psychosocial, and cognitive changes. The death of a parent during this phase can significantly complicate this transitional period (Dixon & Stein, 2006). Moreover, there is no existing literature on the application of this therapy for fatherless depressed adolescents in Iran. Thus, this study aimed to investigate the effectiveness of schema therapy on depression, self-esteem, and distress tolerance in fatherless depressed adolescents.

2. Methods and Materials

2.1. Study Design and Participants

This research was applied in nature and quasiexperimental, with a pre-test and post-test design, including experimental and control groups. The statistical population consisted of high school students who had lost their fathers in the past 1 to 2 years. The sampling was conducted in two stages using a cluster sampling method. Ten schools were selected from the high schools in Arak city, and students who had lost their fathers in the past 1 to 2 years were identified. Screening was conducted using the Beck Depression Inventory until a sufficient sample size was reached. Thirty-three students who scored equal to or above the cut-off point of 19 for depression were selected (three dropped out due to non-cooperation) and randomly assigned to two groups of 15 each. The inclusion criteria were a high score on the depression scale (19 and above), no prior psychotherapy, and no medication treatment. The experimental group received 10 weekly sessions (90 minutes each) of schema therapy over 2.5 months, from October to December. The control group received no intervention during this period. After the intervention, participants in both the experimental and control groups were asked to complete the research questionnaires again. To ensure ethical standards, members of the control group were invited to participate in therapy sessions if they wished.

2.2. Measures

2.2.1. Depression

The Beck Depression Inventory (BDI) was first developed by Beck and colleagues in 1961. It underwent significant revisions in 1996 by Beck and colleagues to cover a broader range of symptoms and better align with the diagnostic criteria for depressive disorders in the DSM-IV. The BDI-II is a self-report measure that takes 5 to 10 minutes to complete and consists of 21 items related to various symptoms, scored on a four-point scale from 0 to 3. These items cover areas such as sadness, pessimism, feelings of failure, guilt, sleep disturbances, appetite loss, self-dislike, and more. Beck, Steer, and Garbin (1988) reported internal consistency coefficients ranging from .73 to .92, with a mean of .86. Concurrent validity with clinical ratings for psychiatric patients showed correlations from moderate to high, with r = .96. The BDI correlated .73 with the Hamilton Depression Rating Scale, .76 with the Zung Self-Rating Depression Scale, and .76 with the MMPI Depression Scale (Salemi et al., 2023).

2.2.2. Self-Esteem

The Coopersmith Self-Esteem Inventory (1967) was developed to measure students' and university students' feelings of self-worth in social and academic contexts. The inventory comprises five domains: academic performance, social relationships, family, self, and future, with four subscales: general self-esteem, social self-esteem (peers), family self-esteem (parents), and academic self-esteem. The inventory consists of 58 dichotomous items ("Yes" or "No"), with specific items scored positively or negatively. The inventory has demonstrated acceptable reliability and validity, with Cronbach's alpha coefficients ranging from .68 to .90. Test-retest reliability was reported as .88 after five weeks and .70 after three years. Boroumand (2001) normed the inventory on high school and pre-university students in Islamshahr, reporting a Cronbach's alpha of .89. The inventory showed a significant negative divergence validity with the neuroticism subscale of the Eysenck Personality Inventory and a significant positive convergent validity with the extraversion subscale (Hosseini et al., 2019).

2.2.3. Distress Tolerance

The Distress Tolerance Scale, developed by Simons and Gaher in 2005, is a self-report measure of emotional distress tolerance. It comprises 15 items and four subscales:





tolerance of emotional distress, absorption by negative emotions, subjective assessment of distress, and regulation efforts to alleviate distress. Items are rated on a five-point Likert scale from 1 (strongly agree) to 5 (strongly disagree), with items 6 and 13 reverse-scored. Simons and Gaher (2005) reported Cronbach's alpha coefficients of .72, .82, .70, and .82 for the subscales and overall scale, respectively. Alavi (2009) used this scale in a study involving 48 students from Ferdowsi University and Mashhad University of Medical Sciences (31 women and 17 men), reporting high internal consistency for the overall scale and moderate reliability for the subscales (tolerance = .54, absorption = .42, assessment = .56, regulation = .58) (Gholipour et al., 2022).

2.3. Intervention

2.3.1. Schema Therapy for Fatherless

Session 1: Introduction and Psychoeducation

The first session focuses on building rapport and introducing the concept of schema therapy. Participants learn about the therapy process, goals, and the importance of their active participation. Psychoeducation on early maladaptive schemas (EMS), their origins, and their impact on emotions and behavior is provided. Adolescents are introduced to the idea that schemas are patterns of thinking and feeling that can be changed. Basic relaxation techniques are also taught to help manage anxiety and stress (Dahmardeh et al., 2021; Khodabandelow et al., 2018; Kindynis et al., 2013; Malogiannis et al., 2014; Mohammadi et al., 2020; Shahab et al., 2020; Simpson et al., 2010; Taylor et al., 2017).

Session 2: Identifying Schemas and Emotional Awareness

In the second session, participants begin identifying their own schemas through discussions and self-assessment exercises. The therapist helps them recognize patterns in their thoughts and behaviors that indicate specific schemas. Adolescents are encouraged to share experiences related to their father's loss and how it has influenced their schemas. Emotional awareness exercises are introduced to help participants identify and articulate their emotions more effectively.

Session 3: Exploring Schema Triggers and Responses

This session focuses on understanding the triggers that activate maladaptive schemas and the typical responses they elicit. Adolescents explore situations that trigger their negative schemas and discuss their emotional and behavioral

responses. The therapist guides them in recognizing the automatic thoughts and feelings associated with these triggers. Techniques for monitoring and recording schema activations in daily life are introduced.

Session 4: Cognitive Restructuring

The fourth session introduces cognitive restructuring techniques to challenge and modify maladaptive thoughts. Participants learn to identify cognitive distortions and practice re-framing negative thoughts into more balanced and realistic perspectives. Role-playing exercises are used to practice new ways of thinking in various scenarios. The goal is to weaken the power of negative schemas and promote more adaptive cognitive patterns.

Session 5: Developing Healthy Coping Skills

In this session, the focus shifts to developing and strengthening healthy coping skills. Participants learn practical strategies for managing distress, such as problemsolving, assertiveness training, and stress reduction techniques. The therapist emphasizes the importance of self-care and encourages adolescents to engage in activities that promote well-being. Coping skills are practiced through interactive exercises and group discussions.

Session 6: Addressing Grief and Loss

The sixth session is dedicated to addressing the grief and loss associated with the father's death. Participants are encouraged to express their feelings of sadness, anger, and confusion in a supportive environment. The therapist introduces techniques for processing grief, such as journaling, creating memory books, and sharing memories. The aim is to help adolescents integrate the loss into their lives in a healthy way.

Session 7: Enhancing Self-Esteem

This session focuses on building and enhancing selfesteem. Participants explore the impact of negative schemas on their self-worth and identify positive qualities and strengths. The therapist guides them in setting realistic and achievable goals to foster a sense of accomplishment. Affirmation exercises and self-compassion practices are introduced to promote a more positive self-concept.

Session 8: Strengthening Relationships and Social Support

In the eighth session, the importance of social support and healthy relationships is emphasized. Participants discuss the role of family, friends, and peers in their lives and identify ways to strengthen these connections. The therapist introduces communication skills and conflict resolution techniques to improve interpersonal relationships. Group



activities are used to foster a sense of community and mutual support among participants.

Session 9: Consolidating Gains and Preparing for the Future

The ninth session focuses on consolidating the gains made during therapy and preparing for the future. Participants review the progress they have made and identify the strategies that have been most helpful. The therapist helps them develop a personalized plan for maintaining the changes and coping with future challenges. Relapse prevention techniques are discussed to ensure long-term success.

Session 10: Closure and Reflection

The final session provides an opportunity for closure and reflection. Participants share their experiences and reflect on their journey through the therapy. The therapist reinforces the skills and insights gained and encourages participants to continue using them in their daily lives. A closing ritual or activity is conducted to celebrate the completion of the therapy and the progress made by each adolescent.

2.4. Data analysis

The data analysis for this study involved a combination of descriptive and inferential statistics. Descriptive statistics,

including means and standard deviations, were calculated for the pre-test and post-test scores of the experimental and control groups across the research variables: depression, self-esteem, and distress tolerance. Inferential statistics were utilized to examine the effectiveness of schema therapy. Analysis of Covariance (ANCOVA) was conducted to control for pre-test scores and determine the significant differences between the experimental and control groups in the post-test scores of depression, self-esteem, and distress tolerance. Additionally, Multivariate Analysis of Covariance (MANCOVA) was used to analyze the impact of schema therapy on the various dimensions of self-esteem and distress tolerance. Effect sizes were calculated to determine the magnitude of the therapy's impact, and statistical significance was set at p < .05. The data were analyzed using SPSS software, ensuring that all assumptions for ANCOVA and MANCOVA were met before interpretation of the results.

3. Findings and Results

Out of the 30 participants, 15 were assigned to the experimental group and 15 to the control group. The age range was between 15 to 18 years, with 19 girls and 11 boys.

 Table 1

 Means and Standard Deviations of Scores on Research Variables (Depression, Self-Esteem, and Distress Tolerance)

Variable	Group	Stage	Mean	Standard Deviation	
Depression	Schema Therapy	Pre-test	40.38	8.55	
	Schema Therapy	Post-test	31.22	8.26	
	Control	Pre-test	42.27	7.44	
	Control	Post-test	41.63	8.26	
Self-Esteem	Schema Therapy	Pre-test	18.41	6.37	
	Schema Therapy	Post-test	28.07	6.67	
	Control	Pre-test	22.00	6.43	
	Control	Post-test	22.41	6.81	
Distress Tolerance	Schema Therapy	Pre-test	17.48	4.55	
	Schema Therapy	Post-test	25.44	5.84	
	Control	Pre-test	15.64	5.48	
	Control	Post-test	16.07	5.93	

As seen in Table 1, descriptive statistics such as mean and standard deviation are presented for pre-test and post-test stages of both experimental and control groups across the research variables (depression, self-esteem, and distress tolerance).

To examine the effectiveness of schema therapy on depression in fatherless depressed adolescents, the results in tables below should be considered.





 Table 2

 Results of Covariance Analysis for Depression Scores

Variable	Sum of Squares	df	Mean Square	F	Significance	Eta Squared	Power
Pre-test	244.46	1	244.46	20.89	.001	.46	.99
Group	201.91	1	201.91	17.25	.001	.51	.98
Error	432.93	28	11.70				

As indicated in Table 2, the F value indicates the effect of the covariate (20.89). The obtained significance level is .001, which is smaller than the .05 significance level. This implies that the assumption of the correlation between the covariate and the independent variable is met.

The main output of the covariance analysis is examined in this table. The F value indicating the effect of the independent variable is significant (17.25). This means that the obtained significance level, up to two decimal places, is zero and is smaller than .01; meaning, after excluding the effect of the pre-test, there is a significant difference between the mean scores of the two groups in the post-test. Thus, the

null hypothesis of no significant difference between the means is rejected, confirming the research hypothesis that schema therapy is effective on depression in fatherless adolescents.

The Pillai's Trace test statistic (F = 36.34) indicates a significant effect on self-esteem dimensions (general self-esteem, family, social, occupational/educational) in the experimental groups at the .01 confidence level (p = .001). This suggests that there is a significant difference in at least one of the self-esteem dimensions (general self-esteem, family, social, occupational/educational) between the pretest and post-test stages.

Table 3

Univariate Covariance Analysis Results in the Context of MANCOVA on Self-Esteem Dimensions

Variable	Sum of Squares	df	Mean Square	F	Significance	Eta Squared	Power
General Self-Esteem							
Pre-test	2.85	1	2.85	.22	.63	.03	.06
Group	1077.96	1	1077.96	27.16	.001	.54	.99
Error	1388.70	28	39.67				
Family							
Pre-test	3.64	1	3.64	.53	.49	.05	.042
Group	1744.11	1	1744.11	20.85	.001	.49	.99
Error	2926.82	28	83.62				
Social							
Pre-test	4.74	1	4.74	1.39	.35	.07	.078
Group	3280.17	1	3280.17	68.22	.001	.42	1.00
Error	1682.71	28	48.07				
Occupational/Educational							
Pre-test	3.64	1	3.64	.53	.49	.042	.036
Group	321.34	1	321.34	42.24	.002	.47	1.00
Error	168.83	28	8.44				

As evident from the results in Table 3, given the significance levels obtained for general self-esteem (F = 27.16, p = .001), family self-esteem (F = 20.85, p = .001), social self-esteem (F = 68.22, p = .001), and occupational/educational self-esteem (F = 42.24, p = .001), all of which are smaller than the .01 error level, it can be said that there is a significant difference between the control and experimental groups in these variables. Thus, the research hypothesis that schema therapy is effective on self-esteem components (general, family, social,

occupational/educational) in fatherless depressed adolescents is confirmed. Overall, schema therapy had the most impact on general self-esteem scores (.54), followed by family self-esteem (.49), occupational/educational self-esteem (.47), and finally social self-esteem (.42).

To examine the effectiveness of schema therapy on distress tolerance components in fatherless depressed adolescents, the results of within-group effects tests were used. The results indicate that the Pillai's Trace test statistic (F = 17.74) is significant for the effect on distress tolerance



components (tolerance, absorption, evaluation, regulation) in the experimental groups at the .01 confidence level (p = .001), suggesting that there is a significant difference in at

least one of the distress tolerance components (tolerance, absorption, evaluation, regulation) between the pre-test and post-test stages.

 Table 4

 Univariate Covariance Analysis Results in the Context of MANCOVA on Distress Tolerance Components

Variable	Sum of Squares	df	Mean Square	F	Significance	Eta Squared	Power
Tolerance							
Pre-test	2.78	1	2.78	1.78	.18	.024	.04
Group	32.54	1	32.54	8.48	.009	.43	.78
Error	72.85	28	3.83				
Absorption							
Pre-test	3.22	1	3.22	.058	.188	.018	.031
Group	60.83	1	60.83	16.45	.001	.46	.97
Error	70.25	28	3.69				
Evaluation							
Pre-test	2.46	1	2.46	.098	.62	.036	.018
Group	122.06	1	122.06	16.85	.001	.42	.97
Error	137.61	28	7.24				
Regulation							
Pre-test	3.67	1	3.67	.048	.24	.039	.028
Group	186.46	1	186.46	21.35	.001	.48	.98
Error	241.22	28	6.63				

As seen in Table 4, considering the obtained significance levels for tolerance (F = 8.48, p = .009), absorption (F = 16.45, p = .001), evaluation (F = 16.85, p = .001), and regulation (F = 21.35, p = .001), all of which are smaller than the .01 error level, it can be said that there is a significant difference between the experimental and control groups in these components. Thus, the research hypothesis that schema therapy is effective on distress tolerance components in fatherless depressed adolescents is confirmed. Overall, the interaction-based teaching method had the most impact on regulation (.48), followed by absorption (.46), tolerance (.43), and finally evaluation (.42).

4. Discussion and Conclusion

The present study aimed to investigate the effectiveness of schema therapy on depression, self-esteem, and distress tolerance in fatherless depressed adolescents. Reactions to parental death in adolescents vary and may include feelings of abandonment and detachment, grief and sorrow, anger, inability to recall positive memories, guilt, fear, depression, isolation, withdrawal, anxiety, concentration difficulties, and hopelessness. These reactions interfere with adolescents' tasks of defining their self-worth and self-esteem, assuming responsibilities in the absence of parental support, and maintaining mental health (Dalton & Krout, 2005). According to the findings, schema therapy can assist these

adolescents, as this study demonstrated that participation in schema therapy sessions helped fatherless depressed adolescents.

The results are consistent with the prior findings (Kindynis et al., 2013; Malogiannis et al., 2014), confirming the effectiveness of schema therapy on depression.

To explain the effectiveness of schema therapy in reducing depression, it should be noted that schema therapy components comprise cognitive-behavioral, attachment, object relations, constructivist, and psychoanalytic approaches within a therapeutic model. It is logical to consider that schema therapy, combining different approaches (attachment and object relations) in a therapeutic model, is effective in treating patients with depression (Shahab et al., 2020). One part of the schema therapy approach focuses on dysfunctional coping styles formed during childhood and continued into adolescence. Studies have shown that altering coping styles in individuals with depressive disorders is associated with reduced depressive symptoms. Schema therapy employs techniques to alter dysfunctional coping styles, aiming to change these styles in patients (Zargarinejad & Ahmadi, 2020).

Additionally, the use of experiential techniques is a key feature of schema therapy, as Greenberg and Safra (1994) provided evidence that cognitive-rational systems based on language are independent of emotion-related systems. Experiential techniques focus on experiencing and



expressing emotions related to past situations, which in turn lead to the development or maintenance of schemas and mindsets. Behavioral pattern-breaking is one of the factors influencing schema modification, which is the longest and most sensitive part of schema therapy. This therapy helps clients replace dysfunctional coping responses with more adaptive behaviors by introducing new, more compatible behavioral patterns (Malogiannis et al., 2014; Mohammadi et al., 2020).

It was also found that schema therapy is effective on the self-esteem components in fatherless depressed adolescents. Overall, schema therapy had the most impact on general self-esteem scores (.54), followed by family self-esteem (.49), occupational/educational self-esteem (.47), and finally social self-esteem (.42). The results are consistent with the prior findings (Kesting & Lincoln, 2013; Khodabandelow et al., 2018; Kindynis et al., 2013; Mohammadi et al., 2020), confirming the effectiveness of schema therapy on self-esteem.

To explain the findings, it can be said that irrational beliefs stemming from early maladaptive schemas, such as unrealistic expectations of oneself, anxiety and tension, avoidance and lack of confrontation with problems, and helplessness in creating changes, are significantly related to low self-esteem (Mohammadi et al., 2020). Schema therapy helps individuals achieve self-esteem by changing negative beliefs about themselves during training sessions, which enhances their ability to cope with problems. Consequently, their persistence, mental, and practical capabilities in addressing issues arising from the absence of a father improve. It is important to note that individuals with a positive self-concept easily resolve conflicts and employ adaptive strategies to handle negative and stressful pressures (Rossi et al., 2020).

Furthermore, group members support each other during therapy sessions by offering reassurance, suggestions, and insights, facilitating the therapeutic process, changing negative thoughts, and enhancing self-esteem (Kesting & Lincoln, 2013). Adolescents learn that everyone possesses a mix of adaptive and maladaptive schemas, and during the training, they identify and form adaptive schemas while reducing the impact of maladaptive ones. Therefore, during schema therapy, the inactive maladaptive schemas formed due to life stressors like losing a father are challenged and eventually altered or eliminated, leading to increased psychological resilience and higher self-esteem.

Finally, it was revealed that schema therapy is effective on distress tolerance components in fatherless depressed adolescents. The results align with the prior findings (Dahmardeh et al., 2021; Kindynis et al., 2013; Simons et al., 2018). To explain the obtained results, it can be stated that schema therapy, in addition to questioning maladaptive schemas, leads to the release of buried negative emotions, such as anger arising from unmet spontaneity and secure attachment needs, thereby increasing distress tolerance due to the absence of a father at home (Simons et al., 2018). Additionally, schema therapy's ability to break behavioral patterns helps depressed adolescents plan and execute tasks to replace maladaptive coping responses with adaptive behavioral patterns, thus increasing distress tolerance. When individuals adequately learn the techniques and training, these techniques help them become aware of and accept their emotions. Moreover, these techniques assist in emotional reorganization, new learning, interpersonal emotion regulation, and self-soothing, thereby improving distress tolerance.

5. Limitations & Suggestions

This study had limitations, including the sample size, so caution should be exercised when generalizing the results. Future research can consider a larger sample size. Additionally, the self-report nature of the research instruments suggests that future studies could use different tools and methods to assess depression. Future studies could also utilize Young's schema questionnaire and provide new explanations based on the types of altered schemas. Finally, there was no follow-up in this study. Overall, it can be concluded that schema therapy is an effective therapeutic method for improving the mental state of adolescents dealing with parental loss.

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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.

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.

References

- Bernstein, A., Zvolensky, M. J., Vujanovic, A. A., & Moos, R. (2009). Integrating Anxiety Sensitivity, Distress Tolerance, and Discomfort Intolerance: A Hierarchical Model of Affect Sensitivity and Tolerance. *Behavior therapy*, 40(3), 291-301. https://doi.org/10.1016/j.beth.2008.08.001
- Boelen, P. A., van den Bout, J., & van den Hout, M. A. (2006). Negative cognitions and avoidance in emotional problems after bereavement: A prospective study. *Behaviour Research and Therapy*, 44(11), 1657-1672. https://doi.org/10.1016/j.brat.2005.12.006
- Brajša-Žganec, A. (2014). Emotional life of the family: Parental meta-emotions, children's temperament and internalising and externalising problems. *Društvena istraživanja-Časopis za opća društvena pitanja*, 23(01), 25-45. https://www.ceeol.com/search/article-detail?id=259511
- Brent, D. A., Melhem, N. M., Masten, A. S., Porta, G., & Payne, M. W. (2012). Longitudinal Effects of Parental Bereavement on Adolescent Developmental Competence. *Journal of Clinical Child & Adolescent Psychology*, 41(6), 778-791. https://doi.org/10.1080/15374416.2012.717871
- Calvete, E., Orue, I., & Hankin, B. L. (2013). Early maladaptive schemas and social anxiety in adolescents: The mediating role of anxious automatic thoughts. *Journal of anxiety disorders*, 27(3), 278-288. https://doi.org/10.1016/j.janxdis.2013.02.011
- Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2009). Assumptive Worldviews and Problematic Reactions to Bereavement. *Journal of Loss and Trauma*, 14(3), 181-195. https://doi.org/10.1080/15325020802537153
- Currier, J. M., Holland, J. M., & Neimeyer, R. A. (2010). Do CBT-Based Interventions Alleviate Distress Following Bereavement? A Review of the Current Evidence. *International Journal of Cognitive Therapy*, 3(1), 77-93. https://doi.org/10.1521/ijct.2010.3.1.77
- Dahmardeh, T. R., Shirazi, M., & Arab, A. (2021). The effectiveness of schema therapy on distress tolerance and resilience of mothers with mentally retarded students. *Journal of Fundamentals of Mental Health*. https://www.sid.ir/fileserver/je/110320210608

- Dalton, T. A., & Krout, R. E. (2005). Development of the Grief Process Scale through music therapy songwriting with bereaved adolescents. *The Arts in Psychotherapy*, *32*(2), 131-143. https://doi.org/10.1016/j.aip.2005.02.002
- Dixon, S. D., & Stein, M. T. (2006). Encounters with children. Elsevier.
 - https://www.sciencedirect.com/book/9780323029155/enco unters-with-children
- Dozois, D. J. A., & Beck, A. T. (2008). Chapter 6 Cognitive Schemas, Beliefs and Assumptions. In K. S. Dobson & D. J. A. Dozois (Eds.), *Risk Factors in Depression* (pp. 119-143). Elsevier. https://doi.org/10.1016/B978-0-08-045078-0.00006-X
- Farella Guzzo, M., & Gobbi, G. (2021). Parental Death During Adolescence: A Review of the Literature. *OMEGA Journal of Death and Dying*, 87(4), 1207-1237. https://doi.org/10.1177/00302228211033661
- Fraser, C. (2014). Strengthening father-daughter relationships to improve the self-esteem of adolescent girls. Saint Mary's College of California. https://search.proquest.com/openview/1eb348e5c18939909e 629177201ab715/1?pq-origsite=gscholar&cbl=18750
- Gholipour, E., Akbari, H., & Shariatnia, K. (2022). The effectiveness of marital relationship enrichment training on emotional literacy, couple compatibility, marital boredom and distress tolerance in couples. *Applied Family Therapy Journal (AFTJ)*, 3(1), 632-653. https://doi.org/10.61838/kman.aftj.3.1.31
- Hosseini, M., Basiri-Moghadam, M., Graminejad, N., & SoleimaniMoghaddam, R. (2019). Studying the Self-Esteem of Gonabad University of Medical Sciences Students Participating in the I'tikaf Ceremony in 2015: A Descriptive Study [Research]. Journal of Rafsanjan University of Medical Sciences, 17(10), 901-912. http://journal.rums.ac.ir/article-1-4084-en.html
- Karakartal, D. (2012). Investigation of bereavement period effects after loss of parents on children and adolescents losing their parents. *International Online Journal of Primary Education*, *I*(1), 37-57. https://dergipark.org.tr/en/pub/iojpe/issue/69839/1114021
- Kesting, M.-L., & Lincoln, T. M. (2013). The relevance of self-esteem and self-schemas to persecutory delusions: A systematic review. *Comprehensive Psychiatry*, 54(7), 766-789. https://doi.org/10.1016/j.comppsych.2013.03.002
- Khodabandelow, S., Najafi, M., & Rahimian Boogar, I. (2018). The Effectiveness of Schema Mode Therapy on the Self-Esteem in Narcissistic Personality Disorder: A Single-Subject Research. *Clinical Psychology Studies*, 8(30), 65-101. https://doi.org/10.22054/jcps.2018.8579
- Kindynis, S., Burlacu, S., Louville, P., & Limosin, F. (2013). Thérapie des schémas du sujet âgé: impact sur la dépression, l'anxiété et les schémas cognitifs typiques. *L'Encéphale*, 39(6), 393-400. https://doi.org/10.1016/j.encep.2013.04.002
- Malogiannis, I. A., Arntz, A., Spyropoulou, A., Tsartsara, E., Aggeli, A., Karveli, S., Vlavianou, M., Pehlivanidis, A., Papadimitriou, G. N., & Zervas, I. (2014). Schema therapy for patients with chronic depression: A single case series study. *Journal of Behavior Therapy and Experimental Psychiatry*, 45(3), 319-329. https://doi.org/10.1016/j.jbtep.2014.02.003
- Mancini, A. D., Prati, G., & Bonanno, G. A. (2011). Do Shattered Worldviews Lead to Complicated Grief? Prospective and Longitudinal Analyses. *Journal of Social and Clinical Psychology*, 30(2), 184-215. https://doi.org/10.1521/jscp.2011.30.2.184
- Markowitz, A. J., & Ryan, R. M. (2016). Father Absence and Adolescent Depression and Delinquency: A Comparison of





- Siblings Approach. *Journal of marriage and family*, 78(5), 1300-1314. https://doi.org/10.1111/jomf.12343
- Marks, N. F., Jun, H., & Song, J. (2007). Death of Parents and Adult Psychological and Physical Well-Being: A Prospective U.S. National Study. *Journal of Family Issues*, 28(12), 1611-1638. https://doi.org/10.1177/0192513X07302728
- Mohammadi, S., Hafezi, F., Ehteshamzadeh, P., Eftekhar Saadi, Z., & Bakhtiarpour, S. (2020). The effect of schema therapy on sexual self-esteem in the women involved in marital conflicts. Women's Health Bulletin, 7(2), 49-55. https://womenshealthbulletin.sums.ac.ir/article_46717.html
- Noppe, I. C., & Noppe, L. D. (2004). Adolescent Experiences with Death: Letting Go of Immortality. *Journal of Mental Health Counseling*, 26(2), 146-167. https://doi.org/10.17744/mehc.26.2.py2tk0kmay1ukc3v
- Rossi, A., Panzeri, A., Pietrabissa, G., Manzoni, G. M., Castelnuovo, G., & Mannarini, S. (2020). The Anxiety-Buffer Hypothesis in the Time of COVID-19: When Self-Esteem Protects From the Impact of Loneliness and Fear on Anxiety and Depression [Original Research]. Frontiers in psychology, 11. https://doi.org/10.3389/fpsyg.2020.02177
- Salemi, M. H., Foroozandeh, E., & Asadi-Gharneh, H. A. (2023).
 Effectiveness of Horticultural Therapy on Improving Memory, Alexithymia, and Severity of Symptoms in Patients with Persistent Depressive Disorder. KMAN Counseling & Psychology Nexus, 1(1), 1-10.
 https://doi.org/10.61838/kman.psychnexus.1.1.1
- Shahab, A., Ahadi, H., Jomehri, F., & Kraskian-Mujembari, A. (2020). The effectiveness of group emotional schema therapy on subjective, well-being, fatigue of patients with multiple sclerosis in Shiraz. *Psychological Models and Methods*, 10(38), 77-96.
 - https://jpmm.marvdasht.iau.ir/article_4236.html
- https://jpmm.marvdasht.iau.ir/article_4236_b763ec6d98a9a0cc05d9bbd842303d43.pdf
- Simons, R. M., Sistad, R. E., Simons, J. S., & Hansen, J. (2018). The role of distress tolerance in the relationship between cognitive schemas and alcohol problems among college students. *Addictive behaviors*, 78, 1-8. https://doi.org/10.1016/j.addbeh.2017.10.020
- Simpson, S. G., Morrow, E., Vreeswijk, M. v., & Reid, C. (2010). Group Schema Therapy for Eating Disorders: A Pilot Study [Original Research]. *Frontiers in psychology*, 1. https://doi.org/10.3389/fpsyg.2010.00182
- Soenens, B., Vansteenkiste, M., & Van Petegem, S. (2017). Autonomy in adolescent development. Taylor & Francis. https://api.taylorfrancis.com/content/books/mono/download?identifierName=doi&identifierValue=10.4324/9781315636511&type=googlepdf
- Taylor, C. D. J., Bee, P., & Haddock, G. (2017). Does schema therapy change schemas and symptoms? A systematic review across mental health disorders. *Psychology and Psychotherapy: Theory, Research and Practice*, 90(3), 456-479. https://doi.org/10.1111/papt.12112
- Zargarinejad, F., & Ahmadi, M. (2020). The mediating role of sexual self-schema in the relationship of sexual functioning with sexual satisfaction in married female college students. *Iranian Journal of Psychiatry and Clinical Psychology*, 25(4), 412-427.
 - https://www.ensani.ir/file/download/article/1588340204-10182-99-5.pdf

