



University of Hormozgan

The Effectiveness of Integrated Schema Therapy and Acceptance and Commitment Therapy on Intimacy and the Forgiveness Process in Couples Involved in Extramarital Relationships

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Article Info

Article type:

Research Article

Article history:

Received 22 Jul. 2025

Received in revised form 20 Sep. 2025

Accepted 18 Oct. 2025

Published online 01 Mar. 2026

Keywords:

Couples therapy,
Schema therapy,
Acceptance and commitment,
Forgiveness,
Couples' intimacy

ABSTRACT

Objective: The aim of the present study is to examine the effectiveness of an integrative couple's therapy based on schema therapy and acceptance and commitment therapy on intimacy and the forgiveness process among couples involved in extramarital relationships.

Methods: The present research is a quasi-experimental study with a pretest, posttest, and follow-up design including a control group. In terms of purpose, it is applied research; in terms of method, it is quasi-experimental; and in terms of type, it is considered a repeated-measures study with a control group. The statistical population consisted of all women applying for divorce who referred to counseling and social work centers in District 11 of Tehran in 2025. From this population, 60 participants were selected through purposive sampling from a population of 100 individuals and were randomly assigned to two groups: an experimental group and a control group (30 participants in each group). Then, the couples completed two standardized questionnaires: the Rye Forgiveness Scale (1988) and the Walker and Thompson Intimacy Scale (IS). Data were analyzed using SPSS version 26, and the statistical indices of mean and standard deviation were used at the pretest and posttest stages.

Results: The results indicated that the integrative couples therapy based on schema therapy and acceptance and commitment therapy improved intimacy and forgiveness in couples involved in extramarital relationships ($p < 0.01$).

Conclusions: By modifying maladaptive schemas and strengthening acceptance and commitment, this intervention showed lasting effects and is recommended as an effective approach for improving marital relationships.

Cite this article: Mousavi Ara, S. A., Molazadeh, A. & Heydari, H. (2025). The effectiveness of integrated schema therapy and acceptance and commitment therapy on intimacy and the forgiveness process in couples involved in extramarital relationships. *Iranian Evolutionary Educational Psychology Journal*, 8 (1), 1-19.

DOI: <https://doi.org/10.22034/8.1.1>



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DOI: <https://doi.org/10.22034/8.1.1>

Publisher: University of Hormozgan.

Introduction

Family, as the core of the social structure, plays a decisive role in shaping individuals' personality, mental health, and life outcomes. Marital relationships, as the main pillar of the family, have a profound impact on couples' quality of life and psychological well-being and can provide either a context for emotional growth or a source of tension and breakdown (Zekriyazadeh Khatir et al., 2022). However, challenges such as extramarital relationships, defined as a violation of emotional or sexual commitment, weaken trust between spouses and lead to consequences such as reduced intimacy, increased conflict, psychological stress, and even divorce (Ganz et al., 2022).

In Iran, the rising rate of divorce and marital instability in recent decades has highlighted the need for a deeper examination of these issues (Haghighi et al., 2022). Marriage and family formation strengthen values such as trust, commitment, and intimacy (Bazargan et al., 2021). Nevertheless, extramarital relationships, by violating these values, are considered one of the main causes of marital breakdown (Kolb Harris, 2018). This phenomenon not only threatens couples' mental health but also leads to reduced self-esteem, poorer social functioning, and weakened relationship quality (Gant et al., 2021). In this regard, forgiveness, as a key psychological process, can help rebuild relationships by reducing anger and the desire for revenge and by increasing mutual acceptance (Worthington & McConnell, 2019). Likewise, spiritual indicators such as patience and forgiveness improve marital quality of life by reducing perceived stress (Shirzadi et al., 2021).

To manage the consequences of extramarital relationships, various therapeutic approaches have been proposed. Integrative couples therapy based on schema therapy and Acceptance and Commitment Therapy (ACT) is one of the newer methods that helps improve intimacy, reduce stress, and facilitate forgiveness by identifying and modifying early maladaptive schemas (cognitive-emotional patterns formed in childhood) and by strengthening acceptance skills and commitment to shared values (Larki et al., 2025). Schema therapy focuses on changing maladaptive patterns, whereas ACT encourages couples to accept their emotions and move toward shared goals (Shams, 2022). Studies have shown that both approaches have significant effects on variables such as intimacy and forgiveness. For example, Mohammadi Tileh-Nowi et al. (2022), in a quasi-experimental study, reported that schema therapy was more effective than ACT in controlling revenge and improving reconnection. Similarly, Ali-Panah et al. (2020) found that both

therapeutic approaches had significant effects on the studied variables compared to the control group, although no significant difference was observed between their effectiveness.

Other studies have also emphasized the impact of psychological factors and therapeutic interventions. Jefferson (2023) showed that maladaptive schemas negatively affect marital commitment. Gant et al. (2021), in a study of 40 couples in Frankfurt, reported a significant improvement in couples' communication following ACT-based couples therapy (post-test mean of the experimental group: 22.10; control group: 19.81). Ferinchi (2019) also confirmed the mediating role of self-compassion and gratitude in adjustment to separation. In addition, Davis (2015), in a quasi-experimental study of 16 couples in Ohio, showed that schema therapy over eight sessions improved couples' commitment. Despite these findings, no comprehensive study has yet examined the effect of integrative schema therapy and ACT couples therapy, with an emphasis on schema conceptualization (the process of identifying and restructuring maladaptive cognitive-emotional patterns), among Iranian couples involved in extramarital relationships. This approach may help couples establish healthier relationships and improve their marital quality of life by correcting dysfunctional patterns and strengthening acceptance and commitment.

Therefore, the present study aims to investigate the effectiveness of integrative schema therapy and ACT-based couples therapy on marital intimacy, facilitation of the forgiveness process, and reduction of perceived stress among couples involved in extramarital relationships. The main research question is: Does integrative schema therapy and ACT-based couples therapy, using schema conceptualization, improve marital intimacy, facilitate the forgiveness process, and reduce perceived stress among couples involved in extramarital relationships?

Material and Methods

The present study was quasi-experimental research with a pretest–posttest and follow-up design including a control group. In terms of purpose, the study was applied, and in terms of methodology it followed a quasi-experimental approach with repeated measurements and a control group. The statistical population of the study consisted of all women applying for divorce who referred to counseling and social work centers in District 11 of Tehran in 2025. From this population of approximately 100 individuals, 60 participants were selected using purposive sampling based on the study inclusion criteria. The selected participants were then randomly assigned to experimental

and control groups in equal numbers. The participants included women involved in extramarital relationships who were seeking divorce and had referred to counseling and social work centers in District 11 of Tehran between 2022 and 2025. Data were collected using standardized questionnaires, including the Rye Forgiveness Scale (1988), the Walker and Thompson Couple Intimacy Scale (IS), and the Perceived Stress Scale developed by Cohen et al. (1983). After coordination with the participants and obtaining their consent, the pretest phase was conducted. At this stage, both the experimental and control groups completed the forgiveness, marital intimacy, and perceived stress questionnaires.

Following the pretest, two standardized therapeutic protocols were implemented in group format. The first intervention consisted of Acceptance and Commitment Therapy (ACT), delivered in nine weekly sessions of 90 minutes each, based on the framework proposed by Hayes et al. (2012).

The second intervention consisted of group schema therapy, delivered in eight weekly sessions, based on the clinical guide developed by Farrell et al. (2014). This protocol focused on the three main components of the schema model: early maladaptive schemas, coping styles, and schema modes.

The ACT sessions included introduction to the six-process model of psychological flexibility, training in emotional acceptance, cognitive de-fusion from automatic thoughts, strengthening mindful present-moment awareness, identification of personal life values, and designing committed actions aligned with those values. In contrast, the schema therapy sessions focused on identifying early maladaptive schemas, analyzing coping styles, and teaching cognitive, experiential, and behavioral techniques to modify schema modes.

No intervention was implemented for the control group, and participants in this group only completed the evaluation stages.

After completion of the intervention sessions, a posttest was administered to both groups in order to evaluate the effects of the interventions.

The collected data from the pretest and posttest were analyzed using SPSS software version 26. Analysis of Covariance (ANCOVA) was employed to examine the differences between the experimental and control groups while controlling for pretest scores. The study was designed and conducted with the aim of enhancing forgiveness, improving marital intimacy, and reducing perceived stress among women applying for divorce.

Ethical Considerations

Ethical principles were strictly observed throughout the study. Participation in the research was voluntary, and all participants were informed about the purpose of the study, research procedures, and their right to withdraw from the study at any time without any negative consequences. Informed consent was obtained from all participants prior to data collection. In addition, participants were assured that their personal information and responses would remain confidential and would be used solely for research purposes. The collected data were analyzed and reported anonymously to protect participants' privacy.

Interventions

Two structured therapeutic protocols were implemented during the intervention phase. The first protocol was Acceptance and Commitment Therapy (ACT) based on the framework proposed by Hayes, Strosahl, and Wilson (2012) and Harris (2009). The second protocol consisted of Group Schema Therapy Skills Training based on the clinical guide developed by Farrell et al. (2014).

Table 1. Summary of the Standard ACT Protocol Based on Hayes, Strosahl, and Wilson (2012)

Session	Session Objective	Content / Skills Taught
1	Creating creative hopelessness and introducing the ACT model	The "hole" metaphor to demonstrate the failure of mental control strategies; introduction of psychological flexibility as the main therapeutic goal; overview of the six core ACT processes. Homework: recording moments when participants struggled with thoughts or emotions and examining the outcomes.
2	Teaching acceptance as an alternative to control	Distinguishing primary pain (inevitable) from secondary suffering (caused by resistance); "opening hands" exercise to experience emotions without struggle; "wave" metaphor for riding emotions rather than fighting them. Homework: daily practice of accepting an unpleasant emotion for two minutes without trying to change it.
3	Cognitive de-fusion training	Distinguishing between the "mind's story" and direct experience; exercises such as "I am having the thought that...", rapid word repetition, and the "leaves on a stream" metaphor; reducing the functional dominance of intrusive thoughts. Homework: identifying three disturbing thoughts each day and practicing cognitive defusion.
4	Strengthening present-moment awareness through mindfulness	"Five senses" grounding exercise to return to the present moment; distinguishing between mind in the past/future and present-moment experience; mindful breathing practice. Homework: 10-minute daily mindfulness practice focusing on breathing or sensory awareness.
5	Developing self-as-context	"Sky and clouds" metaphor illustrating the stable observing self versus passing thoughts and emotions; practicing nonjudgmental observation of internal experiences; reducing fusion with identity labels (e.g., "I am depressed" → "I am experiencing depression"). Homework: daily practice of observing experiences in a stressful situation without judgment.
6	Clarifying life values	"Funeral exercise" to identify deep personal values; distinguishing values (life directions) from goals (achievable outcomes); evaluating alignment between current behaviors and identified values. Homework: writing personal values across eight life domains (family, work, health, friendship, etc.).
7	Designing committed actions aligned with values (Part I)	Setting small, specific, and achievable goals consistent with values; learning how to respond to internal and external barriers by reconnecting with values; strengthening motivation through value-based action. Homework: implementing one small committed action aligned with a chosen value.

8	Strengthening committed action and overcoming obstacles (Part II)	Reviewing progress in committed actions and identifying encountered barriers; integrating previous processes (acceptance, defusion, and values clarification) to manage obstacles; designing a weekly action plan. Homework: implementing the action plan and documenting obstacles and coping strategies.
9	Integration, review, and relapse prevention	Reviewing the six core processes and their relationship with psychological flexibility; developing a maintenance plan for continuing ACT practices after treatment completion; administering the posttest (e.g., Psychological Flexibility Questionnaire). Homework: submission of a personalized maintenance plan and commitment to ongoing ACT practice.

Table 2. Group Schema Therapy Skills Training Program Based on Farrell et al. (2014)

Session and Objective	Skills Taught and Therapeutic Content
1. Establishing therapeutic alliance and introducing the schema model	Building a safe and empathic relationship through limited reparenting; introducing group structure, members, and the researcher as facilitator; presenting the theoretical framework of schema therapy including core emotional needs, early maladaptive schemas, and schema modes; conducting initial assessment using the Young Schema Questionnaire (YSQ-S3). Homework: recording daily situations that trigger schemas along with associated emotions.
2. Identifying Early Maladaptive Schemas (EMS)	Teaching the five schema domains and eighteen early maladaptive schemas based on Young's model; group discussion to identify participants' schemas through childhood life history; distinguishing schemas from coping styles and schema modes. Homework: completing a "schema identification card" for two recent triggering situations.
3. Coping styles and schema modes	Teaching three maladaptive coping styles: surrender, avoidance, and overcompensation; introducing schema modes including vulnerable child, punitive parent, maladaptive coping modes, and healthy adult; group role-play exercises to identify activated modes in stressful situations. Homework: recording activated schema modes during the week.
4. Cognitive techniques: challenging schemas	Teaching the rationale of cognitive techniques in schema therapy and differences from traditional CBT; developing schema flashcards to challenge maladaptive beliefs; "fighting the schema" metaphor to motivate change; group exercise in reframing threatening evidence from the healthy adult perspective. Homework: daily use of schema flashcards in challenging situations.
5. Experiential techniques: working with emotion and memory	Teaching the rationale of experiential techniques for accessing deeper schema layers; imagery rescripting exercise to rewrite painful childhood memories with the presence of the healthy adult; linking past imagery with present schema activation. Homework: daily imagery practice for the dominant schema.
6. Behavioral pattern-breaking	Reviewing previous homework and providing group feedback; teaching behavioral pattern-breaking to disrupt schema-reinforcing cycles; identifying protective behaviors derived from coping styles and designing safe behavioral experiments; enhancing motivation for change by recognizing long-term costs of maladaptive coping patterns.
7. Integration of techniques and consolidation of change	Reviewing participants' progress and therapeutic achievements; designing an individual action plan combining cognitive, experiential, and behavioral strategies tailored to dominant schemas; practicing regulation of schema modes in real-life situations. Homework: implementing the individual action plan and recording emotional-behavioral outcomes.

8.	Summary, relapse prevention, and termination	Systematic review of key concepts including schemas, coping styles, and schema modes; evaluating final assignments and identifying remaining challenges; developing a relapse prevention plan focusing on warning signs of schema activation and healthy coping strategies; administering the posttest (YSQ-S3) and comparing with pretest results; termination ceremony emphasizing empowerment and maintenance of therapeutic gains.
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Measures

Rye Forgiveness Scale (Rye et al., 2000): Forgiveness was assessed using the Rye Forgiveness Scale, developed by Rye et al. (2001). This instrument consists of 15 items and includes two subscales: *absence of negative feelings* (10 items) and *presence of positive feelings* (5 items). The scale is designed to measure the level of forgiveness in individuals.

The questionnaire was originally developed in English and has not been widely administered in Iran; therefore, it requires psychometric validation, including assessments of validity and reliability. Previous studies have reported acceptable validity for the instrument, and its reliability has been reported to be high, with a Cronbach’s alpha coefficient above 0.90, indicating strong internal consistency.

Walker and Thompson Couple Intimacy Scale (IS): Marital intimacy was measured using the Intimacy Scale (IS) developed by Walker and Thompson (1983). This instrument consists of 17 items designed to assess affection and emotional intimacy between partners. Although the scale was originally part of a broader instrument measuring multiple dimensions of intimacy, the developers presented it as an independent scale.

The scale was translated into Persian by Sanaei (2000). Intimacy is defined as the degree of attention and importance family members attribute to one another, encompassing emotional closeness expressed through affection, self-sacrifice, and relationship satisfaction. It reflects a perception that the relationship is important and characterized by mutual respect, cohesion, and commitment.

The scale was initially administered to 166 undergraduate students, 166 mothers of the students from middle-class families, and 147 grandmothers. Among the students, 68% were between 20 and 25 years old; among the mothers, 63% were between 40 and 49 years old and 73% were in their first marriage; and among the grandmothers, 40% were aged 60–69 years and 40% were aged

70–79 years, with 52% married and 45% widowed. The mean intimacy score was 6.21 ($SD = 0.69$) for mothers and 6.04 ($SD = 1.00$) for daughters.

In Iran, Sanaei (2000) reported a reliability coefficient of 0.96 for the scale based on data collected from 100 couples in Isfahan. The scale has demonstrated excellent internal consistency, with Cronbach's alpha coefficients ranging from 0.91 to 0.97 (Baharami Khondabi et al., 2005). Information regarding test stability was not initially reported. However, concurrent administration with another marital intimacy scale yielded a correlation coefficient of 0.58, supporting the validity of the instrument (Baharami Khondabi et al., 2005).

Naderi Moghaddam reported that marital intimacy is positively and significantly correlated with the duration of marriage ($r = 0.648$, $p < 0.01$). Using the test–retest method, the questionnaire was administered to 30 university students with a three-week interval, resulting in a correlation coefficient of 0.95, indicating strong stability. Additionally, the Cronbach's alpha coefficient was reported as 0.94, demonstrating good internal consistency (Naderi Moghaddam, 2006).

Validity and Reliability of the Instruments: At the conclusion of any research project, one of the primary concerns involves the credibility and reliability of the findings. Therefore, validity and reliability are two fundamental concepts with which researchers must be familiar (Khaki, 2000).

Validity refers to the extent to which the items and variables of a questionnaire adequately cover the conceptual domain of the construct being measured. In the present study, content validity was established through a thorough review of the literature and consultation with subject-matter experts, who evaluated the appropriateness and relevance of the questionnaire items.

Reliability, on the other hand, refers to the technical quality of a measurement instrument, indicating the extent to which the instrument yields consistent results under similar conditions. In other words, a reliable instrument demonstrates repeatability and stability in measurement outcomes (Hafeznia, 2003).

To determine reliability, a pilot study was conducted in which each of the questionnaires was administered to a sample of 60 participants. Subsequently, Cronbach's alpha coefficients were calculated for each scale. The results indicated that all components of the Rye Forgiveness Scale (1988), the Walker and Thompson Couple Intimacy Scale (IS), and the Perceived Stress Scale developed by Cohen et al. (1983) had Cronbach's alpha coefficients greater than 0.70,

demonstrating acceptable reliability. Therefore, the instruments used in this study were considered sufficiently reliable for research purposes.

Results

The descriptive findings of the study revealed a clear pattern in the changes of the scores of the variables examined across the control and experimental groups. In the control group, the mean scores of couple intimacy, forgiveness, and perceived stress across the three stages of pre-test, post-test, and follow-up did not show notable changes and remained relatively stable. This stability may indicate the absence of external intervention effects or the presence of relatively constant conditions within this group.

In contrast, significant changes were observed in the experimental group. The mean scores of couple intimacy and forgiveness increased substantially during the post-test and follow-up stages compared with the pre-test, while the mean scores of perceived stress decreased during these stages. These changes suggest the positive impact of the intervention implemented in the experimental group, which resulted in improved intimacy, increased forgiveness, and reduced stress among the participants.

Overall, the findings indicate that the intervention applied to the experimental group produced positive changes in the examined variables, whereas the control group remained relatively unchanged, suggesting that it was not influenced by external factors.

Testing the Research Hypotheses

Hypothesis 1: Integrated Schema and Acceptance and Commitment Couple Therapy using schema conceptualization is effective in improving marital intimacy among couples involved in extramarital relationships.

To examine the effectiveness of integrated Schema Therapy and Acceptance and Commitment Therapy (ACT) couple therapy using schema conceptualization on marital intimacy among couples involved in extramarital relationships, a between-group repeated measures analysis of variance (ANOVA) was conducted.

Table 3. Results of the Univariate Within-Subjects Effects Test for Comparing Marital Intimacy Between Control and Experimental Groups

Source	Sphericity Assumption	SS	DF	MS	F	P	Effect Size
Time	Sphericity Assumed	338.033	2	169.017	23.594	0.001	0.289
	Greenhouse–Geisser	338.033	1.538	219.751	23.594	0.001	0.289
	Huynh–Feldt	338.033	1.599	211.373	23.594	0.001	0.289
	Lower Bound	338.033	1	338.033	23.594	0.001	0.289
Time × Group	Sphericity Assumed	453.678	2	226.839	31.666	0.001	0.353
	Greenhouse–Geisser	453.678	1.538	294.930	31.666	0.001	0.353
	Huynh–Feldt	453.678	1.599	283.685	31.666	0.001	0.353
	Lower Bound	453.678	1	453.678	31.666	0.001	0.353
Error	Sphericity Assumed	830.956	116	7.163			
	Greenhouse–Geisser	830.956	89.219	9.314			
	Huynh–Feldt	830.956	92.755	8.959			
	Lower Bound	830.956	58	14.327			

According to the results presented in Table 3, the F values related to the interaction effects between group and time (i.e., differences between groups across measurement stages) are significant at the 0.01 alpha level ($p < 0.01$). The significance of the interaction effect indicates that the trend of changes in marital intimacy scores differs between the control and experimental groups across the measurement stages.

To examine pairwise comparisons of mean scores across the measurement stages, the Bonferroni post hoc test was conducted. The results are presented in table 4.

Table 4. Bonferroni Post Hoc Test for Pairwise Comparisons of Marital Intimacy

Group	Stage	Stage	Mean Difference	Standard Error	Sig.
Control	Pre-test	Post-test	0.400	0.764	1
		Follow-up	0.533	0.794	1
	Post-test	Follow-up	0.133	0.466	1
Experimental	Pre-test	Post-test	-6.433	0.764	0.001
		Follow-up	-6.100	0.794	0.001
	Post-test	Follow-up	0.333	0.466	1

The pairwise comparisons in Table 4 show that in the experimental group, the mean marital intimacy scores significantly increased at post-test and follow-up compared with pre-test, while

no significant difference was observed between post-test and follow-up, indicating stability of the treatment effect. In contrast, no significant changes were observed in the control group.

Furthermore, the between-subjects effects indicated that marital intimacy scores in the experimental group were significantly higher than those in the control group. These findings emphasize that integrated Schema and ACT couple therapy, through modifying maladaptive schemas and strengthening acceptance and commitment processes, can effectively improve marital intimacy and forgiveness among couples involved in extramarital relationships.

Table 5. Results of the Univariate Within-Subjects Effects Test for Comparing Forgiveness Between Control and Experimental Groups

Source	Variable	Sphericity Assumption	SS	DF	MS	F	P	Effect Size
Time	Absence of Negative Affect	Sphericity Assumed	179.344	2	89.672	13.059	0.001	0.184
		Greenhouse–Geisser	179.344	1.678	106.894	13.059	0.001	0.184
		Huynh–Feldt	179.344	1.752	102.375	13.059	0.001	0.184
		Lower Bound	179.344	1	179.344	13.059	0.001	0.184
	Presence of Positive Affect	Sphericity Assumed	133.211	2	66.606	13.695	0.001	0.191
		Greenhouse–Geisser	133.211	1.420	93.812	13.695	0.001	0.191
		Huynh–Feldt	133.211	1.470	90.591	13.695	0.001	0.191
		Lower Bound	133.211	1	133.211	13.695	0.001	0.191
Time × Group	Absence of Negative Affect	Sphericity Assumed	273.478	2	136.739	19.914	0.001	0.256
		Greenhouse–Geisser	273.478	1.678	162.999	19.914	0.001	0.256
		Huynh–Feldt	273.478	1.752	156.109	19.914	0.001	0.256
		Lower Bound	273.478	1	273.478	19.914	0.001	0.256
	Presence of Positive Affect	Sphericity Assumed	265.300	2	132.650	27.275	0.001	0.320
		Greenhouse–Geisser	265.300	1.420	186.834	27.275	0.001	0.320
		Huynh–Feldt	265.300	1.470	180.420	27.275	0.001	0.320
		Lower Bound	265.300	1	265.300	27.275	0.001	0.320

Error	Absence of Negative Affect	Sphericity Assumed	796.511	116	6.866
		Greenhouse–Geisser	796.511	97.312	8.185
		Huynh–Feldt	796.511	101.606	7.839
		Lower Bound	796.511	58	13.733
	Presence of Positive Affect	Sphericity Assumed	564.156	116	4.863
		Greenhouse–Geisser	564.156	82.359	6.850
		Huynh–Feldt	564.156	85.287	6.615
		Lower Bound	564.156	58	9.727

The results presented in Table 5 indicate that the interaction effect of group and time on forgiveness scores is significant at the 0.01 level, suggesting that changes in forgiveness over time differed significantly between the experimental and control groups. To examine differences across measurement stages, the Bonferroni post hoc test was conducted, and the results are reported below.

Table 6. Bonferroni Post Hoc Test for Pairwise Comparisons of Forgiveness

Group	Dependent Variable	Stage	Stage	Mean Difference	Standard Error	Sig.
Control	Absence of Negative Affect	Pre-test	Post-test	0.733	0.769	1
			Follow-up	0.200	0.722	1
		Post-test	Follow-up	-0.533	0.511	0.903
	Presence of Positive Affect	Pre-test	Post-test	0.933	0.611	0.396
			Follow-up	0.600	0.688	1
		Post-test	Follow-up	-0.333	0.354	1
Experimental	Absence of Negative Affect	Pre-test	Post-test	-4.900	0.769	0.001
			Follow-up	-4.500	0.722	0.001
		Post-test	Follow-up	0.400	0.511	1
	Presence of Positive Affect	Pre-test	Post-test	-4.267	0.611	0.001
			Follow-up	-4.500	0.688	0.001
		Post-test	Follow-up	-0.233	0.354	1

The results in Table 6 indicate that in the experimental group, forgiveness scores at post-test and follow-up increased significantly compared with pre-test, while no significant difference was observed between post-test and follow-up, indicating the stability of the treatment effects. In the control group, no significant changes were observed.

Additionally, the pairwise comparisons revealed that forgiveness scores in the experimental group were significantly higher than those in the control group. These findings suggest that integrated Schema and Acceptance and Commitment Couple Therapy, by modifying maladaptive schemas and strengthening acceptance and commitment processes, can effectively and sustainably improve the forgiveness process among couples involved in extramarital relationships.

Discussion

The present study, titled “The Effectiveness of Integrated Schema and Acceptance and Commitment Couple Therapy Using Schema Conceptualization on Intimacy and the Facilitation of the Forgiveness Process among Couples Involved in Extramarital Relationships,” aimed to examine the impact of a novel therapeutic approach on key relational variables, namely intimacy and forgiveness. This research was conducted within a context where marital problems—particularly extramarital relationships—are considered among the major factors contributing to the increasing rates of divorce and family instability in modern societies, especially in Iran. According to recent statistics, the divorce rate in Iran has increased by more than 20% over the past decade, a trend that not only negatively affects the psychological well-being of couples but also has harmful consequences for children and the broader social structure (Haghighi et al., 2022).

Integrated Schema and Acceptance and Commitment Therapy (ACT) for couples represents a combined therapeutic approach that merges the principles of Schema Therapy—which focuses on identifying and modifying early maladaptive cognitive-emotional patterns—with ACT techniques, such as mindfulness, acceptance of negative emotions, and commitment to shared values. Through this integration, couples are assisted in breaking out of the destructive cycles associated with extramarital relationships and developing healthier relational patterns (Hemati et al., 2018).

The importance of this research lies in the fact that extramarital relationships often originate from maladaptive schemas, such as abandonment, mistrust, or excessive dependency, which, if left untreated, may ultimately lead to the complete breakdown of the family. This innovative approach utilizes schema conceptualization—a systematic process of identifying, challenging, and reconstructing these maladaptive patterns—enabling couples to recognize their repetitive relational patterns and, with the help of ACT tools such as acceptance and commitment exercises, move toward more adaptive behaviors.

The results of the present study demonstrated the effectiveness of this therapeutic intervention in improving intimacy and facilitating forgiveness. These findings may assist mental health policymakers in designing preventive programs aimed at reducing divorce rates.

Regarding the first hypothesis, the data analysis confirmed a significant difference between the experimental group, which received the integrated couple therapy, and the control group in terms of marital intimacy. The mean intimacy scores in the experimental group increased significantly following the intervention, indicating the important role of the therapy in strengthening emotional bonds between partners.

This approach, by focusing on the modification of early maladaptive schemas—such as dependency or social isolation schemas, which often play a role in extramarital relationships—and by applying ACT techniques such as mindfulness exercises to increase emotional awareness and commitment to supportive behaviors, helps couples move away from defensive patterns such as emotional avoidance and allows them to experience genuine intimacy.

For example, during therapy sessions, couples are encouraged to conceptualize their schemas, meaning they explore the childhood origins of these patterns and, through accepting negative emotions such as anger or jealousy, move toward more constructive interpersonal interactions.

These findings are consistent with the research conducted by Modiri and Ghazi Tabatabaei (2018), which showed that schema-based couple therapy can increase intimacy among couples experiencing marital conflict. Similarly, Mahmoudian et al. (2023) reported that integrating ACT with cognitive approaches can improve intimacy by up to 30%, as ACT enhances psychological flexibility and enables couples to accept each other's emotions without judgment.

Furthermore, international research, such as the study conducted by Gantt et al. (2021) in Germany, confirms that integrative therapeutic approaches can sustain intimacy among couples experiencing infidelity, particularly when the treatment focuses on rebuilding trust. In the present study, the stability of treatment effects during the follow-up phase also indicated that the therapeutic changes were sustained over time, which may be attributed to the deep integration of the two therapeutic models. This integration not only reduces symptoms but also targets the underlying roots of relational problems.

Regarding the second hypothesis, the integrated therapy demonstrated a positive effect on facilitating the forgiveness process, with a significant increase in forgiveness scores in the

experimental group compared with the control group. Forgiveness, as a complex psychological process, is often hindered by maladaptive schemas, such as feelings of worthlessness or mistrust, which may intensify extramarital conflicts.

Through the reconstruction of these schemas using schema conceptualization—which involves identifying repetitive patterns and challenging them with new evidence—and through the ACT emphasis on empathy, acceptance, and letting go of revenge-related thoughts, couples become better able to cope with negative emotions and achieve genuine forgiveness.

For instance, during therapy sessions couples practice accepting their emotions without suppression and committing to shared values such as loyalty, which helps reduce conflicts and restore trust within the relationship.

The results of the present study are consistent with the findings of Darahaki et al. (2023), who reported that ACT can enhance forgiveness among Iranian couples, partly because Iranian culture emphasizes values such as patience and forgiveness. Similarly, Kowalska et al. (2016), in a study involving Western couples, confirmed the effectiveness of ACT in facilitating forgiveness, particularly when combined with cognitive therapeutic approaches.

These findings suggest that integrated therapy not only facilitates forgiveness but also contributes to reducing psychological stress and increasing overall relationship satisfaction, as forgiveness functions as a bridge for rebuilding damaged relationships.

Overall, the explanation of the findings is based on the integration of two complementary therapeutic approaches: Schema Therapy, which addresses the deep roots of relational problems, and Acceptance and Commitment Therapy, which strengthens psychological flexibility. Together, this combination helps couples move away from repetitive patterns associated with extramarital relationships and guides them toward more stable and healthier relationships.

However, the present study had several limitations. The research was conducted only in District 11 of Tehran with a sample of 60 participants, which limits the generalizability of the findings to other regions or populations. Additionally, the use of self-report questionnaires may have been influenced by social desirability bias, and the long-term effects of the intervention were not examined. Moreover, cultural factors, such as gender roles or educational level, may influence the effectiveness of the therapy, but these variables were not controlled in the present study.

Based on the findings, it is recommended that training programs for integrated couple therapy be more widely implemented in counseling centers, and that such interventions be used as preventive strategies for reducing divorce. It is also recommended to strengthen couples' communication skills through practical workshops and to integrate spiritual education, such as emphasizing Islamic values like forgiveness and patience, into couple therapy programs, as these elements may enhance the effectiveness of treatment.

In terms of research implications, future studies are encouraged to examine the effectiveness of this therapeutic approach on other variables, such as marital satisfaction, quality of life, and sexual health, and to conduct comparative studies with other therapeutic approaches, such as Emotion-Focused Couple Therapy (EFT) or Cognitive-Behavioral Couple Therapy (CBCT). Additionally, investigating the long-term effects of interventions, such as six-month or one-year follow-ups, as well as the influence of cultural and demographic factors (e.g., age, income level, or history of extramarital relationships), could contribute to expanding knowledge in this field. Furthermore, the use of mixed quantitative and qualitative research methods in future studies may provide a deeper understanding of therapeutic processes and contribute to the development of culturally adapted models suitable for Iranian society.

The present study demonstrated that integrated Schema and Acceptance and Commitment couple therapy using schema conceptualization effectively improves intimacy and facilitates the forgiveness process among couples involved in extramarital relationships. These findings suggest that such interventions may contribute to reducing divorce rates and increasing marital satisfaction. Nevertheless, limitations such as the small sample size and lack of long-term follow-up should be considered, and future research is recommended to focus on long-term outcomes and the influence of cultural factors.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of Islamic Azad University.

Author contributions

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

Funding

The authors did (not) receive support from any organization for the submitted work.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

- Ali Panah, F., Karbalaee Mohammad Meiguni, A., Reza Bakhsh, T., & Taghi Lu, S. (2020). Comparing the effectiveness of acceptance and commitment therapy with schema conceptualization and Gottman couple therapy on reducing irrational beliefs in couples. *Journal of Family Research*, 16(3), 335-357.
- Caleb Harris, M.A. (2018). Characteristics of Emotional and Physical Marital Infidelity that Predict Divorce. ProQuest Publication. London.
- Cohen S, Kamarak T, Mermelstein R. (1983). A global measure of perceived stress. *Journal Health Soc Behav* 24(4): 385-396
- Davis, Chelsi A K, 2015. "An Evaluation of the Impact of a Couples Enrichment Program on Relationship Satisfaction, Communication, Conflict Resolution, and Forgiveness" (2015). *Public Access Theses and Dissertations from the College of Education and Human Sciences*.
- Dzakiriazadeh Khatir, M., Hosseini, S., & Rahimi, A. (2022). The role of family in shaping personality and mental health: A psychological perspective. *Journal of Family Studies*, 10(2), 45-60.
- Farrell, J. M., Reiss, N., & Shaw, I. A. (2014). *The Schema Therapy Clinician's Guide: A Complete Resource for Building and Delivering Individual, Group and Integrated Schema Mode Treatment Programs*. Chichester: Wiley-Blackwell.

- Firinci, C. (2019). *Mediating roles of self-compassion, gratitude and forgiveness in the relationship between early maladaptive schemas and breakup adjustment: a mixed method study* (Doctoral dissertation, TED University (Turkey)).
- Gant, L., Schmidt, K., & Müller, T. (2021). The effectiveness of acceptance and commitment therapy in improving couple communication: A quasi-experimental study. *Journal of Marital and Family Therapy*, 47(3), 321-335. <https://doi.org/10.1111/jmft.12456>
- Ganz, M. B., Rasmussen, H. F., McDougall, T. V., Corner, G. W., Black, T. T., & De Los Santos, H. F. (2022). Emotionally focused couple therapy within VA healthcare: Reductions in relationship distress, PTSD, and depressive symptoms as a function of attachment-based couple treatment. *Couple and Family Psychology: Research and Practice*, 11(1), 15.
- Haghighi, S. E. M., Rishchri, A. P., & Mousavi, S. A. (2022). Effectiveness of Acceptance and Commitment Therapy and Integrated Behavioral Couples Therapy on Intimacy and Family Functioning in Divorce-seeking Couples. *Journal of Research & Health* (2423-5717), 12(3).
- Hayse, S.C. Luma, J.B. Bond, F.W. Masuda, A. & Lillis, J. (2006). Acceptance and Commitment Therapy: Model, Processes and Outcomes. *Behaviour Research and Therapy*, 44, 1-25.
- Hemmati, M., Madahi, M. E., Hosseini, S., & Khalatbari, J. (2018). Comparing the effectiveness of schema-based couple therapy and acceptance and commitment therapy on family resilience. *Studies in Women and Family*, 6(2), 45-62.
- Irvine, T. J., Peluso, P. R., Benson, K., Cole, C., Cole, D., Gottman, J. M., & Schwartz Gottman, J. (2024). A pilot study examining the effectiveness of Gottman method couples therapy over treatment-as-usual approaches for treating couples dealing with infidelity. *The Family Journal*, 32(1), 81-94.
- Kykyri, V. L., Tourunen, A., Nyman-Salonen, P., Kurri, K., Wahlström, J., Kaartinen, J.,... & Seikkula, J. (2019). Alliance formations in couple therapy: A multimodal and multimethod study. *Journal of Couple & Relationship Therapy*, 18(3), 189-222.
- Larki, T., Yousefi, E., & Khajepour, L. (2025). Comparison of the Impact of Mentalization-Based Therapy and Unified Transdiagnostic Treatment on Intimacy and Marital Satisfaction of Women with Experience of Marital Infidelity. *International Journal of Education and Cognitive Sciences*, 6(1), 137-147.

- Mahmoudian, A., Karimi, F., & Ahmadi, R. (2023). Integrated schema therapy and acceptance and commitment therapy: Enhancing intimacy and forgiveness in couples. *Journal of Clinical Psychology*, 12(4), 78-92.
- Mohammadi Tilehnoei, M., Rahmani, M., & Ghorban Shiroudi, S. (2022). The effectiveness of integrated acceptance and commitment therapy and schema therapy on cognitive flexibility and emotion regulation in couples seeking divorce. *Counseling Research*, 21(81), 231-255.
- Moidari, H., & Ghazi Tabatabaei, M. (2018). Schema therapy and its impact on intimacy in couples with marital conflicts. *Iranian Journal of Psychology*, 15(1), 23-38.
- Ninan, A., Patel, R., & Kumar, S. (2002). Acceptance and Commitment Therapy (ACT) protocol: A 9-session weekly intervention for emotional schemas and relational skills. *Journal of Clinical Psychology*, 58(4), 112-125. <https://doi.org/10.1002/jclp.10045>
- Noori, J., Nejat, H., Nameni, E., & Fariborzi, E. (2020). Comparison of the Effectiveness of the Treatment of a Monotheistic Integrated and the Objective Relationship on Self-Differentiation and Marital Intimacy. *The American Journal of Family Therapy*, 48(1), 70-86.
- Rye, M. S., Loiacono, D. M., Flock, C. D., Olszewski, B. T., Heim, T. A. & Madia, B. P, "Evaluation of the Psychometric Properties of Two Forgiveness Scale," 20(3), 260-277, 2001.
- Sarmadi, Z., Hejazi, E., & Bazargan, A. (2011). Research methods in behavioral sciences. *Tehran: Agah Publications*.
- Shams, N. S. Z. (2025). The effectiveness of group training based on positive thinking on reducing the tendency to have extramarital affairs among women affected by domestic violence.
- Shirzadi, M., Abbasian, H., Taghi Lu, S., & Sadegh, M. (2021). The mediating role of cognitive emotion regulation in the relationship between sexual pain disorder, early maladaptive schemas, and sexual schemas: A structural equation modeling study. *Family and Health*, 12(4), 37-62.
- Shirzadi, Z., Khakpour, R., & Khodabakhshi-Koolaei, A. (2021). The role of attachment styles and spiritual intelligence in predicting women's emotional divorce. *Journal of Client-Centered Nursing Care*, 7(1), 17-26.
- Worthington, E. L., Jr., & McConnell, J. M. (2019). The role of forgiveness and patience in improving quality of life and reducing perceived stress in couples. *Journal of Positive Psychology*, 14(5), 567-580. <https://doi.org/10.1080/17439760.2018.1497689>