

## Research Paper

# Effectiveness of Acceptance and Commitment Therapy and Integrated Behavioral Couples Therapy on Intimacy and Family Functioning in Divorce-seeking Couples



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## ABSTRACT

**Background:** Dysfunctional families suffer from poor communication, negative relationships, and countless conflicts. Achieving goals is challenging in such families and requires significant energy. The present study aims to investigate the effectiveness of acceptance and commitment therapy (ACT) and integrated behavioral couples therapy (IBCT) in improving intimacy and family functioning in divorce-seeking couples in Bushehr City, Iran in 2020.

**Methods:** This was a quasi-experimental study based on a pretest-posttest design with a control group. The study population consisted of all married couples applying for a divorce in Bushehr City, Iran. A total of 45 couples were selected as the sample through convenience sampling and were randomly and equally assigned to three groups. The research instruments included, Walker and Thompson intimacy scale, and the McMaster family assessment device. The data were statistically analyzed by univariate and multivariate analysis of covariance via SPSS software. The Bonferroni post hoc test was used to determine the mean difference between the groups.

**Results:** The results showed a significant difference between ACT and IBCT groups with the control group in the posttest scores for intimacy and family functioning ( $P < 0.001$ ). Moreover, there was no significant difference between ACT and IBCT in improving intimacy and family functioning in divorce-seeking couples.

**Conclusion:** Based on the results of the present study, both ACT and IBCT can be used for improving intimacy and family functioning between divorce-seeking couples.

**Keywords:** Acceptance and commitment therapy, Couples therapy, Intimacy, Family functioning, Divorce

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## 1. Introduction

Individuals face extensive psychological pressures as they approach a deadlock in their marriage and decide to put an end to it. Such pressures continue even for years after the divorce [1]. When an emotional relationship ends and individuals fail to achieve their goals (e.g. a long-lasting and happy marriage) because of an unpleasant event (e.g. a divorce), they may feel an intense sense of loneliness and tend to develop irrational beliefs [2]. These irrational beliefs mainly cause complications, such as a sense of unhealthiness, behavioral consequences, and long-term emotional crisis [3]. Studies have shown that low intimacy and poor family functioning are among the major factors causing marital failure [4, 5].

Human beings need to establish intimate relationships as intimacy is considered a primary psychological need. Marital intimacy is defined as the closeness of spouses, the sharing of values and ideas, the engagement in common activities, sexual relationships, mutual understanding, and emotional behaviors (e.g. cuddling) [4]. Marital intimacy is one of the characteristics of couples' relationships; a relationship that is defined by the actual self-disclosure and mutual understanding based on an equal partnership. Intimacy is the degree of closeness and support that each of the spouses feels and expresses. A person who experiences a higher level of intimacy can present themselves more desirably in a relationship and express their needs more effectively to their partner or spouse [6]. Luo et al. [7] indicated that today's couples experience pervasive and severe problems in establishing and maintaining intimate relationships, while intimacy between spouses is one of the main keys to a successful and long-lasting marriage and its absence can cause marital failure. Moreover, close and intimate relationships between couples strengthen their marital life, help them meet their emotional needs, and provide opportunities for their development.

In addition, family functioning plays a crucial role in the durability and quality of marriage. The Interactions and communication patterns that exist between family members establish functioning. Healthy functioning states that these interactions and patterns of communication are effective and efficient in achieving family objectives [8]. Family functioning is a joint attempt to establish and maintain balance in the family. It refers to the ability to coordinate changes, resolve conflicts, boost solidarity between members, and succeed in applying disciplinary models, observing boundaries between in-

dividuals, and implementing the rules and principles governing the family to protect the entire family system [9]. Healthy family functioning occurs within a family environment with clear communication, well-defined roles, cohesion, and optimal affect regulation. In contrast, poor family functioning occurs within families with high levels of conflict, disorganization, and poor affective and behavioral control [10]. Family functioning is extensively investigated by systemic theorists and it is mainly defined through the quality of family interactions and relationships associated with the family's ability to perform tasks and cope with daily demands and transient events [11]. Cheung et al. [12] believed that in functional families, roles are established properly and compatibly, communication is effective, interactions and relationships are positive, and the family easily manages demands and achieves goals. Tolou-Shams et al. [13] reported that dysfunctional families suffer from poor communication, negative relationships, and countless conflicts; therefore, achieving goals in such families is challenging and requires significant energy.

Accordingly, it is essential to address the levels of intimacy and family functioning among couples, especially divorce-seeking ones. Studies reported acceptance and commitment therapy (ACT) as an effective approach to coping with emotional, cognitive, and behavioral problems in couples [14]. ACT is a newly developed model with key therapeutic processes that are different from those of conventional cognitive-behavioral therapy. As a third-generation behavioral therapy, ACT emerged following the second wave of these therapies, such as cognitive-behavioral therapy. ACT is related to a research project called the communication system theory. This approach accepts changing thoughts and feelings instead of changes in their content or frequency [15]. As an experimental treatment, ACT is effective in improving a range of disorders, including mood disorders [16]. There are two main objectives to this therapy: 1) encouraging the acceptance of problematic thoughts and emotions that cannot be controlled; and 2) taking steps toward leading a lifestyle based on values of personal choice. This therapy includes exposure-based exercises, linguistic metaphors, and methods, such as mental care. ACT helps clients to take greater control over their emotions by using techniques and strategies, such as reducing the credibility of thoughts, cognitive defusion, and avoidance of annoying thoughts [17]. Walser and Wharton [18] reported that the main objective of ACT is to achieve psychological flexibility; that is, the ability to make practical and more appropriate choices between different options, rather than just doing or forcing someone to do something to avoid disturbing thoughts, emotions,

memories, or desires. Therefore, ACT can increase effectiveness while reducing psychological symptoms when combined with traditional cognitive behavioral therapy techniques because of its underlying mechanisms, such as acceptance, awareness-raising, desensitization, living the moment, observation without judgment, confrontation, and emotional freedom [19]. Mohammadian et al. [14] concluded that ACT decreased anxiety and cognitive avoidance, and significantly increased empathy in married individuals; moreover, ACT can be used to improve empathy in couples involved in marital conflicts.

Integrative behavioral couple therapy (IBCT) was also investigated in this study, which originated from traditional behavioral couples therapy. The IBCT is a context-based behavioral therapy that helps couples increase their compatibility and satisfaction. This approach applies “affective acceptance” concepts and techniques to compensate for some limitations of traditional behavioral couples therapy. Acceptance techniques are more in line with behavioral acceptance than behavioral change and seek to apply the areas of conflict as a means to build greater intimacy and closeness between couples [20]. It seeks to reconstruct the traditional behavioral couples therapy by stating that not all aspects of a couple’s relationship can be changed. Here, acceptance means that couples try to keep their closeness and intimacy despite having problems. Interventional approaches used in the IBCT are in line with the conceptualization of disrupted relationships and emphasize on couples’ emotional reactions to the resulting differences and conflicts [21, 22].

The IBCT aims to establish affective acceptance in couples toward their extant and possible differences. Roddy et al. [20] reported that IBCT positively impacts relationship constructs, such as satisfaction and communication, and the benefits of this therapy extend to individuals, co-parenting, and child functioning. Evaluating, explaining, and comparing ACT and IBCT on psychological characteristics, such as intimacy and improving the family functioning of divorce-seeking couples are among the most important innovations of this study. Based on the above considerations, the present study aims to investigate the effectiveness of ACT and IBCT in improving intimacy and family functioning in divorce-seeking couples.

## 2. Methods

This was a quasi-experimental study based on a pretest-posttest design with a control group. The study population consisted of all divorce-seeking couples in Bushehr City, Iran. A total of 45 couples from the population were

selected as the sample through convenience sampling and were randomly and equally assigned to three groups of 15. In this study, 15 couples were included in each group via G\*Power software with an effect size of 0.80, a test power of 0.90, and  $\alpha$  of 0.05. The couples who were applying for divorce were identified by visiting specialized psychology and counseling clinics in Bushehr City, Iran. After identifying the required number of couples, the authors interviewed the participants to brief them on the research objectives, procedures, and ethical considerations.

Researchers also answered questions and obtained participants’ informed consent letters. The inclusion criteria included the following items: couples seeking a divorce, no mental illness (based on participants’ self-reports), having at least a middle school level education, and not participating in other educational and medical programs. The exclusion criteria were reluctance to continue the treatment process and more than two absences from the treatment sessions. Moreover, the participants completed the measurement tools and a screening tool as the pretest during the initial interview. Those who obtained a high score (in terms of psychological function) were eliminated and replaced with new participants with lower scores on the measurement tools. Next, the participants were randomly assigned to one of the ACT, IBCT, or control groups. The participants in the ACT and IBCT groups attended the intervention sessions according to the relevant instructions, whereas those in the control group received no intervention. At the end of the interventions, participants completed the measurement tools once again as the posttest. Also, the control group received a course of ACT and IBCT at the end of the study to observe the ethical considerations.

### Intervention programs

The first intervention program consisted of twelve 90-minute sessions of ACT. These sessions were performed once a week based on the practice of ACT, according to Hayes et al. [23]. The second intervention program consisted of eight 90-minute sessions of IBCT. These sessions were performed once a week based on the practice of IBCT, according to Christensen and Doss [24]. The intervention sessions were conducted at Bushehr City Counseling Center by the first author who had received specialized courses and workshops. A summary of ACT and IBCT sessions is provided in Table 1 and Table 2.

**Table 1.** Summary of ACT intervention [23]

Sessions	Strategies	Interventions
1: treatment evaluation and orientation	Familiarity with couples, introducing ACT	Introducing the focus of exercises
2: individual evaluations	Individual interview: assessment of marital adjustment and forgiveness	Couple planning: integration of individual and couple evaluations
3: cost-effectiveness evaluation of ineffective relationships	Cost-effectiveness evaluation of conflicts and avoidance, development of creative frustration	The use of the Chinese finger trap, practicing how to struggle and deal with the spouse
Session 4: mindfulness and acceptance	Introduction to mindfulness and acceptance	Practicing how to accept thoughts and emotions
5: cognitive fusion	Explaining negative relationship thoughts	The MindBus technique, writing thoughts on training sheets
6: observation of thoughts	Developing the observer's point of view and comparing one's reactions to their spouse's reactions	Writing thoughts on training sheets, practicing how to accept reactions in a relationship
7: choosing the direction of values	Encouraging and helping the participants identify and clarify the values of their lives and relationships	Practicing "what do I currently need in my life or relationships need?"
8: identification of barriers to life values through self-acceptance and self-observation	Reviewing the value worksheet, discussing barriers to life values, and helping clients cope with the barriers rather than overcome them	Committed action worksheet, reviewing the MindBus technique
9: encouraging flexible patterns of behavior in relationships	Expressing the desires	Committed action worksheet
10: self as a context in the relationship	The nature of choice and the ability to respond, the experience of couples as being the context of the relationship	Committed action worksheet, chessboard metaphor
11: acceptance and committed action	Reviewing emotional inclination in the context of a committed action	Committed action worksheet
12: termination	Reviewing the relationship values and committed action, preparations for committed actions in the future, and termination of the therapy	Concentration exercises for home practice



**Research tools**

**Walker and Thompson Intimacy Scale**

Walker and Thompson's intimacy scale was developed by Walker and Thompson in 1983. It consists of 17 items scored based on a 7-point Likert scale (1=never, 2=rarely, 3=sometimes, 4=often, 5=mostly, 6=almost always, 7=always). The total score on this scale ranges from 17 to 119, and higher scores indicate a higher level of intimacy between spouses. Amadian et al. [25] reported the Cronbach  $\alpha$  coefficient of 0.95 for the scale. In the present study, the Cronbach  $\alpha$  coefficient was obtained at 0.87.

**McMaster Family Assessment Device**

The McMaster Family Assessment Device (FAD) was developed by Epstein et al. [26] to assess family functioning. It is a 60-item self-report measure that assesses 7 dimensions of family functioning: general functioning, problem-solving, communication, roles, affective involvement, affective responsiveness, and behavioral control. This self-report device aims to describe the organizational and structural characteristics of the family and measure the family's ability to adapt to itself and family tasks. It is rated on a 5-point Likert scale (1=strongly dis-

agree to 5=strongly agree). The minimum and maximum scores are 60 and 240, respectively, with higher scores indicating better family functioning. Sahraian et al. [27] reported the Cronbach  $\alpha$  coefficient of 0.92 for the questionnaire. In the present study, the Cronbach  $\alpha$  coefficient was obtained at 0.83.

**Data analysis**

The data were analyzed using descriptive (mean and standard deviation) and inferential statistics (univariate and multivariate analysis of covariance) by SPSS software. The Bonferroni post hoc test was used to determine the mean difference between the groups.

**3. Results**

According to the results of the demographic variables, the Mean $\pm$ SD of the age of participants in ACT, IBCT, and control groups were 31.46 $\pm$ 4.56, 32.55 $\pm$ 4.62, and 32.49 $\pm$ 6.31, respectively. In addition, the participants' duration of marriage in the ACT, IBCT, and control groups were 5.85 $\pm$ 3.63, 6.39 $\pm$  0.12, and 7.53 $\pm$ 5.86, respectively.

According to Table 3, the pretest and posttest Mean $\pm$ SD for intimacy in the ACT group were

Table 2. A summary of IBCT intervention [24]

Sessions	Contents	Objectives
pre-	Communicating with and evaluating the couples (pre-session)	1- Evaluating couples (couple's relationship, extramarital relationships, strengths and weaknesses of the harmed spouse, environmental stressors and their sources, and evaluating the treatment expectations); 2- Initial case conceptualization; 3- Expressing the rules, objectives, the number of sessions, and concluding a treatment contract; 4- Performing the pretest.
1	Controlling further harms in marriage	1- Minimizing further harms in marriage (destructive interactions between couples, destructive behaviors in the absence of the spouse); 2- Promoting effective interactions and sharing feelings with the spouse. Interventions: 1- Teaching communication skills; 2- Pausing technique during an argument; 3- Teaching how to talk about issues.
2	Re-establishing order and balance in daily life and returning to normal life	1- Improving harms caused in the couple's relationship (daily tasks of each spouse, activities that require the support of both sides in the relationship, intimate activities); 2- Improving harm in personal performance (physical activities, social relations, and spiritual activities); 3- Training on flashbacks and re-experiencing trauma and how to deal with it. Interventions: 1- Teaching problem-solving skills about the roles of couples; 2- Teaching how to identify and deal with flashbacks.
3	Regulating emotions and sharing them with the spouse	1- Teaching emotional expression skills; 2- Teaching listening skills; 3- Teaching skills of responding to emotions. Interventions: 1- Determining times to talk about conflicts outside the session; 2- Writing a letter by the harmed spouse on their feelings about the conflict.
4	Discovering factors that lead to marital conflict	1- Preparing the couple to investigate factors involved in the marital conflict; 2- Presenting a model of risk factors in marital conflict (factors related to the marital relationship, extramarital factors, factors related to the spouse participating in the conflict, factors related to the harmed spouse); 3- Investigating factors related to marital relationships in marital conflicts. Interventions: 1- Encouraging couples to have a long-term perspective on marriage; 2- Encouraging couples to explore common areas of conflict in their relationship and offer solutions.
5	Discovering factors that lead to marital conflict	1- Investigating extramarital factors involved in the marital conflict (work and environmental pressures, long-term stress, and lack of social support); 2- Examining factors related to the spouse with conflict (personality traits, and individual factors that cause the conflict to continue). Interventions: 1- Identifying and writing extramarital sources with a negative impact on the marriage that leads to marital conflicts; 2- Identifying and writing extramarital sources with a positive effect on the marriage that protects it against marital conflicts; 3- Discovering factors related to the spouse involved in the conflict; 4- Discovering factors related to the spouse who makes the conflict continue.
6	Case conceptualization of factors involved in marital conflict	1- Examining the characteristics of the harmed spouse that make the relationship vulnerable to conflicts; 2- Examining the characteristics of the harmed spouse that prevent the discovery of conflicts; 3- Examining the characteristics of the harmed spouse that make it difficult to improve the relationship; 4- Case conceptualization of conflicts for couples by considering factors of marital relationship, environmental factors, characteristics of the conflicting spouse, and characteristics of the harmed spouse. Interventions: 1- Discussing characteristics of the harmed spouse that make the relationship vulnerable; 2- Asking couples to write their story about the conflict and the factors involved between sessions and bring them to the next session.

Sessions	Contents	Objectives
7	Investigating forgiveness in the context of conflict	1- Reviewing models of forgiveness; 2- Examining common beliefs about forgiveness; 3- Examining potential benefits and costs of forgiveness; 4- Investigating worries and concerns about forgiveness. Interventions: 1- Identifying misconceptions about forgiveness and correcting them between sessions; 2- Examining strengths of the relationship and factors that boost marital commitment.
8	Moving forward and finalizing the treatment	1- Identify behavioral changes that prevent the recurrence of conflicts; 2- Restoring trust; 3- Examining couples' comments on the extent to which the set goals are achieved; 4- Reviewing performed interventions, summarizing, and terminating the treatment; 5- Getting feedback; 6- Performing the posttests; 7- Determining the follow-up time.



68.07±7.28 and 78.27±7.27, respectively. The pretest and posttest Mean±SD for family functioning in this group were 69.00±77.99 and 81.73±8.86, respectively. In the IBCT group, the pretest and posttest Mean±SD for intimacy were 69.00±77.99 and 81.73±8.86. Meanwhile, the pretest and posttest Mean±SD for family functioning were 124.40±13.15 and 134.80±14.65, respectively. In the control group, the results also showed that the pretest and posttest Mean±SD for intimacy were 67.33±7.29 and 68.13 ± 7.94 and the pretest and posttest Mean±SD for family functioning were 126.73±12.54 and 127.07±2.40, respectively.

Data distribution was examined and the Kolmogorov-Smirnov and the Levene test were used to observe whether the data were parametric or non-parametric. Results of the Kolmogorov-Smirnov test indicated a normal distribution of the data in the pretest and posttest for intimacy and family functioning (P>0.05); the data were normally distributed when conducting the analysis of covariance as well. The non-significant results of the Levene test indicated the homogeneity of variances (P>0.05). The Box's M test revealed the homogeneity

of the covariance matrices. The test indicated that the homogeneity of the covariance matrices was met.

The multivariate analysis of variance showed a significant difference between the three groups at least in one of the dependent variables (Pillai's Trace=1.94, F=32.35, P<0.001). According to Table 4, the results of the 1-way analysis of covariance showed the statistical difference between the experimental and control groups in the scores of intimacy and family functioning (P<0.001).

The results indicated a significant difference between the ACT and IBCT groups and the control group in terms of intimacy (P<0.001), whereas there was no significant difference between the IBCT and ACT groups in this regard. Moreover, there was a significant difference between the ACT and IBCT groups and the control group in terms of family functioning (P<0.001); however, no significant difference was observed between ACT and IBCT in terms of family functioning (Table 5). Therefore, it can be concluded that both IBCT and ACT were almost equally effective in improving intimacy and family functioning in divorce-seeking couples.

Table 3. Mean and SD of research variable in experimental and control groups

Variables	Phases	Mean±SD		
		ACT	IBCT	Control
Intimacy	Pretest	68.07±7.28	69.00±77.99	67.33±7.92
	Posttest	78.27±7.27	81.73±8.86	68.13±7.94
Family functioning	Pretest	125.33±11.56	124.40±13.15	126.73±12.54
	Posttest	130.80±11.22	134.80±14.65	127.07±12.40

ACT: Acceptance and commitment therapy; IBC: Integrated behavioral couples therapy.



**Table 4.** Results of 1-way analysis of covariance on the posttest scores of variables

Variables	SS	df	MS	F	P	$\eta^2$
Intimacy	1029.14	3	343.05	58.84	0.001	0.76
Family functioning	1763.04	3	587.68	139.75	0.001	0.88



#### 4. Discussion

This study aimed to investigate the effectiveness of ACT and IBCT in improving intimacy and family functioning in divorce-seeking couples in Bush-ehr City, Iran. Results showed that ACT improved intimacy in divorce-seeking couples. This finding is consistent with the results of Mohammadian et al. [14]. Intimacy between couples is crucial in creating a long-lasting marriage. The ACT aims to make thoughts and feelings come naturally, resolve conflicts with spouses, start new positive relationships to develop intimacy, and gradually reduce marital burnout in couples. Couples may experience conflict and maladjustment and try to change each other. They avoid releasing their minds from interpersonal differences and follow interpersonal control and hostility toward each other. In this therapeutic approach, intimacy between couples improves as a consequence of acceptance, absence of empirical avoidance and use of control methods, increased mindfulness, determination of values and adjustment of expectations, and reduction of judgment and thinking [14]. On the other hand, individuals' perception of intimate relationships is formed through their emotional exchanges during childhood and their relationship with people close to them. In this approach, informing couples about intimacy schemas and helping to correct them is another factor in im-

proving relationships and increasing couples' intimacy during treatment [28].

During the sessions, couples realized that all problem-solving methods they have used for years are just control and avoidance. As creative helplessness was established using acceptance and commitment techniques, the problem-solving process and the way they dealt with their thoughts changed, and these factors boosted their intimacy at the end of treatment. ACT allows couples to change their relationships with inner experiences, reduce empirical avoidance, and increase resilience and action in valuable paths. Changing relationships with inner experiences involves expanding and clarifying the inner consciousness. In addition, in this method, strengthening a non-judgmental and compassionate relationship with experiences is emphasized. Self-compassion improvement and strengthening are major aspects of this therapeutic approach to reduce reactivity, fear, and misjudgment. They are shown to increase discomfort and tension between individuals and motivate them for experiential avoidance [29].

Results showed that IBCT improved intimacy among divorce-seeking couples. The findings of this study on the effectiveness of IBCT comply with the principles of cognitive behavioral couples therapy which are the basis of the integrative approach. There are structured and direct strategies in the IBCT which help couples ex-

**Table 5.** Bonferroni post hoc test for paired comparison of the variables in the posttest phase

Variables	Groups	Mean Difference	SE	P
Intimacy	ACT-Control	9.15	0.89	0.001
	IBCT-Control	10.72	0.88	0.001
	ACT-IBCT	1.56	0.88	0.491
Family functioning	ACT-Control	8.29	1.04	0.001
	IBCT-Control	8.35	1.04	0.001
	ACT-IBCT	0.05	1.04	0.998



ACT: acceptance and commitment therapy; IBCT: integrated behavioral couples therapy; SE: standard error.

perience less affective disturbance and reduce the intensity of their negative interactions. Therefore, behavioral techniques may resolve conflicts, increase communication between couples, and lead to a positive interpersonal environment. By modifying maladaptive schemas and converting them into reliable adaptive ones, cognitive techniques make couples understand each other's feelings and increase intimacy between them [21]. Integrative behavioral couples therapy emphasizes mutual knowledge of couples and regards it as an integrated part of the change process in them. These principles emphasize correcting the misconceptions of couples about each other, which will eliminate misunderstandings, reduce resentment and anger, make couples pay attention to the positive aspects of each other's behavior, and ultimately, increase mutual intimacy. The philosophical underpinning of this view is that behavior change, alone, is not enough to correct inadequate interactions and emphasis should be placed on the way people think about maladaptive relationships and patterns of behavior.

Results also proved that ACT is effective in improving couples' family functioning. Every family needs to move within the framework of values. Families function well when they move within the framework of values. Family functioning can be determined by their success in progressing in the direction of values. Couples on the verge of divorce or separation are no exception. They often suffer from shortcomings that deprive them of the opportunity to move in the direction of values because of their problems. ACT is effective in improving family functioning as it focuses on clarifying and specifying values, identifying barriers, and creating a sense of commitment [30]. The ACT treatment seeks to help individuals discover the difference between reality and internal events [31]. If this approach focuses on defusion and lack of fusion, it will improve effectiveness and functioning. This therapeutic approach helps families who are on the verge of separation to function more based on reality than their perceptions and thoughts of events. Defusion can improve family functioning at both family and individual levels.

One of the major techniques in the ACT approach is non-avoidance training, through which individuals learn to reduce their cognitive avoidance and instead seek the meaning of life. Another technique employed in this approach is strengthening the ability to pay non-judgmental attention to harmful thoughts, mental images, and memories resulting from challenging experiences (fostering mindfulness skills). Through mindfulness skills, the ACT treatment enables individuals to observe their mental images, allows them to look at their thoughts and

images instead of being involved in them, and to use problem-solving power to think about the challenges ahead [32]. It should be noted that therapeutic changes resulting from this approach help individuals accept the traumatic events of the past more and avoid control and avoidance when they find them ineffective. Instead, they define their life values and organize their actions based on moving in the direction of defined values. As they pass this process, they get rid of ruminations through accepting thoughts and separating acts from thoughts, and returning to their valuable life path.

Results showed that IBCT was effective in improving family functioning among divorce-seeking couples. The IBCT states that over time, even the happiest and healthiest couples experience differences that are both normal and unavoidable. Early in the relationship, it is easy for many couples to accept and tolerate differences, but as time passes, some couples lose their tendency to accept, tolerate, and compromise their differences, which reduces optimal family functioning [20]. This therapeutic approach strongly emphasizes acceptance. Optimal family functioning occurs through mutual interest, caring for each other, acceptance, mutual understanding, and satisfying needs. In optimal functioning families, couples have a great deal of compromise, are satisfied with the type and level of relationships, the type, and quality of leisure time, and exercise optimal management in their time and financial affairs [24]. In the IBCT, various techniques are used to improve family functioning some of which are as follows: creating acceptance through an empathic union between couples and helping them see the world from each other's perspective, creating acceptance through allied defusion, creating tolerance by practicing negative behavior in a therapeutic session in the presence of a therapist and learning to appropriately respond to events, developing tolerance by practicing behavior at home with the spouse, boosting tolerance through self-care, and increasing positive couple interactions through behavior exchange and problem-solving communication training.

Similar to any other research, this study faced some limitations. The conduction of two different interventions by a therapist at short intervals may cause interference in some elements. Moreover, despite observing all health protocols (e.g. disinfection of all surfaces), the excessive concern of some participants about the COVID-19 pandemic could negatively affect the quality of the information provided by them. Another research limitation was the impossibility of using a larger sample because of observing physical distancing.

## 5. Conclusion

The study findings suggested that ACT and IBCT were equally effective in improving the intimacy and family functioning of divorce-seeking couples. Since ACT and IBCT are less costly but more effective approaches, the results of the present study suggest that therapists use ACT and IBCT in the treatment of patients to solve couples' marital problems and promote the intimacy and family functioning of their families. Future studies are recommended to investigate men and women separately to determine the effects of gender differences on the results of different treatment models and different variables such as intimacy.

## Ethical Considerations

### Compliance with ethical guidelines

The study was approved by the Research Ethics Committees of Bushehr Province University of Medical Sciences (Code: IR.BPUMS.REC.1400.011).

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### Authors' contributions

Conceptualization and supervision: Ali Pooladi Rishehri and Seyed Esmail Mousavi Haghighi; Methodology: Ali Pooladi Rishehri; Investigation, Writing—original draft, and Writing—review and editing: All authors; Data collection: Seyed Esmail Mousavi Haghighi; Data analysis: Seyed Asghar Mousavi.

### Conflict of interest

The authors declare no conflict of interest.

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