Research Paper

Impact of Object Relations Couple Therapy on Marital Intimacy of Divorce Applicant Couples With High-level Borderline Personality Organization: A Pilot Study Considering the Moderating Role of Executive Functions

Sahereh Safavi, Shahrokh Makvand Hosseini, Parvaneh Mohammadkhani, Parviz Sabahi

1. Department of Psychology, Faculty of Psychology and Educational Sciences, Semnan University, Semnan, Iran.
2. Department of Clinical Psychology, Faculty of Psychology, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.

* Corresponding Author:
Shahrokh Makvand Hosseini, PhD.
Address: Department of Psychology, Faculty of Psychology and Educational Sciences, Semnan University, Semnan, Iran.
Tel: +98 (912) 3072411
E-mail: shmakvand@semnan.ac.ir

Objective: Recently, the stability of marriages and the proper communication between couples has become more difficult. Therefore, exploring the impacts of relevant clinical interventions in resolving marital conflicts seems crucial. This study investigates the effectiveness of object relations couple therapy on marital intimacy of divorce applicant couples with high-level borderline personality organization while considering the moderating role of executive functioning.

Methods: Using a quasi-experimental design, a sample of 90 volunteers was selected from all couples seeking a divorce and referred to counseling centers in Tehran City, Iran. All participants were screened by Structured Interview of Personality Organization (STIPO). A final sample of 38 individuals with high-level personality organization was randomly divided into control and experimental groups. After dropping the sample, 11 couples remained in the experimental group and 8 in the control group. Participants in the experimental group received 14 sessions of object relations couple therapy, while the control group remained on the waiting list. The Wisconsin Card Classification Test (WCST) and Thompson and Walker’s marital intimacy scale were administered on pre- and post-intervention occasions as well. The data were analyzed by a multivariate analysis of covariance.

Results: Significant positive effects were found on marital intimacy in the post-intervention stage (P<0.001). Significantly, better results were also evident for couples with higher executive function scores (P<0.001).

Conclusion: It could be concluded that object relation couple therapy could promote the marital intimacy of couples with high-level borderline personality organization, and executive functioning could moderate the therapeutic effects.
1. Introduction

Marriage is the most vital and fundamental human relationship because it provides the basic structure for establishing a family relationship and life satisfaction (Lavner, Karney, and Bradbury, 2016). Indeed, marriage is a commitment to love and responsibility for peace, happiness, and the development of family relationships. In addition, choosing a partner and entering married life is a turning point in life and personal success (Roa, 2017).

Marriage is the creation of a relationship in which each of the two members can experience the highest level of intimacy. Although this relationship can be accompanied by a feeling of intimacy and calm, it may fail and cause damage (Leonidou et al., 2017). Marriage is known as the most intimate (Scharf, 2014) relationship in adulthood (Kamalian, Mirza Hosseini, and Monirpour, 2020). Most couples’ therapists believe that marital intimacy is a key part of a satisfying marital relationship and the stability of the marriage. However, the rising divorce rate indicates that during life, the relationship between spouses has undergone changes that have increased the differences between them and eventually led to their divorce (Zareinejad, Pourhossein, and Rahiminejad, 1396).

The divorce scenario is not a sudden struggle but a gradual lack of intimacy and closeness (Haghighi, Zarei, and Qaderi, 2012). Intimacy is made up of multiple elements that grow over time and follows a step-by-step pattern. This pattern begins with rational intimacy (conversation and self-disclosure) and continues with physical intimacy (holding hands, hugging, and sex), and then leads to emotional intimacy (accessibility, support, emotional expression, and mutual sensitivity) (Hanning et al., 2007). High levels of emotional intimacy in a person’s relationship is one of the powerful predictors of physical and mental health, in addition to mutual satisfaction (Dandorand, Lafontaine, 2013).

In recent decades, the effect of personality on people’s interactions in emotional and intimate relationships between two people has attracted much attention. Some personality traits increase tensions and incompatibility in couples and threaten the continuity of their marital life (Mousavi, Fatehzadeh, and Jazayeri, 2017). Sheikh Zaimuddin, Farrokhi, and Abbaspour Azar (2018) found those personality traits as characteristics that people

Highlights

- The Borderline level of Personality Organization (BPO), characterized by identity pathology, the predominance of splitting-based defenses, and deficiencies in social reality testing, covers a relatively broad spectrum of personality pathology.
- At the higher end of the BPO spectrum, patients have some capacity for dependence, albeit troubled relationships generally have relatively intact or only minor pathology of moral functioning and are not overly aggressive in most settings.
- Object relations couple therapy seeks to resolve couples’ current conflicts by providing them with insights into the patterns of communication they bring from their family of origin and primary relations with caregivers, and the fact that they project their internally repressed objects onto each other.
- The results indicate the effectiveness of this treatment on conflicts between couples with high-level BPO.

Plain Language Summary

Personality organization of individuals has a crucial role in maintaining the relationship between couples and resolving their conflicts, for it leads to differences in adaptation and behavior of individuals in dealing with problems. In addition, executive functions are crucial features that can affect a person’s flexibility and problem-solving abilities. Based on psychoanalytic approaches, personality organization and adult conflicts result from individual childhood events and the initial relations with caregivers. Accordingly, object relations couple therapy aims to solve couples’ problems by offering them insight into the similarity of their conflicts to the dimensions of their relations with primary caregivers in their family of origin. This study seeks to investigate the effectiveness of this therapeutic approach in increasing the marital intimacy of couples with personality disorders by considering the role of executive functions of couples on the therapeutic impact.
bring to their married life; they affect the mediating structures in dealing with marital problems.

In research, Habibi AskgarAbadi and Haji Heidari (2015) mentioned personality problems as one of the three main reasons for divorce in Iran. Personality traits of individuals can shape the overall quality of the relationship and the quality of the couple’s relationship; in turn, it affects the likelihood of relationship breakdown (Solomon and Jackson, 2014). In his contemporary object relations theory, Kernberg describes a multidimensional model of personality that focuses on evaluating three key areas: identity disorder, primary psychological defenses, and reality testing (Kernberg & Caligor, 2005).

In his notes and clinical tutorials, Kernberg associated clinical personality pathology with the individual’s condition in three dimensions that lead to two basic levels: borderline (BPO) and neurotic (NPO) levels of personality organization (Stern et al., 2010). Thus, personality organization pathology is divided into two main categories based on Kernberg’s theory. The first level has the least intensity and is called the neurotic level of personality organization. At this level, the personality of individuals is rigid and incompatible, but they have a unified identity. The defense mechanisms of these individuals are high-level and based on repression, and the reality test is intact. However, at the second or severe level, which is called the borderline level of personality organization (BPO), some people have clinically significant character rigidity and incompatibility, as well as identity damage. In these people, low-level defense mechanisms based on splitting are predominant. Although some forms of reality testing are sometimes healthy, their ability to understand the inner states of others is impaired. Patterns of internal relationships that reflect spaces of incompatibility are kept out of one’s consciousness through defensive operations; therefore, these defenses protect the individual from the threatening and painful aspects of their inner life that ends at the cost of creating character rigidity (Caligor, Kernberg, & Clarkin, 2007). Based on the STIPO-R dimensional ratings, this categorization can be made, differentiating normal, neurotic, and borderline personality organization, categorized into three levels according to their severity: high, mid, and low BPO. Patients in a borderline level of personality organization range from high to mid and then to low, with an increase in identity diffusion, the use of primitive defense mechanisms, overt manifestations of aggression, increased disturbance of object relations, and diminished use of internal standards of morality (Clarkin, Caligor, Stern, & Kernberg, 2019).

STIPO is a semi-structured interview to assess the pathological dimensions of personality in the context of Kernberg’s specific theory of psychodynamics (Stern et al., 2010).

In addition, various studies in couple relationships show that conflicting couples have problems in various components in the subsets of executive functions. Executive performance is a general term that encompasses a wide range of cognitive processes and behavioral abilities such as problem-solving ability, attention, reasoning, organizing, planning, working memory, inhibitory control, impulse control, stimulus retention, stimulus change, and response inhibition (Isquith, Roth & Gioia, 2013). People with an active behavioral inhibition system internalize their aggression and experience great anger. They are also less likely to forgive themselves and their spouses for their mistakes (Johnson, Kim, Givaneli, & Kagel, 2010). Executive functions can be considered above all the ability of cognitive flexibility and managing interfering components in goal-oriented behaviors, and predict the consequences of a performance (Schmeichel & Tang, 2015). In their study, Isazadegan and Dostalizadeh (2020) showed that cognitive flexibility is a crucial component in continuing cohabitation, marital satisfaction, and intimacy. Individual differences in brain-behavioral systems, including levels of executive functions, may affect how spouses respond to conflicts and lead to different behaviors (Johnson, et al., 2010).

Object relations theorists believe that personality is structured in patterns of emotions, behavior, and thoughts due to changes in early and current relationships. Thus, the theory of object relations considers the internal structure of an individual in a social context with emphasis on the role of interpersonal interactions, both in personality development through the relationship with primary caregivers and in creating and maintaining psychological and behavioral patterns in current relationships with family, friends, or colleagues (Poulton, 2013).

The object relations perspective emphasizes the internalization, structuring, and reactivation of the oldest binary object relations in the clinical space (transference and countertransference). The internalization of object relations refers to the concept of all infant or child interactions with the faces of important persons. The child internalizes an image, a representation of a person, or a representation of a person interacting with the object. From the point of view of object relations theory, a person grows up with distorted expectations of others, subconsciously forcing intimate persons to conform to such internal patterns of roles. A major source of mari-
tal discord is spouses who project their repulsive aspects onto their partners and then struggle with these traits in their spouse. Also, a couple may consider inappropriate family roles for their children based on their intuitions. Unresolved psychological conflicts with the family of origin continue to be expressed in intimate relationships with spouses and children. The efforts made by couples to resolve internal conflicts through interpersonal relationships are the main focus of all problems observed in marriages and troubled families (Burch, 2012; quoted by Honarparvaran, 2017).

Object relations couple therapy assumes that humans are prone to problem-stabilizing interactive patterns as they build their current relationships based on unconscious communication patterns formed during the early years of life (Glick, Rait, Heru, & Ascher, 2017).

In this approach, it is believed that a person’s current communication problems are a reflection of the main family issues because each person has idealistic beliefs about marital relationships and wants to satisfy their unmet needs from childhood relationships with their parents in a marital relationship (Siegel, 2020). The advantage of object-oriented couple therapy is that, unlike most couple therapy perspectives, it addresses unconscious desires and unrealistic expectations, which can lead couples to a cycle of marital conflicts. Couples can change their perspective and behavior by knowing their problems are due to their inchoate work in the previous family. This approach also tries to explain current interactions in terms of past internalization. This model allows therapists to focus on past and present periods (Glick et al., 2017).

Object relations couple therapy provides deep integration between individual dynamics and a systematic understanding of couples and their extended families. This treatment emphasizes the origins of intergenerational growth and the centrality of relationships. Object relations couple therapy focuses on the relationship between couples according to the interactive patterns and participation of each of them. In this treatment, the focus is on helping couples to achieve the right level of functioning in their life stages and the intimacy they seek, rather than the symptoms that bring them comfort by themselves (Kerr, 2013).

Landucci and Foley (2014), in their study entitled “Treatment of Selected Couples With Personality Disorders in the Context of Psychodynamic Therapy,” examined the characteristics of different types of personality disorders and their specific defenses in couple therapy. In addition, Honarparvaran (2017) examined the effect of the integrated approach of Imago therapy and object relations on controlling the emotions of infidel couples. He reported that this approach could be used to reduce the damage caused by marital problems.

Hosseini, Vakili, and Abolmaali Al-Husseini (2021) also showed that object relations couple therapy is a fine approach to increase positive emotional expression and intimacy and reduce negative emotional expression in spouses with marital conflicts. In addition, Jahanbakhshian, Rasouli, Tajik Ismaili, and Sarami Foroughani (2019) also reported in their research that object-oriented couple therapy could be effective in increasing women’s marital intimacy and resolving marital conflicts.

Therefore, this study aims to investigate the effectiveness of object relations couple therapy on marital intimacy of couples seeking divorce with high-level personality organization by considering the mediating role of couples’ executive performance. This research seeks to answer whether object relations couple therapy can enhance marital intimacy in couples seeking a divorce with high-level personality organization.

2. Participants and Methods

This research is a quasi-experimental study with a pre-test-posttest design with a control group. The study’s statistical population included all couples seeking a divorce who were referred to counseling centers in Tehran City, Iran. A total of 45 couples (90 people) seeking divorce were screened using STIPO to access the research sample in the initial stage of the national screening plan for couples seeking a divorce in Tehran. Based on the score obtained from the instructions of this scale, individuals with high-level BPO were identified (those with an average score of 3 in subscales of STIPO). The purpose and method of conducting the research were explained to the couples who obtained a high-level BPO based on the obtained score. Among those who completed the informed consent to participate in the research project and by controlling the inclusion and exclusion criteria of the study, a sample of 24 couples was formed and randomly divided into two groups; control and experiment.

The inclusion criteria contained the following items: 1) age range of 18 to 50 years, 2) at least one year of living together, and 3) having at least diploma education. Meanwhile, the exclusion criteria contained the following items: 1) the use of psychiatric drugs, 2) the existence of substance abuse disorder in one of the couples, 3) participation in one of the treatments, and 4) recent
individual or couple therapy. Wisconsin and Marital Intimacy tests were taken from all subjects, and the experimental group received 14 sessions of object relations couple therapy; however, no intervention was performed on the control group. Finally, after the dropout of some samples, 11 couples remained in the experimental group and 8 couples in the control group who completed the posttest scales.

The object relations couple therapy used in this study included 14 sessions for 45 minutes in pairs, based on the instructions of Donovan (2003). Table 1 presents the content of the sessions, designed using the object relations couple therapy of Donovan (2003). Each session, which was one and a half hours long, was divided into two 45-minute sessions.

In this study, we used the following tools to collect the study data.

**Revised Version of Structured Interview of Personality Organization (2016)**

The Revised Version of the Structured Interview of Personality Organization (STIPO-R) is designed to assess personality function areas central to understanding the object relations theory of personality and its pathology. STIPO is a guide for examining the level of personality organization of individuals based on the concepts of Kernberg’s (1996) psychodynamic theory. In this interview, six personality structures are examined: identity, object relations, defenses, aggression, moral values, and narcissism (Clarkin, et al, 2007). The revised version of this interview (2015) is intended to shorten the original extended version (2007) to increase its research and clinical application, as well as to modify cases that did not have desirable psychometric properties. STIPO-R consists of 55 items that measure six personality structures: identity, object relations, defenses, aggression, moral values, and narcissism (Clarkin, et al, 2015). According to the answers of the person in each of the above components, a score in the range of 1 to 5 is given, which is based on the cutoff line provided in the instructions of this interview (Clarkin, et al, 2019), the level of organization of the person’s personality is determined, including normal, neurotic, and BPO differentiated into three levels of high, mid, and low. Based on the STIPO-R dimensional ratings, if a person’s average score in each of the 5 areas is equal to 3, the person’s personality organization will be classified as a high-level BPO (Clarkin, et al, 2019).

The study results of Stern et al. (2010), which evaluated the psychometric properties of the previous version of this interview, showed its internal consistency coefficients in the range of 0.84 to 0.97. In addition, in the study of Doering et al. (2013), the reliability of the Cronbach α method for this scale was reported to be 0.97. In the present study, the reliability of this interview was obtained at 0.86 by the Cronbach α method, and the internal consistency coefficients of its subscales were in the range of 0.54 to 0.77.

**Wisconsin Card Classification Test**

This Wisconsin card classification test was designed by Grant and Berg in 1948 to measure executive performance, abstraction, and ability to change cognitive strategy, cognitive flexibility, and problem-solving (Cavallo et al., 2003). This test is considered one of the most sensitive tests related to the function of the frontal cortex and the lateral dorsal region of the frontal lobe. It measures a complex range of executive functions, including planning, problem-solving, abstract reasoning, concept forming, having cognitive flexibility, and inhibiting impulsive responses (Lezak, 2004). The test consists of 64 cards on which one or four symbols are engraved in a red triangle, a green star, a yellow cross, and a blue circle; also, no two cards were similar or duplicated. The subject’s task is to place the cards based on inference from the pattern used by the examiner. This pattern consists of a red triangle, two green stars, three yellow crosses, and four blue circles. The principle for the classification and the placement of cards is their color, shape, and number of symbols, respectively, which the examiner considers without informing the subject. When the subject can categorize ten cards in a row by color, the examiner changes the criterion. The test continues until the subject can swap ten cards six times. In calculating the test results, three factors are considered: 1) the number of cards dealt during the test (number of classes), which indicates the subject’s progress and the discovery of six series; 2) the persistent or enduring error is attributed to choices in which the participant insists on the previous answer after changing the test rule in ten open attempts, this error is a major indicator of cognitive inflexibility and a sign of injury in the lateral dorsal areas of the forehead cortex; and 3) the general error indicates the number of times other than instances of residuality in the correct selection of card handles. (Lezak, 2004) reported that its validity in assessing cognitive impairment (after brain injury) was more than 0.86. In Iran, Naderi (1996) has calculated and reported the validity of this test equal to 0.85 in the Iranian population using the retest method (quoted by Ghasemi et al., 2012).
Marital Intimacy Questionnaire

The Marital Intimacy questionnaire was developed by Walker, Skowronski, and Thompson (1983) and included 17 questions designed to assess the level of marital intimacy of couples (quoted by Davoudvandi Navabinejad, Farzad, 2018). In Iran, this scale has been used in a sample of 100 couples in Isfahan City, and the reliability coefficient of the whole scale by the Cronbach alpha method has been reported to be 0.96, which indicates the acceptable reliability of this scale. In addition, calculating the reliability coefficient by deleting one of the questions also indicated that omitting any of the questions did not have a significant effect on its reliability and that the questionnaire has a good internal consistency (Momeni, Kavousi, & Amani, 2015). In the present study, the reliability of this scale was obtained at 0.92 by the Cronbach α method.

Regarding the ethical principles in the present interventional study, the American Psychological Association, as well as the Iranian Psychological and Counseling Organization’s ethical criteria, were considered. After introducing to the participants, the researcher explained the purpose of the research to all participants and emphasized their voluntary participation in the research. Accordingly, written consent was obtained from all participants, and they were assured that all information remains confidential. Other points related to research ethics were also observed, such as ethical values in data collection, prioritizing the psychological health of participants, objectivity in data analysis, and accuracy in the citation.

Statistical analysis

It was found from the statistical studies that the average age of the experimental and control groups were 30.32 and 29.63 years, respectively. Regarding marriage duration, the average of the two groups was 4.64 and 4.43 years, respectively. The amount of t statistic comparing the frequencies of the two groups in the above variables was not significant (P<0.05); therefore, the experimental and control groups lacked a significant difference in the above components.

Statistical pre-assumptions of the analysis of covariance were also examined. The result of the Shapiro-Wilks test was not significant for the marital intimacy variable (P<0.05); therefore, the marital intimacy variable followed the normal distribution. The result of Levene’s test was also not significant; therefore, the assumption of the equality of variances was established (P<0.05). The results of the Box test were also not significant; thus, the assumption of the equality of variance was observed, and based on this, the use of the analysis of covariance method was certified to test the research hypothesis.

According to Table 2, the mean of the pretest score of marital intimacy in the experimental group increased in the posttest phase. The study hypothesized that object relations couple therapy positively affects marital intimacy in divorce applicant couples with mild BPO. The results of the analysis of covariance for evaluating the effectiveness of couple therapy on marital intimacy are presented in the following tables.

Table 3 indicates that by controlling the effect of the pretest score, a significant difference is seen between the adjusted mean of the participants’ marital intimacy scores in terms of group membership (experimental and control) (P<0.05). Accordingly, the first research hypothesis is approved. The effect size according to the partial coefficients of Eta also shows that the intervention has led to a 34% upgrade in the score of marital intimacy in the subjects.

To investigate the mediating role of executive functions, two vital indicators of executive functions in the Wisconsin test were considered: 1) the number of completed categories, which indicates the ability of the individual’s mental executive performance; and 2) the number of aberration errors, which indicates the individual’s cognitive flexibility. The experimental group was divided into two groups with high and low executive performance, as well as high and low cognitive flexibility. In addition, the improvement percentage in the samples of the experimental group was calculated for the components of marital intimacy. On this basis, the analysis of variance test was used to analyze the difference in the improvement percentage between groups.

The results of Table 5 indicate a significant difference (F=5.156, P<0.05) between the two groups of couples with high executive performance and low executive performance. Because of the difference in the average percentage of improvement observed in the marital intimacy variable in Table 4, the executive performance mediates the effectiveness of object relations couple therapy, and higher executive performance as a moderator improved the effectiveness of treatment on the variable of marital intimacy in both groups. The moderating role of couples’ executive functions is confirmed in the effectiveness of object relations couple therapy.
The results of Table 7 indicate that there is a significant difference ($F=5.312, P<0.05$) between the two groups of couples with high cognitive flexibility and low cognitive flexibility. Because of the difference in the mean percentage of improvement observed in the marital intimacy variable in Table 6, the cognitive flexibility index has a mediating role in the effectiveness of couple therapy, and higher cognitive flexibility as a moderator has improved the effectiveness of treatment on the marital intimacy variable in both groups. Accordingly, the research hypothesis regarding the moderating role of couples’ cognitive flexibility in the effectiveness of object relations couple therapy is confirmed.

4. Discussion

The present study was conducted to determine the effectiveness of couple therapy based on object relations on the marital intimacy of couples seeking divorce with high-level BPO. The study showed that object relations couple therapy has significantly increased marital intimacy in couples seeking divorce with a high-level BPO. This finding was consistent with the findings of Jahanbakhshian, et al (2019), that examined and confirmed the effectiveness of group therapy based on short-term couple therapy on marital intimacy. In addition, Honarparvaran (2017) showed the effectiveness of the combined approach of Imago therapy and object relationships in controlling the emotions of unhappy couples. In their study, Shaker Dolagh, et al (2014) showed that short-term object relations couple therapy improves family performance. Divorce-seeking couples reported similar results. The results of the above study are also based on the findings of Landaki and Foley (2014) studies showing the effectiveness of dynamic psychotherapy on couples with personality disorders. Also, Poulton (2013) study on the effectiveness of object relations therapies on couples, and Ahmadi, Ahmadi, and Fatehizadeh (2006) were consistent in a study that examined the effectiveness of short-term object relations couple therapy on couples’ communication patterns. In explaining this finding, it can be said that object relations, which is one of the main concepts of psychodynamic theories, play an essential role in all aspects of interpersonal communications and social interactions. Dynamic psychotherapists focus on the impact of past experiences and analyze the parts of the self that affect a person’s current life but are unconscious and not fully understood (Schedler, 2010).

In romantic relationships, couples project their repressed internal objects onto each other, forcing their spouses to accept the role through projective replication (Glick, et al., 2017). Therefore, in object relations couple therapy, couples learn to use their proper control in their relationships to eliminate the system of mutual projection and accept the other as they are. This insight into the patterns projected in the current relationship in a safe treatment environment is considered the basis for change (Mubasem et al., 2013).

In addition, most divorce applicant couples referred to counseling centers face externalization and external documentation of their problems and seek the cause of their conflicts and incompatibilities in external factors. Meanwhile, they lack sufficient insight into the underlying factors of their problems. It has also been repeatedly seen that during interviews, they ignore their role in dealing with and investigating conflicts. In object relations couple therapy, the main focus is on the psychological organization and object relation patterns of the individual, which is currently reflected again in marital relationships (Jahanbakhshian, et al, 2019). This emphasis directs the individual’s attention to see his role and emotions influenced by the representations of elementary objects; meanwhile, object relations patterns transferred from the person’s early past in the process of living together, as well as resolving conflicts so that couples achieve this insight. Many of their interpersonal conflicts can result from representing intra-psychological conflicts or passing on patterns, roles, and objects from one generation to the next. With that in mind, one has the opportunity to accept, write one’s life scenario, and make positive changes in the relationship by accepting this responsibility.

From the point of view of object relations therapists, intimacy develops through a dynamic process in which a spouse expresses their feelings, thoughts, personal information, and other responses to the experience of the feeling of being understood. Recognized and cared for, and by internalizing the experiences gained from such interactions, the individual forms general internal representations that reflect the degree of intimacy and meaningfulness of the relationship. As a result, the intimacy in the relationship gives the couple a sense of understanding, in a way that they feel comfortable in expressing their concerns to each other, and their openness is mutually understood and, more importantly, accepted (Scharff, 2014). In romantic relationships, couples project their repressed internal objects on each other and force their spouse to accept this role through projective assimilation (Glick, et al., 2017). Developing intimacy in a couple’s relationship requires reorganizing the represented world that is essentially formed in childhood. In object relationship therapy, couples learn to use self-control in their relationships to separate themselves from the reciprocal projection system and accept their spouse as they are.
Table 1. The content of object relations couple therapy sessions

| Session | Subject                                      | Content                                                                 |
|---------|----------------------------------------------|--------------------------------------------------------------------------|
| 1       | Communication, conflict analysis, familiarity with object relations theory, Pretest implementation | Introduction, concluding a medical contract, stating the purpose of the session, communicating with the couples, measuring and evaluating the problem, explaining the theory of psychoanalysis and the theory of object relations, conducting a Pretest |
| 2       | Investigating conflicts                      | Receiving feedback from the previous session, summarizing the previous session with the help of participants, identifying the events that lead to the conflict, identifying each couple’s feelings about the conflict and the position that each couple takes in the fight, drawing an object relations map, providing homework, receiving feedback |
| 3       | Investigating the focus triangle              | Receiving feedback from the previous session, reviewing and discussing the content and assignments of the previous session, drawing the focus triangle by giving an example, drawing a genealogy of the main family and identifying the personality traits of each parent, identifying the characteristics that each one of the couples has been brought into their married life from the main family, providing homework, receiving feedback |
| 4       | Investigating the conflict triangle           | Receiving feedback from the previous session, reviewing and discussing the content and tasks of the previous session, drawing the conflict triangle by giving an example, identifying the defense mechanisms, anxieties, and inner feelings of the couple, stating that replication with projection and triangle conflict arises in an internally strained relationship, giving homework, receiving feedback |
| 5       | Change and reform conflict triangle           | Receiving feedback from the previous session, reviewing and discussing the content and task of the previous session, re-examining the focus triangle, correcting the conflict triangle by reducing the couple’s defense methods, providing homework, receiving feedback |
| 6       | Working on conflicts and devising ways to resolve them | Getting feedback from the previous session, reviewing and discussing the topics and assignments of the previous session, identifying the ways that couples use to reduce their conflicts, training techniques to improve and strengthen the relationship, factors that lead to problems in couple’s communication, giving homework, receiving feedback |
| 7       | Final conclusion and posttest implementation  | Receiving feedback from the previous session, reviewing and discussing the contents and tasks of the previous session, summarizing and discussing the couple’s personality structure, conducting a posttest |

In this treatment, insight into the patterns projected in current relationships in a safe treatment environment is considered the basis for change (Mobassem et al., 2013).

In addition, according to the statistical findings, the number of completed classes in the Wisconsin test, which represents the executive appearance and function of the brain’s frontal lobe, has a moderating role in the positive effects of treatment in the study sample. No studies were found in the literature that directly examined the executive performance of couples independently. To explain this finding, it can be said that executive performance refers to a variety of related high-level cognitive skills that allow the individual to independently perform complex and purposeful behaviors that can range from factors such as willpower and self-regulation, including planning, decision making, targeted actions and dynamic performance (Randolph & Chaytor, 2013). These factors are capabilities that include higher levels of cognitive processing. They can, therefore, affect a person’s processing and perception of the treatment process and content, as well as enhance the therapeutic alliance while coordinating and implementing therapeutic principles in couples’ personal experiences.

The findings also showed that the number of aberration errors in the Wisconsin test, which is an indicator of a person’s cognitive flexibility, acted as a moderator in the positive effects of treatment. This finding is consistent with the findings of Koesten (2009), who showed that cognitive flexibility has a moderating role in couples’ communication and conflict resolution. In addition, the results of Mashayekh and Asgarian (2020) showed a significant positive relationship between cognitive flexibility and positive thinking, and intimacy of couples. Also, the research by Issazadegan and Dost-Alizadeh (2020) introduced flexibility cognition as an essential factor in the continuation of cohabitation and the choice of coping style of couples seeking divorce; and Hill (2008) considered cognitive flexibility as one of the most important factors affecting marital satisfaction. To explain this finding, it can be said that higher cognitive flexibility can lead to greater adaptation of couples to situations, understanding the requirements of the situation, willingness to talk, tolerance of disagreement, willingness to forgive,
Table 2. Mean±SD of pretest-posttest scores of marital intimacy variable according to group membership

| Group               | Mean±SD Experimental Group | Control Group |
|---------------------|-----------------------------|---------------|
|                     | Pretest | Posttest | Pretest | Posttest |
| Marital intimacy    | 31.55±7.81 | 66.68±13.21 | 32.63±5.31 | 32.31±6.12 |

Table 3. Results of univariate analysis of covariance for evaluating the effectiveness of object relations couple therapy on marital intimacy

| Source of Changes | Sum of Squares | df | Mean of Squares | F     | P       | Eta Coefficient | Statistical Power |
|-------------------|----------------|----|-----------------|-------|---------|-----------------|--------------------|
| Group membership  | 116.57         | 1  | 116.57          | 3.34  | 0.021   | 0.34            | 0.44               |

Table 4. Descriptive statistics of improvement percentage variables in marital intimacy in couples with high and low executive performance executive

| Group Index | Couples with low executive performance n=11 | Couples with high executive performance n=11 |
|-------------|---------------------------------------------|---------------------------------------------|
| Improvement Percentage in marital intimacy variable | Mean±SD | Min | Max | Mean±SD | Min | Max |
|             | 94.69±35.02 | 41.18 | 150 | 145.53±65.47 | 52.08 | 264.71 |

Table 5. Results of ANOVA for examining the difference in improvement percentage between groups based on the level of executive performance

| Variable                                      | Sum of Squares | df | Mean of Squares | F     | P       |
|-----------------------------------------------|----------------|----|-----------------|-------|---------|
| Improvement percentage in marital intimacy variable | 14215.2       | 1  | 14215.2         | 5.156 | 0.036   |

Table 6. Descriptive Statistics of Improvement Percentage of Marital Intimacy in Two Groups of Couples With High and Low Cognitive Flexibility (Based on Replication Error Index)

| Group Index | Couples With Low Cognitive Flexibility, n=9 | Couples With High Cognitive Flexibility, n=13 |
|-------------|---------------------------------------------|---------------------------------------------|
| Improvement percentage in marital intimacy variable | Mean±SD | Min | Max | Mean±SD | Min | Max |
|             | 89.2±36.31 | 41.18 | 150 | 141.51±60.72 | 52.08 | 264.71 |

Table 7. Results of ANOVA for evaluating the difference in improvement percentage between groups based on the level of cognitive flexibility

| Variable                                      | Sum of Squares | df | Mean of Squares | F     | P       |
|-----------------------------------------------|----------------|----|-----------------|-------|---------|
| Improvement percentage in marital intimacy variable | 14544.11      | 1  | 14544.11        | 5.31  | 0.032   |
and adaptation to communication changes (Mashayekh and Asgarian, 2020). Therefore, all of these cases affect the degree of adaptation and cooperation of individuals to treatment, and the couple therapy process is one of the main manifestations of changing communication patterns between couples. Couples with more cognitive flexibility, less resistance, and less dryness in the face of the couple therapy process are more effectively adapted to the correctional contents and have a higher capacity to accept treatment. Thus, cognitive flexibility can play an effective role in the effectiveness of treatment.

5. Conclusion

Based on what was discussed, this approach, in addition to clinical and therapeutic effectiveness, has the potential to provide growth and perform a developmental role in couples’ relationships. Also, it can be used as an effective intervention in resolving conflicts between couples with high-level personality organization. Meanwhile, adding dimensions of cognitive rehabilitation to strengthen the executive functions of individuals in couple therapy interventions can be a practical step in increasing the effectiveness of couple therapy interventions at these levels.

Every research faces limitations in the implementation process. Limitations of this study include purposive sampling and the residence of participants in Tehran, which could impair the generalizability of the findings to other subcultures. The impossibility of assessment in the follow-up stage in the control group is also one of the main limitations of the present study because three months after the intervention, all couples in the control group were officially divorced, and their relationships ended. Other study limitations were the subjects’ dropout, the possibility of events co-occurring with the application of an independent variable to the research groups, and the self-reporting of the instrument. For this reason, it is necessary to be careful in generalizing the research results.

Ethical Considerations

Compliance with ethical guidelines

To observe the ethical principles in the present interventional study, the ethical criteria of the American Psychological Association and Iranian Psychological and Counseling Organization were considered. The purpose of the study was explained to all participants, and the voluntary nature of their participation was specified. Accordingly, written consent was obtained from all participants. They were assured that all their information would remain confidential, and they could leave the research whenever they wanted. Other points related to research ethics, such as observing ethical values in data collection, prioritizing the psychological health of participants, objectivity in data analysis, and accuracy in the citation, have also been observed.

Funding

This study was conducted at the personal expense of the researcher, and no financial resources were received in any stages of the research.

Authors’ contributions

All authors equally contributed in preparing this article.

Conflict of interest

The authors declared no conflict of interest.

Acknowledgments

The authors are grateful for the cooperation of the management of Vafa Assistance Clinic, who worked hard to establish communication between the researcher and the couples in question, as well as to provide their facilities. The authors are also thankful to all couples who participated in the research and answered the interviews and tests, and provided their personal information to the researcher.

References

Ahmadi, Z., Ahmadi, S. A., & Fatehizadeh, M. (2006). [Evaluation of effectiveness of brief object-relations couple therapy on couples’ communication patterns (Persian)]. Journal of Family Research, 2(6), 117-105. [Link]

Caligor, E., Kernberg, O. F., & Clarkin, J. F. (2007). Handbook of dynamic psychotherapy for higher level personality pathology. Washington: American Psychiatric Publishing. [Link]

Cavallaro, R., Cavedini, P., Mistretta, P., Bassi, T., Angelone, S., & Ubbiali, A., et al. (2003). Basal-corticofrontal circuits in schizophrenia and obsessive-compulsive disorder. Biological Psychiatry, 54(4), 437-443. [DOI:10.1016/S0006-3223(02)01814-0]

Clarkin, J. F., Caligor, E., Stern, B., & Kernberg, O. F. (2007). Structured interview of personality organization. Personality disorders institute, Weil Medical College of Cornell University. https://borderlinedisorders.com/structured-interview-of-personality-organization.php

Safavi, S., et al. (2022). Moderating Role of Executive Functions in Effectiveness of Object Relations Couple Therapy on the Conflicts of High-borderline Couples. JPCP, 10(2), 141-152
Clarkin, J. F., Caligor, E., Stern, B., & Kernberg, O. F. (2012). Structured interview for personality organization-revised (STIPO-R). New York City: Weill Cornell Medical College. [Link]

Clarkin, J. F., Caligor, E., Stern, B. L., & Kernberg, O. F. (2019). Manual for the structured interview of personality organization-revised (STIPO-R). Unpublished manuscript, Weill Cornell Medical College. https://www.borderlinedisorders.com/assets/STIPORmanual.July2021.pdf.

Dandurand, C., & Lafontaine, M. F. (2013). Intimacy and couple satisfaction: The moderating role of romantic attachment. International Journal Of Psychological Studies, 5(1), 74-90. [DOI:10.5539/ijps.v5n1p74]

Davoudvandi, M., Navabinejad, S., & Farzad, V. [The effectiveness of emotionally focused couple therapy in improving marital adjustment and couples’ intimacy (Persian)]. Quarterly Journal of Family and Research, 15(1), 39-56. [Link]

Doering, S., Burgmer, M., Heuft, G., Menke, D., Baumer, B., & Lubking, M., et al. (2013). Reliability and validity of the German version of the Structured Interview of Personality Organization (STIPO). BMC Psychiatry, 13, 2010. [DOI:10.1186/1471-244X-13-210] [PMID] [PMCID]

Donovan, J. M. (2003). Short-term object relations couple therapy: The five-step model. Oxfordshire: Brunner-Routledge. [Link]

Ghasemi, N., Kiani, A. R., Zerehposh, A., Rabiei, M., & Vakili, A. (2012). [The study of the differences of attention bias, executive function, and reaction time of amphetamine consumers in comparison of non consumers (Persian)]. Research on Addiction, 6(23), 53-64. [Link]

Glick, I. D., Rait, D. S., Heru, A. M., & Ascher, M. (2015). Couples and family therapy in clinical practice. New York: Wiley. [Link]

Habibi Asgarabadi, M., & Hajiheidari, Z. (2015). [A qualitative study for investigating the reasons of sexual infidelity of couples who have asked for divorce in family court (Persian)]. Journal of Family Research, 11(42), 165-186. [Link]

Haghighi, H., Zarei, E., & Qaderi, F. (2012). [Factor structure and psychometric characteristics conflict resolution styles Questionnaire Rahim (Roci-Ii) In Iranian Couples (Persian)]. Research on Addiction, 6(23), 53-64. [Link]

Haning, R. V., O’Keefe, S. L., Randall, E. J., Komnor, M. J., Baker, E., & Wilson, R. (2007). Intimacy, orgasm likelihood, and conflict predict sexual satisfaction in heterosexual male and female respondents. Journal of Sex & Marital Therapy, 33(2), 93-113. [PMID]

Hill, A. (2008). Predictors of relationship satisfaction: The link between cognitive flexibility, compassionate love, and level of differentiation. Los Angeles: Alliant International University, California School of Professional Psychology, Los Angeles. [Link]

Honarpavaran, N. (2017). [The effectiveness of integrated approach imago therapy and object relationship to controlling emotions couples treacherous (Persian)]. Journal of Psychological Models and Methods, 8(27), 28-15. [Link]

Houseini, F., Vakili, P., & Abolmaalihalhosseini, K. (2021). [Comparison of the effectiveness of couple therapy based on object relationships and solution-oriented couple therapy on the emotional expression of spouses with marital conflict (Persian)]. Applied Family Therapy, 2(1), 108-125. [Link]

Isazadegan, A., & Dostalizadeh, S. (2020). [Comparing the cognitive flexibility, cognitive fusion, cognitive defusion in male and female divorce applicants (Persian)]. Scientific Journal of Nursing, Midwifery and Paramedical Faculty, 5(4), 15-26. [Link]

Isquith, P. K., Roth, R. M., & Gioia, G. (2013). Contribution of rating scales to the assessment of executive functions. Applied Neuropsychology. Child, 22(2), 125-132. [PMID]

Jahanbakhshian, N., Rasouli, M., Tajeikaseili, A., & Sarami Foroueshani, G. R. (2019). [Comparison of the effect of group therapy based on family systems theory and short-term object relations couple therapy on the women’s marital intimacy. (Persian)]. Nursing and Midwifery Journal, 17(3), 213-226. [Link]

Johnson, J. L., Kim, L. M., Giovannelli, T. S., & Cagle, T. (2010). Reinforcement sensitivity theory, vengeance, and forgiveness. Personality and Individual Differences, 48(5), 612-616. [DOI:10.1016/j.paid.2009.12.018]

Kamalian, T., Mirzahoseini, H., & Monirpoor, N. (2020). [Comparison of the effectiveness of emotional schema therapy with self-differentiation method on marital burnout in women (Persian)]. Journal of Applied Psychology, 14(1), 9-33. [Link]

Kernberg, O. F., & Caligor, E. (2005). A psychoanalytic theory of personality disorders. In M. F. Lenzenweger, & J. F. Clarkin (Eds.), Major theories of personality disorder (pp. 114-156). New York: Guilford Press. [Link]

Kerr, M. (2013). Family Evaluation 1st ed. W. W. Norton & Company; 1er edición (17 Octubre 1988). New York: Norton. https://www.amazon.com/Family-Evaluation-Michael-Kerr/dp/0393700569.

Koesten, J.; Schrodt, P.; & Ford, D. J. (2009). Cognitive flexibility as a mediator of family communication environments and young adults’ well-being. Health Communication, 24(1), 82-94. [PMID]

Landucci, J., & Foley, G. N. (2014). Couples therapy: Treating selected personalitydisordered couples within a dynamic therapy framework. Innovations in Clinical Neuroscience, 11(3-4), 29-36. [PMID]

Lavner, J. A., Karney, B. R., & Bradbury, T. N. (2016). Does couples’ communication predict marital satisfaction, or does marital satisfaction predict communication? Journal of Marriage and Family, 78(3), 680-694. [PMID] [PMCID]

Leonidou, L. C., Aykoul, B., Spyropoulou, S., & Christoudilides, P. (2019). The power roots and drivers of infidelity in international business relationships. Industrial Marketing Management, 78, 198-212. [DOI:10.1016/j.indmarman.2017.03.003]

Lezak, G. F., Lezak, M. D., Hannay, J., Fischer, J. S., Howieson, D. B., & Loring, D. W., et al. (2004). Neuropsychological assessment. Oxford: Oxford University Press. [Link]

Mashayekh, F. M., & Asgarian, M. (2019). [Relationship between couples’ intimacy and positive thinking with cognitive flexibility among married women (Persian)]. Quarterly Journal of Social Work, 8(2), 56-64. [Link]

Mobassem, S., Delavar, A., Karami, A., Sanai, B., & Shafiaabadi, A. (2013). [Evaluating the effectiveness of intensive short-term dynamic psychotherapy in decreasing marital
conflict in women (Persian). Quarterly of Clinical Psychology Studies, 9, 102-81. [Link]

Momeni, K., Kavoosi, S., & Amani R. (2015). [Predicting marital commitment on the basis of differentiation of self, family adaptability and cohesion, and marital intimacy (Persian)]. Family Pathology, Counseling and Enrichment Journal, 1(2), 46-58. [Link]

Mousavi, S., Fatehizadeh, M., & Jazayeri, R. S. (2018). [The effect of couple training based on personality-systemic couple therapy model on marital adjustment (Persian)]. Journal of Research in Cognitive and Behavioral Sciences, 7(2), 83-106. [DOI:10.22108/CRBS.2017.86698.0]

Poulton, J. L. (2012). Object relations and relationality in couple therapy: The middle ground. Maryland: Jason Aronson, Incorporated. [Link]

Randolph, J. J., & Chaytor, N. S. (2013). Promoting the executive functions: Core foundations, assessment considerations, and practical applications. In J, Randolph (Eds.), Positive neuropsychology: Evidence-based perspectives on promoting cognitive health. New York: Springer. [DOI:10.1007/978-1-4614-6605-5_5]

Rao, L. S. (2017). Marital adjustment and depression among couples. The International Journal of Indian Psychology, 4(2), 34-42. [DOI:10.25215/0402.045]

Scharff, D. E., & Scharff, J. S. (2014). Psychoanalytic couple therapy: Foundations of theory and practice. Oxfordshire: Taylor & Francis. [Link]

Schmeichel, B. J., & Tang, D. (2015). Individual differences in executive functioning and their relationship to emotional processes and responses. Current Directions in Psychological Science, 24(2), 93-98. [DOI:10.1177/0963721414555178]

Shaker Dolaq, A., Afrooz, Gh. A., Narimani, M., & Emamipour, S. (2014). [The effectiveness of couple therapy short-term thematic relationships on improving the family performance of couples seeking divorce (Persian)]. Journal of Behavioral Sciences, 8(2), 123-130. [Link]

Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. The American Psychologist, 65(2), 98–109. [PMID]

Sheikh Zeineddin, H., Farrokhi, N., & Abbaspoor Azar, Z. (2018). [Mediating role of psychological capital in the relationship between personality features with marital adjustment in students (Persian)]. Quarterly of Applied Psychology, 12(3), 439-462. [Link]

Siegel, J. P. (2020). Digging deeper: An object relations couple therapy update. Family Process, 59(1), 10-20. [PMID]

Solomon, B. C., & Jackson, J. J. (2014). Why do personality traits predict divorce? Multiple pathways through satisfaction. Journal of Personality and Social Psychology, 106(6), 978-996. [PMID]

Stern, B. L., Caligor, E., Clarkin, J. F., Critchfield, K. L., Horz, S., & MacCormack, V., et al. (2010). Structured Interview of Personality Organization (STIPO): Preliminary Psychometrics in a clinical sample. Journal of Personality Assessment, 92(1), 35-44. [DOI:10.1080/00223890903379308] [PMID]

Zareinejad, Z., Pourhossein, R., & Rahiminejad, A. (2017). [Assessment of mediatory role defense styles in the relationship between ego development and marital satisfaction (Persian)]. Journal of Psychological Sciences, 16(61), 6-19. [Link]