

## Comparing the Efficacy of Bowen Family Systems Therapy and Couple Therapy Based on Integrated Behavioral Systems on Marital Intimacy and Family Functions

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### ABSTRACT

**Objective:** The present study aimed to compare the effectiveness of Bowen family systems therapy and couple therapy based on integrated behavioral systems on marital intimacy and family functions in couples attending counseling centers in Mahshahr county.

**Method:** This study was a quasi-experimental design with a pre-test and post-test control group. The population of this study consisted of all couples who referred to counseling centers in Mahshahr city due to marital problems. Out of the population, 30 couples were selected through convenience sampling and were randomly assigned to three groups. The instruments used in this study were Bowen family systems therapy, couple therapy based on integrated behavioral systems, the Marital Intimacy Questionnaire (2006), and the Epstein, Baldwin, and Bishop (1983) Family Functioning Questionnaire. Data processing was conducted using descriptive and inferential statistics (covariance analysis).

**Findings:** The results showed that there was a significant difference between the three groups in the variables of marital intimacy and family function. This means that Bowen family systems therapy and couple therapy based on integrated behavioral systems have a significant effect on these variables.

**Conclusion:** Bowen family systems therapy and couple therapy based on integrated behavioral systems did not differ in their effectiveness on marital intimacy and family functions.

**Keywords:** Marital intimacy, Family function, Bowen family systems therapy, Couple therapy based on integrated behavioral systems.

## 1. Introduction

The family is an institution that provides its members with a sense of security, tranquility, and consolation. Marital life, based on a contract between a man and a woman to satisfy their needs, consequently encompasses all functions such as a spirit of cooperation, division of labor, upbringing and education of children, and creating love and affection within the family nucleus (Farahani, 2019).

Marital intimacy is one of the characteristics of couple relationships, defined by genuine self-disclosure and mutual understanding based on equal participation. Intimacy refers to the closeness and support that each partner feels and expresses. An individual experiencing a higher level of intimacy can present themselves more favorably in a relationship and express their needs more effectively to their partner or spouse (Choi et al., 2020). Luo et al. (2019) stated that contemporary couples face widespread and severe difficulties in establishing and maintaining intimate relationships, while intimacy between spouses is one of the main keys to a successful and long-term marriage, and its absence can lead to marital breakdown (Luo et al., 2019). Moreover, close and intimate relationships between couples enhance their marital life, help them fulfill their emotional needs, and provide opportunities for their growth. The main barriers to creating intimacy include inability in active listening, selective hearing, defensive listening, listening with the aim of changing the attitude of the other, using vague words, blaming, perfectionist expectations from the relationship, lack of empathy, bias, adherence to stereotypes, cultural differences, and individuals' unconscious defenses (Patrick et al., 2007).

Furthermore, family functioning plays a significant role in the durability and quality of marriage. The interactions and communication patterns that exist among family members create functioning. Healthy functioning indicates that these interactions and communication patterns are effective and efficient in achieving family goals (Thomas et al., 2017). Family functioning represents a collective effort to create and maintain a balance within the family. It refers to the ability to coordinate changes, resolve conflicts, strengthen cohesion among members, and succeed in implementing disciplinary patterns, respecting boundaries between individuals, and executing rules and principles governing the family to protect the entire family system (Pirzadeh & Parsakia, 2023). Healthy family functioning occurs in a family environment with clear communications, defined roles, cohesion, and optimal affect regulation.

Conversely, poor family functioning occurs in families with high levels of conflict, disorder, and weak emotional and behavioral control (Tsibidaki, 2020). Family functioning is extensively examined by systemic theorists and is primarily defined through the quality of family interactions and relationships related to the family's ability to perform tasks and cope with daily demands and transient events (Cheung et al., 2019; Haghani et al., 2019; Saeedpoor et al., 2019).

Cheung et al. (2019) believed that in functional families, roles are properly and consistently established, communications are effective, interactions and relationships are positive, and the family easily manages desires and achieves goals. Successful and healthy functioning in families is created with clear relationships where roles are well defined and there is appropriate cohesion and emotion regulation (Cheung et al., 2019). In contrast, poor family functioning occurs in families with high levels of conflict, dysregulation, and weak control of emotions and behavior (Lewandowski et al., 2010). The results from a study showed that family functioning with marital conflicts was significantly more inadequate in all domains including overall functioning, communication, emotional entanglement, role performance, problem sensitivity, emotional accompaniment, and behavior control compared to the healthy group (Feinberg et al., 2022).

The increasing prevalence of marital conflicts in the contemporary world and the risk of separation as a result of unhealthy family functions, lack of intimacy, and its negative effects on the mental health of couples and their children have led counselors and family therapists to propose theories and approaches to help couples experiencing emotional divorce. One of the most famous therapeutic approaches is Bowen's family-centered therapy (Jahanbakhshian et al., 2019). The family systems approach, formulated by this theory, consists of eight interconnected concepts including self-differentiation, triangles, nuclear family emotional system, family projection process, emotional cutoff, multigenerational transmission process, sibling position, and societal regression.

Bowen's emotion system-based therapy considers the family as an emotional unit and a network of intertwined relationships that should be analyzed from a different or historical perspective for better understanding. Bowen believes that the entire family system is considered an emotional unit that cannot be successfully separated or distinguished from one another. In essence, the foundation of this theory is based on the concept of self-differentiation (Bridge, 2019). Self-differentiation leads to psychological

balance in the family (Bridge, 2019). Bowen introduces two fundamental types of self-differentiation: basic differentiation and functional differentiation. What can change in therapy is functional differentiation. The goal of Bowen's family therapy is to help the individual reflect on their response to an event instead of using automatic behaviors and choose the correct response (Nabawi Hasar et al., 2015; Saeedpoor et al., 2019).

Another approach used for couple therapy is integrated behavioral couple therapy. Integrated behavioral couple therapy is a context-based behavior therapy that, by integrating acceptance and change, helps couples reduce their incompatibilities (Barraca Mairal, 2015; Christensen & Doss, 2017). Integrated behavioral-couple therapy, derived from traditional couple therapy, employs concepts and techniques of emotional acceptance to address some of the limitations of traditional behavioral couple therapy (Soheili et al., 2019). This approach examines the turmoil in couples' relationships with an emphasis on acceptance and/or behavioral change of each party. Acceptance techniques are more in line with behavioral change through acceptance and strive to use areas of conflict as a means to create greater intimacy and closeness between couples (Snyder & Balderrama-Durbin, 2012).

Integrated behavioral couple therapy integrates behavioral strategies for change with the promotion of acceptance and tolerance of differences in personality, perspectives, values, and conversation methods. This perspective does not reinforce harmful behaviors and dissatisfaction but focuses on increasing acceptance of personality differences that are a factor in spouse confrontation (Najafi et al., 2021). This approach uses three intervention techniques to increase acceptance capacity: empathetic alliance, unified detachment, and tolerance building. Therapy begins with clinical attention to each couple based on the case formulation obtained in the initial assessment sessions (Christensen & Doss, 2017).

Bowen interventions and couple therapy based on integrated behavioral systems, due to their perspective on family communication traditions and the importance of meaningfulness in life, can be compatible with the mental and behavioral world of traditional and value-oriented Iranian clients and beneficial in improving the family life of Iranian couples. Several previous studies have illuminated the efficacy of family therapy based on Bowen's family systems perspective; this intervention is effective in enhancing the quality of life and relationship quality of couples and increasing women's intimacy (Nabawi Hasar et

al., 2015). Najafi, Ahmadi, and Zaharakar (2020) showed that education based on integrated behavioral couple therapy approach is effective on marital intimacy of married women (Najafi et al., 2021). Saeedpoor, Asghari, & Sayadi (2018) demonstrated that Bowen and McMaster family therapy had a significant impact on authenticity, emotional cognitive regulation, and family function (Saeedpoor et al., 2019). Jahanbakhshian et al. (2018) concluded in their study that group therapy based on family systems theory and short-term object relations couple therapy was used to increase women's marital intimacy and resolve couple conflicts (Jahanbakhshian et al., 2019). Heidari et al. (2021) found that integrated behavioral couple therapy significantly improves family functions (Heidari et al., 2021).

Today, therapists face various and complex issues in family and couple structures, and single-dimensional treatments alone have not been able to consider family relationships with all its complexities. Given the complexity and multifaceted nature of family relationship problems and the limitations of single-school approaches for a more significant and lasting impact in treating couples and that no research has been conducted on the effectiveness of Bowen family systems therapy and integrated behavioral couple therapy on marital conflicts and family function, this study is significant. Moreover, regarding the reason for choosing this topic, it can be said that since based on conducted research, about 78% of the problems of young couples are hidden in their type of communication, the couple therapy approach in this study also intervenes in the relationships of couples (Shiri et al., 2020).

Studies have shown that low intimacy and poor family function are among the main factors of marital failure. Humans need to establish intimate relationships because intimacy is considered a primary psychological need. Intimacy, in fact, involves closeness, similarity, and personal romantic or emotional relationships with another person, which require deep knowledge and understanding of the individual, as well as the expression of thoughts and feelings indicative of their similarity to each other (Choi et al., 2020; Patrick et al., 2007). Therefore, to enhance intimacy and improve family function in marital life, the effectiveness of various therapeutic approaches has been examined, with each approach proposing different therapeutic and educational methods based on its specific explanations. Additionally, attention to the fact that no research to date has compared the effectiveness of Bowen family systems therapy and couple therapy based on integrated behavioral systems on marital intimacy and family functions, and

almost all previous research has addressed the therapeutic effects of different approaches in a single-dimensional manner. In this context, in the last two decades, Bowen family systems therapy and couple therapy based on integrated behavioral systems have gained particular popularity. Therefore, the current study aims to examine the effectiveness of Bowen family systems therapy and integrated behavioral couple therapy and to compare these two approaches. This research seeks to answer whether there is a difference in the effectiveness of Bowen family systems therapy and integrated behavioral couple therapy on marital intimacy and family functions among couples attending counseling centers in Mahshahr.

## 2. Methods

### 2.1. Study design and Participant

The current research was a quasi-experimental study with a pre-test and post-test control group design. The population of this study consisted of all couples who referred to counseling centers in Mahshahr city due to marital problems during the years 2020-2021. The study included 3 groups (2 experimental groups and 1 control group), with each group requiring 10 couples, totaling 30 couples. Sampling was conducted through purposive sampling, and homogenization was based on demographic variables. For one group, Bowen family systems therapy was administered over 8 sessions of 90 minutes each, according to a therapeutic package, on a weekly basis. Similarly, the second group received couple therapy based on integrated behavioral systems over 10 sessions of 90 minutes each, according to a therapeutic package, on a weekly basis. However, no educational intervention was provided for the third group, which served as the control group. Inclusion criteria for the study were: couples' referral to the counseling center and request for psychological treatment due to marital issues, not receiving simultaneous therapeutic interventions, a minimum of three years of marital life, age range of 20 to 40 years, and both partners' written consent to participate in the treatment, with at least a middle school education level.

Exclusion criteria included: at least one of the partners having an addiction to drugs or alcohol during the treatment, diagnosis with a personality disorder or acute mental disorder, use of psychiatric drugs or psychotherapeutic interventions during the treatment, and history of psychiatric hospitalization, absence from more than two sessions during the educational programs.

After selecting the sample, based on the entry criteria set for couples referring to the Mahshahr counseling center, the aims and characteristics of the study were explained to the participants, and upon their willingness, the intervention commenced. Participants were randomly assigned to 2 experimental groups and 1 control group, and one week before the intervention, each participant completed the Marital Intimacy and Family Functioning Questionnaires as a pre-test.

### 2.2. Measures

#### 2.2.1. Marital Intimacy

Marital Intimacy Questionnaire was first developed and standardized in Iran by Oliya (2006). It is an 85-item instrument measuring nine dimensions including emotional, intellectual, physical, social, recreational, communicative, sexual, religious, psychological intimacy, and an overall score. Each question is answered on a Likert scale ranging from always (4) to never (1). To determine the content validity of this questionnaire, the opinions of 5 counseling experts from the Faculty of Educational Sciences at the University of Isfahan were sought. The alpha coefficient for the entire questionnaire was reported as 0.92. For concurrent criterion validity, this questionnaire was used alongside the Walker and Thompson (1983) Intimacy Scale, showing a correlation of 0.92, significant at the level of less than 0.01. Zolfaghari (2006) reported an alpha coefficient of 0.91 for the entire questionnaire. In the current study, the Cronbach's alpha coefficient for this questionnaire was 0.76 (Saeedpoor et al., 2019).

#### 2.2.2. Family Functioning

Family Functioning Questionnaire was developed by Epstein, Baldwin, and Bishop (1983) to measure family functioning. It is a 60-item questionnaire designed to assess family functioning based on the McMaster model and defines six dimensions: problem solving, communication, roles, emotional involvement, emotional bonding, and behavior control, in addition to a seventh subscale related to overall family functioning (Ghaffari et al., 2010). This tool has good internal consistency with alpha coefficients ranging from 0.72 to 0.92. Excluding the overall functioning subscale, the other six subscales are relatively independent and somewhat possess concurrent and predictive validity, moreover, this tool can differentiate between clinical and non-clinical family members across all seven subscales

(Ghaffari et al., 2010). In the present study, the reliability coefficient using Cronbach's alpha method was 0.73.

2.3. *Intervention*

2.3.1. *Bowen Family Systems Therapy*

Bowen family systems therapy was administered to one group over 8 sessions of 90 minutes each, according to the therapeutic package, on a weekly basis (Haefner, 2014).

**Table 1**

*Content of Bowen Family Systems Therapy Sessions*

Session	Content
1	Introduction, objectives, rules, pre-test, session overview, topic explanation.
2	Teaching self-differentiation concept, linking current problems to differentiation, characteristics of differentiated vs. undifferentiated individuals. Assignments on self-observation.
3	Four components of differentiation, emotion management, emotional vs. rational reactions, managing emotions during conflicts. Assignments on hypothetical stories analysis.
4	Explaining triangulation logic, effects on family function and communication, teaching detriangulation techniques. Assignments on listing and addressing triangulations.
5	Impact of family background on individual's life, relationship between current and past family problems, revisiting family of origin. Assignments on childhood memories and self-role analysis.
6	Concepts of family projection and emotional cutoff, their impacts on family problems, developing mature relationships and responsibility. Assignments on personal desires and behavioral consequences reflection.
7	Emphasizing responsibility and self-regulation, reducing blame and criticism, expressing feelings and beliefs properly. Assignments on self-evaluation and emotional response.
8	Review of all sessions, final strategies for improvement, post-test administration.

2.3.2. *Integrated Behavioral Couple Therapy*

The second group underwent couple therapy based on integrated behavioral systems across 10 sessions of 90

minutes each, according to the therapeutic package, on a weekly basis.

**Table 2**

*Content of Sessions in Integrated Behavioral Couple Therapy*

Session	Content
1	Assessing couple's suitability for therapy; familiarization with current issues; collecting developmental history; moving towards formulation; guiding clients towards the therapy process.
2	Assessing individual problems; initial direction; understanding conflict patterns; evaluating physical violence; assessing commitment to therapy; evaluating extra-marital relationships.
3	Discussing expectations from therapy; fostering participation in formulation; sharing questionnaire and interview information with clients; identifying problem areas and themes; discussing polarization and double bind.
4	Empathetic alliance; assigning in-session and homework tasks based on empathetic alliance; adopting the partner's perspective.
5	Creating a safe space for expressing grievances; assigning tasks based on soft disclosure.
6	Detaching from conflict with rational analysis; discussing the problem without accusation or blame.
7	Understanding the interaction sequence leading to couple's frustration; involving spouses in efforts to comprehend continual comparison and contrast; using the "fourth chair" technique assuming the problem is seated there.
8	Not attempting to change the partner; highlighting the positive side of negative behavior; desensitization to negative behavior of each spouse and sensitizing the aggressive spouse to the impact of their behavior.
10	Performing behavior artificially; advising couples on task implementation; identifying negative behaviors that can be performed at home; planning for negative behaviors at home; analyzing performed behavior; feedback analysis from the spouse; evaluating the task outcome.

2.4. *Data Analysis*

For data analysis in this study, after collecting data using the questionnaire, SPSS-24 software and statistical methods such as frequency calculation, mean, standard deviation,

multivariate and univariate analysis of covariance, and the Bonferroni post-hoc test were used.

**3. Findings and Results**



The age range of the participants in this study was between 20 to 40 years. There were 30 females (50%) and 30 males (50%). Table 3 shows the mean and standard

deviation of the variables of marital intimacy and family functions in the pre-test and post-test stages for the experimental and control groups separately.

**Table 3**

*Descriptive Information of Pre-test, Post-test on Marital Intimacy and Family Functions in Three Research Groups*

Variable	Group	Pre-test Mean	Pre-test SD	Post-test Mean	Post-test SD
Marital Intimacy	Bowen Therapy	117.25	11.57	128.75	13.39
	Integrated Therapy	117.60	10.74	128.05	11.65
	Control	116.90	9.12	117.30	8.92
Family Function	Bowen Therapy	130.10	10.29	139.40	11.36
	Integrated Therapy	129.55	10.36	136.65	10.39
	Control	127.61	10.03	127.40	8.96

Given the nonsignificance of Mauchly's test of sphericity for the fear of negative evaluation variable, the assumption of sphericity is met. The sphericity assumption was not violated, allowing for sphericity in variances to be considered for the analysis of variance model. The results of the Box's M test indicated that the level of significance was greater than 0.05; therefore, the assumption of homogeneity of variance-covariance matrices was met. The normality of data was also examined with the Shapiro-Wilk test, which was above 0.05, indicating that the data were normal. The results of Levene's test also indicated that the significance

level obtained was greater than 0.05; thus, the condition of homogeneity of error variances was also met.

To compare the Bowen family systems therapy and the control group on marital conflict scores, intimacy, and family function of couples in pre-test, post-test, and follow-up stages, a mixed analysis of variance (one within-subjects factor and one between-subjects factor) was used. The three stages of pre-test, post-test, and follow-up were considered as a within-subjects factor, and grouping of participants into three groups was considered as a between-subjects factor.

**Table 4**

*Multivariate Analysis of Variance Test for Scores of Marital Conflicts, Intimacy, and Family Function Dimensions*

Effect	Test	Value	F	df Hypothesis	df Error	Sig	Eta Squared
Between Groups	Pillai's Trace	0.71	29.32	3	36	0.001	0.71
	Wilks' Lambda	0.29	29.32	3	36	0.001	0.71
	Hotelling's Trace	2.44	29.32	3	36	0.001	0.71
	Roy's Largest Root	2.44	29.32	3	36	0.001	0.71
Within Groups	Pillai's Trace	0.83	26.04	6	33	0.001	0.83
	Wilks' Lambda	0.17	26.04	6	33	0.001	0.83
	Hotelling's Trace	4.74	26.04	6	33	0.001	0.83
	Roy's Largest Root	4.74	26.04	6	33	0.001	0.83
Group*Measure Interaction	Pillai's Trace	0.84	28.87	6	33	0.001	0.84
	Wilks' Lambda	0.16	28.87	6	33	0.001	0.84
	Hotelling's Trace	5.25	28.87	6	33	0.001	0.84
	Roy's Largest Root	5.25	28.87	6	33	0.001	0.84

The results of the Table 4 a significant effect for the group factor "independent variable" using multivariate analysis of variance. This effect indicates that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family function of couples in the Bowen family systems therapy and control groups (Wilks' Lambda=0.29, p<0.05). Multivariate tests of within-

group effects also indicate that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family function of couples across the three measurement stages (p<0.05). Subsequently, the results of univariate tests in the context of multivariate mixed analysis of variance are reported.

**Table 5**

*Mixed ANOVA Test for Scores of Marital Conflicts, Intimacy, and Family Function Components with Greenhouse-Geisser Correction*

Variable	Factor	SS	df	MS	F	Sig	Eta Squared
Marital Conflicts	Test (Repeated Measures)	2134.62	1.36	1570.66	32.14	0.001	0.46
	Test*Group Interaction	1669.65	1.36	1228.53	25.14	0.001	0.40
	Between Groups	2296.88	1.00	2296.88	9.57	0.001	0.20
Intimacy	Test (Repeated Measures)	4701.80	1.03	4559.43	26.85	0.001	0.41
	Test*Group Interaction	4920.87	1.03	4771.86	28.11	0.001	0.43
	Between Groups	11741.41	1.00	11741.41	17.99	0.001	0.32
Family Function	Test (Repeated Measures)	2917.07	1.46	2003.58	10.33	0.001	0.21
	Test*Group Interaction	3789.60	1.46	2602.88	13.42	0.001	0.26
	Between Groups	10378.80	1.00	10378.80	16.42	0.001	0.30

To compare the effects of integrative behavioral couple therapy and control group on the scores of marital conflict components, intimacy, and family functioning of couples at pre-test, post-test, and follow-up stages, a mixed analysis of variance method (one within-subjects factor and one

between-subjects factor) was employed. The three stages of pre-test, post-test, and follow-up were considered as a within-subjects factor, and the grouping of subjects into three groups served as a between-subjects factor.

**Table 6**

*Multivariate Analysis of Variance (MANOVA) for Scores on Marital Conflict Dimensions, Intimacy, and Family Functioning between Couples in Behavioral System-Based Therapy and Control Group*

Effect	Test	Effect Size	F Value	Hypothesis df	Error df	Sig.	Eta Squared
Between Groups	Pillai's Trace	0.45	9.70	3.00	36.00	0.001	0.45
	Wilks' Lambda	0.55	9.70	3.00	36.00	0.001	0.55
	Hotelling's Trace	0.81	9.70	3.00	36.00	0.001	0.81
	Roy's Largest Root	0.81	9.70	3.00	36.00	0.001	0.81
Within Groups	Pillai's Trace	0.60	8.20	6.00	33.00	0.001	0.60
	Wilks' Lambda	0.40	8.20	6.00	33.00	0.001	0.40
	Hotelling's Trace	1.49	8.20	6.00	33.00	0.001	1.49
	Roy's Largest Root	1.49	8.20	6.00	33.00	0.001	1.49
Group*Measurement Interaction	Pillai's Trace	0.53	6.10	6.00	33.00	0.001	0.53
	Wilks' Lambda	0.47	6.10	6.00	33.00	0.001	0.47
	Hotelling's Trace	1.11	6.10	6.00	33.00	0.001	1.11
	Roy's Largest Root	1.11	6.10	6.00	33.00	0.001	1.11

The results of Table 6 indicate that with the multivariate analysis of variance method, there is a significant effect for the group factor "independent variable". This effect demonstrates that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family functioning of couples in both the integrative behavioral couple therapy group and the control group (Wilks' Lambda = 0.73,  $p < 0.05$ ). Furthermore,

multivariate tests of within-group effects also suggest that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family functioning of couples across the three measurement stages ( $p < 0.05$ ). The results of univariate tests within the context of multivariate mixed analysis of variance will be reported subsequently.

**Table 7**

*Mixed Analysis of Variance (MANOVA) Results for Marital Conflict Components, Intimacy, and Family Functioning Scores*

Variable	Factor	SS	df	MS	F	Sig.	Eta Squared
Marital Conflict	Test (Repeated Measures)	376.47	1.34	281.91	6.64	0.01	0.15
	Test*Group Interaction	184.27	1.34	137.98	4.25	0.04	0.09
	Between-Group	371.01	1.00	371.01	4.77	0.02	0.10
Intimacy	Test (Repeated Measures)	1459.85	1.39	1050.32	7.41	0.001	0.16
	Test*Group Interaction	1562.92	1.39	1124.48	7.93	0.001	0.17
	Between-Group	3392.03	1.00	3392.03	6.05	0.02	0.14
Family Functioning	Test (Repeated Measures)	2526.67	1.36	1863.88	11.51	0.001	0.23
	Test*Group Interaction	3069.60	1.36	2264.39	13.99	0.001	0.27
	Between-Group	6049.20	1.00	6049.20	9.76	0.001	0.20

To examine the impact of Bowen family systems therapy and integrative behavioral couple therapy on the scores of marital conflict components, intimacy, and family functioning of couples at pre-test, post-test, and follow-up stages, a mixed analysis of variance method (one within-

subjects factor and one between-subjects factor) was utilized. The three stages of pre-test, post-test, and follow-up were considered as a within-subjects factor, and the grouping of subjects into three groups served as a between-subjects factor.

**Table 8**

*Multivariate ANOVA Test for Scores of Marital Conflicts, Intimacy, and Family Function Dimensions in Bowen Family Systems Therapy and Integrated Behavioral Couple Therapy Groups*

Effect	Test	Value	F	df Hypothesis	df Error	Sig	Eta Squared
Between Groups	Pillai's Trace	0.39	7.68	3	36	0.001	0.39
	Wilks' Lambda	0.61	7.68	3	36	0.001	0.39
	Hotelling's Trace	0.64	7.68	3	36	0.001	0.39
	Roy's Largest Root	0.64	7.68	3	36	0.001	0.39
Within Groups	Pillai's Trace	0.88	41.34	6	33	0.001	0.88
	Wilks' Lambda	0.12	41.34	6	33	0.001	0.88
	Hotelling's Trace	7.52	41.34	6	33	0.001	0.88
	Roy's Largest Root	7.52	41.34	6	33	0.001	0.88
Group*Measure Interaction	Pillai's Trace	0.47	4.82	6	33	0.001	0.47
	Wilks' Lambda	0.53	4.82	6	33	0.001	0.47
	Hotelling's Trace	0.88	4.82	6	33	0.001	0.47
	Roy's Largest Root	0.88	4.82	6	33	0.001	0.47

The results show that with the multivariate analysis of variance method, there is a significant effect for the group factor "independent variable" (Table 8). This effect indicates that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family functioning of couples in both the Bowen family systems therapy group and the integrative behavioral couple therapy group (Wilks' Lambda = 0.55,  $p < 0.05$ ). Moreover,

multivariate tests of within-group effects also indicate that there is at least a significant difference between one of the components of marital conflicts, intimacy, and family functioning of couples across the three measurement stages ( $p < 0.05$ ). The results of univariate tests within the context of multivariate mixed analysis of variance will be reported subsequently.

**Table 9**

*Mixed ANOVA Test for Scores of Marital Conflicts, Marital Intimacy, and Family Function Components with Greenhouse-Geisser Correction*

Variable	Statistical Index	Factors	SS	df	MS	F	Sig	Eta Squared
Marital Conflicts	Test (Repeated Measures)	3507.62	1.21	2898.97	35.32	0.001	0.48	
	Test*Group Interaction	823.32	1.21	680.45	8.29	0.001	0.18	



Intimacy	Between Groups	821.63	1.00	821.63	5.99	0.002	0.14
	Test (Repeated Measures)	11638.22	1.29	9005.38	43.25	0.001	0.53
	Test*Group Interaction	937.95	1.29	725.76	4.49	0.003	0.11
Family Function	Between Groups	2511.68	1.00	2511.68	6.36	0.002	0.14
	Test (Repeated Measures)	11952.27	1.16	10290.97	30.80	0.001	0.45
	Test*Group Interaction	218.40	1.16	188.04	0.56	0.48	0.02
	Between Groups	580.80	1.00	580.80	1.92	0.17	0.05

#### 4. Discussion and Conclusion

Marriage and family formation are among the most important and superior social customs that, if functioning normally, can not only meet various needs of individuals but also lead to their holistic growth. For this reason, this study aimed to compare the effectiveness of Bowen family systems therapy and couple therapy based on integrated behavioral systems on marital intimacy and family functions.

The results of the research showed that Bowen family systems therapy is effective in addressing marital conflicts, marital intimacy, and family function in couples attending counseling centers. These research findings are consistent with previous studies (Bridge, 2019; Dion, 2003; Ghaffari et al., 2010; Gharehbaghy et al., 2015; Haefner, 2014; Haghani et al., 2019; Jahanbakhshian et al., 2019; Krgar Barzi et al., 2021; Mofassali & Hassan, 2016; Nabawi Hasar et al., 2015; Saeedpoor et al., 2019; Shirzadi et al., 2018; Son, 2019; Spencer, 2015; Yousefi, 2011). To explain these findings, it should be stated that intimacy is an inner and mental sense of belonging and connection with an emotional and affectionate nature, arising from an interindividual and reciprocal process. Internal and interindividual emotions play an extraordinarily important role in the development and expansion of intimacy. It could be argued that emotion-focused therapies, including Bowen family systems therapy, are suitable approaches for working on marital intimacy. The results of each mentioned study demonstrated that the Bowen family systems approach positively affects many family components, including family function. In explaining these research findings, it can be inferred that during the therapeutic process, using differentiation, couples strive to maintain their position when confronted with various realities (Krgar Barzi et al., 2021; Nabawi Hasar et al., 2015). Differentiation, the ability to balance dependence and individual independence within family relationships, the family system's ability to manage emotional reactions, and the ability to distinguish between thoughts and feelings. Differentiated individuals have a clear definition of themselves and their beliefs and are able to choose their path

in life (Ghaffari et al., 2010; Spencer, 2015). They can make correct decisions using reason and logic in situations that lead to impulsive behaviors and poor decisions in some individuals. Individuals who have reached this level of differentiation consider each other's tolerance and adjust the family environment according to each other's emotional needs, leading to an increase in the family's developmental functions. In fact, in Bowen family therapy, instead of focusing on family problems, the dynamics of family members are emphasized.

Other findings of this research pertain to the impact of couple therapy based on integrated behavioral systems on marital conflicts, marital intimacy, and family function in couples attending counseling centers. These findings are consistent with the previous research (Aw et al., 2021; Bridge, 2019; Cheung et al., 2019; Ghaffari et al., 2010; Haghani et al., 2019; Heidari et al., 2021; Hoyer et al., 2009; Krgar Barzi et al., 2021; Lewandowski et al., 2010; Niazi et al., 2019; Saeedpoor et al., 2019; Shiri et al., 2020; Tsibidaki, 2020). The results of each of these studies indicated the effectiveness of couple therapy based on integrated behavioral systems on various variables of couples, including marital conflicts. To explain the obtained result, it can be said: Intervention strategies used in integrated behavioral couple therapy emphasize couples' emotional reactions to differences and conflicts arising from them. Essentially, the primary goal of this type of therapy is to create emotional acceptance by the couples of the current differences between them and those that can always exist. When couples develop greater acceptance of these differences, they understand them better, and reactive conflicts between them decrease (Cheung et al., 2019; Tsibidaki, 2020).

The research background revealed that no study has been conducted concerning the effectiveness of therapy based on integrated behavioral systems in improving marital intimacy. However, the results of the mentioned studies demonstrated that integrated behavioral couple therapy teaches couples to help increase intimacy through increasing feelings of security and support, availability, appropriate response to spouse's needs, creating secure behaviors,

teaching proper and desirable communication skills, and modifying behaviors. To explain this finding, it can be said: In integrated marital counseling sessions, the therapist helps couples by creating a common perspective towards marital problems and defining it as a bilateral issue, both parties somehow understand their role in creating and continuing it. In fact, husband and wife come to the conclusion that only one partner is not the sole cause of problems, but both are involved in starting and continuing the problem. When a spouse is not considered the problem, blaming the other side is eliminated or reduced. According to Glasser (2000), blaming is one of the factors that distance individuals from each other, and the less blame there is in a relationship, the more interaction and conversation there will be, which leads to improved intimacy (Glasser, 2000). Helping couples focus on each other's strengths instead of negative aspects and uniting to overcome problems are other characteristics of this approach, which brings husband and wife closer together, increasing the likelihood of interaction and conversation between couples, and consequently improving intimacy.

Other findings of this research were the effectiveness of Bowen family systems therapy and couple therapy based on integrated behavioral systems on marital conflicts, intimacy, and family function of couples attending counseling centers, indicating a difference in the effectiveness of Bowen family systems therapy and couple therapy based on integrated behavioral systems on marital conflicts, intimacy, and family function of couples attending counseling centers. These findings are in line with the previous research (Bridge, 2019; Dion, 2003; Ghaffari et al., 2010; Gharehbaghy et al., 2015; Haefner, 2014; Haghani et al., 2019; Jahanbakhshian et al., 2019; Krgar Barzi et al., 2021; Mofassali & Hassan, 2016; Nabawi Hasar et al., 2015; Saeedpoor et al., 2019; Shirzadi et al., 2018; Son, 2019; Spencer, 2015; Yousefi, 2011). These findings must be stated that in the intervention process with the Bowen approach, efforts are made using various therapeutic strategies such as detriangulation, increasing awareness of the triangles that exist in the family, towards improving the relationship between family members and consequently reducing blame, increasing responsibility, reducing emotional distance and fusion, managing emotions, and using problem-solving in facing interpersonal challenges, leading to individuals' ability to accept difficulties they will face, enhancing their emotional self-awareness which results in marital satisfaction and subsequently improving the quality of life of couples and reducing conflicts between them (Haefner, 2014; Haghani et

al., 2019; Nabawi Hasar et al., 2015). Based on the perspective of previous studies, it can be said that couples with marital problems and conflicts feel isolated from social interactions due to a sense of alienation and feel lonely in the crowd. Their forces for performing daily functions decrease, feelings of fatigue and mood swings are created, sleep, eating, and self-care habits are disrupted, due to the hard and unbearable life they refrain from eating and have problems with sleep and neglect their physical appearance, and are engulfed by emotions of anger, sadness, a sense of hopelessness, and despair (Mofassali & Hassan, 2016; Shirzadi et al., 2018). On the other hand, the Bowen family therapy approach reduces each of the explained mechanisms by providing training in communication skills to couples, and the result of this reduction in tensions is the reduction of marital conflicts.

The results from the analysis of research hypotheses showed that each of the therapeutic approaches is effective and beneficial in reducing marital conflicts, improving marital intimacy, and enhancing family functions of couples attending counseling centers. Also, in comparing the effectiveness of the two therapeutic approaches, findings showed that Bowen family systems therapy approach is more effective than integrated behavioral couple therapy in reducing marital conflicts and improving marital intimacy. Therefore, based on the findings of this research, family counselors can use Bowen family systems therapy and integrated behavioral couple therapy approaches to reduce marital conflicts, improve marital intimacy, and enhance the family functions of couples.

## 5. Suggestions and Limitations

The major limitations of this research were that the research sample consisted of residents of Mahshahr within the age range of 20-40 years; however, generalizing the results of this research to couples in other age groups and with different cultural backgrounds should be done with caution. Attrition of subjects, the possibility of concurrent events with the application of the independent variable on the experimental groups, self-reporting nature of the used tool, convenience sampling method, and small sample size are other limitations of the current research that necessitate cautious generalization of the research findings.

Therefore, it is suggested that future researchers employ both qualitative and quantitative methods. It is recommended to repeat the research in other settings and with different samples to trust the outcomes of the research

about the effect of interventions. Investigating and comparing the impact of interventions on other variables such as marital satisfaction, marital commitment, sexual satisfaction, and other components of marital and family communication life is suggested. The outcomes of this research can be used in family counseling centers, in such a way that by considering the tendencies and nature of the couple's relationship and paying attention to the impact of these variables on marital problems, more comprehensive and effective counseling services are provided to clients.

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### Declaration of Interest

According to the authors, this article has no financial support and no conflicts of interest.

### Authors' Contributions

All authors made substantial contributions to the research process, covering various aspects from study design to data handling and manuscript preparation.

### Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

### Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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### References

Aw, S. S. Y., Ilies, R., Li, X., Bakker, A. B., & Liu, X.-Y. (2021). Work-related helping and family functioning: A work-home resources perspective. *Journal of Occupational and Organizational Psychology*, 94(1), 55-79. <https://doi.org/10.1111/joop.12331>

Barraca Mairal, J. (2015). Integrative Behavioral Couple Therapy (IBCT) as a third-wave therapy. *Psicothema*, 27(Número 1), 13-18. <https://reunido.uniovi.es/index.php/PST/article/view/10622>

Bridge, E. N. (2019). Review of A Case Study in Light of Bowen Theory: Differentiation of Self [Bowen Teorisi Işığında Bir Vaka Çalışmasının Gözden Geçirilmesi: Benliğin Farklılaşması]. *Yaşam Becerileri Psikoloji Dergisi*, 3(5), 65-72. <https://doi.org/10.31461/ybpd.556080>

Cheung, R. Y. M., Leung, M. C., Chiu, H. T., Kwan, J. L. Y., Yee, L. T. S., & Hou, W. K. (2019). Family functioning and psychological outcomes in emerging adulthood: Savoring positive experiences as a mediating mechanism. *Journal of Social and Personal Relationships*, 36(9), 2693-2713. <https://doi.org/10.1177/0265407518798499>

Choi, S.-Y., Kim, H.-R., & Myong, J.-P. (2020). The Mediating Effects of Marital Intimacy and Work Satisfaction in the Relationship between Husbands' Domestic Labor and Depressive Mood of Married Working Women. *International journal of environmental research and public health*, 17(12), 4547. <https://doi.org/10.3390/ijerph17124547>

Christensen, A., & Doss, B. D. (2017). Integrative behavioral couple therapy. *Current opinion in psychology*, 13, 111-114. <https://doi.org/https://doi.org/10.1016/j.copsyc.2016.04.022>

Dion, A. R. (2003). *A single case study of a survivor of suicide using Bowen therapy and grief counseling*. Alliant International University, San Diego. <https://search.proquest.com/openview/2d96dd65116e50f30bc3ff54abadc75/1?pq-origsite=gscholar&cbl=18750&diss=y>

Farahani, M. (2019). *The mediating role of self-compassion and coherent selfknowledge in the relationship between marital frustration and emotional divorce in Malayer couples* Master Thesis, Family Counseling, Razi University. 2019.[Persian]]. <https://jpcp.uswr.ac.ir/article-1-765-en.pdf>

Feinberg, M. E., A. Mogle, J., Lee, J.-K., Tornello, S. L., Hostetler, M. L., Cifelli, J. A., Bai, S., & Hotez, E. (2022). Impact of the COVID-19 Pandemic on Parent, Child, and Family Functioning. *Family Process*, 61(1), 361-374. <https://doi.org/10.1111/famp.12649>

Ghaffari, F., Rafiey, H., & Sanai, M. b. (2010). The Effectiveness of "Bowen's Family System Therapy" on Differentiation and the Functions of Families with Addicted Child [Research]. *Research on Addiction*, 3(12), 19-30. <http://etiadjpajohi.ir/article-1-405-en.html>

Gharehbaghy, F., Besharat, M., Rostami, R., & Gholamali Lavasani, M. (2015). Designing and evaluating an intervention based on Bowen family systems theory to improve health and quality of relationships [Research]. *Journal of Psychological Science*, 14(54), 168-179. <http://psychologicalscience.ir/article-1-237-en.html>

Glasser, W. (2000). *Counseling with choice therapy: The new reality therapy*. Harper-Collins. <https://www.amazon.com/Counseling-Choice-Theory-William-Glasser/dp/0060953667>

Haefner, J. (2014). An Application of Bowen Family Systems Theory. *Issues in Mental Health Nursing*, 35(11), 835-841. <https://doi.org/10.3109/01612840.2014.921257>

- Haghani, M., Abedi, A., Fatehizade, M., & Aghaei, A. (2019). A Comparison of the Effectiveness of Combined Systemic Couple Therapy (Bowen) and Emotion-focused Therapy (Johnson) Packages and Integrated Couple Therapy on the Quality of Marital Life of Couples Affected by Infidelity. *Sadra Medical Journal*, 8(1), 11-28. <https://doi.org/10.30476/smsj.2020.82902.1040>
- Heidari, Z., Ghamari, M., Jafari, A., & Armani Kian, A. (2021). The Effectiveness of Integrative Behavioral Couple Therapy (IBCT) on Family Function of the Couples: A Randomized Clinical Trial [Original Article]. *Journal of Human Environment and Health Promotion*, 7(4), 225-232. <https://doi.org/10.52547/jhehp.7.4.225>
- Hoyer, J., Uhmman, S., Rambow, J., & Jacobi, F. (2009). Reduction of sexual dysfunction: by-product of cognitive-behavioural therapy for psychological disorders? *Sexual and Relationship Therapy*, 24(1), 64-73. <https://doi.org/10.1080/14681990802649938>
- Jahanbakhshian, N., Rasouli, M., Tajikesaeili, A., & Sarrami Foroushani, 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 [Research]. *Nursing and Midwifery Journal*, 17(3), 213-226. <http://unmf.umsu.ac.ir/article-1-3727-en.html>
- Krgar Barzi, H., Choubdary, A., & Samari Safa, J. (2021). The effectiveness of family therapy based on bowen's emotional treatment on developmental functions of family and maladaptive emotional schemes among women with major depressive disorder. *Journal of Family Psychology*, 6(1), 3-14. <https://doi.org/10.29252/ijfp.6.1.3>
- Lewandowski, A. S., Palermo, T. M., Stinson, J., Handley, S., & Chambers, C. T. (2010). Systematic Review of Family Functioning in Families of Children and Adolescents With Chronic Pain. *The Journal of Pain*, 11(11), 1027-1038. <https://doi.org/10.1016/j.jpain.2010.04.005>
- Luo, B., Fang, W., Shen, J., & Cong, X. F. (2019). Gift-image congruence and gift appreciation in romantic relationships: The roles of intimacy and relationship dependence. *Journal of Business Research*, 103, 142-152. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.06.018>
- Mofassali, R. H., & Hassan, T. (2016). Investigating the effectiveness of Bowenian family therapy in boredom and forgiveness of individuals affected by extramarital relationships of the spouse. [https://ijpras.com/storage/models/article/rMWU\\_rQBsvvNY1d3f9j0PkfiwILV9bDdzEdIZYHsKdhoDOXbk8fo1BNpvwro/investigating-the-effectiveness-of-bowenian-family-therapy-in-boredom-and-forgiveness-of-individua.pdf](https://ijpras.com/storage/models/article/rMWU_rQBsvvNY1d3f9j0PkfiwILV9bDdzEdIZYHsKdhoDOXbk8fo1BNpvwro/investigating-the-effectiveness-of-bowenian-family-therapy-in-boredom-and-forgiveness-of-individua.pdf)
- Nabawi Hasar, J., Arefi, M., & Yoosefi, N. (2015). The Effectiveness of Family therapy based Bowen emotion System on love styles and Intimacy Among Counseling applicant Women. *Biannual Journal of Applied Counseling*, 4(Vol.4 NO. 2), 83-98. <https://doi.org/10.22055/jac.2015.12599>
- Najafi, Y., Ahmadi, S., & Zahrakar, K. (2021). The effect of educating integrative behavioral couple therapy On the cognitive emotion regulation and marital intimacy of married women. *Women and Family Studies*, 13(50), 49-62. [https://jwsf.tabriz.iau.ir/m/article\\_675960.html?lang=en](https://jwsf.tabriz.iau.ir/m/article_675960.html?lang=en)
- Niazi, E., Mami, S., & Ahmadi, V. (2019). Comparison of the Efficacy of the Integrative Behavioral Couple Therapy and Rational-Emotive Behavior Therapy on the Communication Beliefs among Maladjustment Couples [Original Research Article]. *Middle Eastern Journal of Disability Studies---*, 9(0), 14-14. <http://jdisabilstud.org/article-1-1403-en.html>
- Patrick, S., Sells, J. N., Giordano, F. G., & Tollerud, T. R. (2007). Intimacy, Differentiation, and Personality Variables as Predictors of Marital Satisfaction. *The Family Journal*, 15(4), 359-367. <https://doi.org/10.1177/1066480707303754>
- Pirzadeh, S., & Parsakia, K. (2023). A Comparative Study of Family Structure (Cohesion and Flexibility) and Functioning in People with and without Drug Abuse. *International Journal of Body, Mind & Culture (2345-5802)*, 10(1). <https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=site&authtype=crawler&jml=23455802&AN=I62663361&h=BI2%2FTI9X5rOxM%2FcnNo627323L%2BPvmpwEUU5%2Br47H40ZeIL%2BuniyXaWOy1VfIQ5ZK0Q8s0PY%2BWrzNFB4zzgUFbA%3D%3D&url=c>
- Saeedpoor, F., Asghari, F., & Sayadi, A. (2019). Comparison the effectiveness of Bowen family therapy approach and McMaster's model on intimacy, cognitive emotion regulation and family function in couples who exposed to divorce. *Family Counseling and Psychotherapy*, 8(2), 191-214. <https://doi.org/10.22034/fcp.2019.61023>
- Shiri, F., Goudarzi, M., Moradi, O., & Ahmadian, H. (2020). Comparison of the Effectiveness of Self Regulation-Attachment Couple Therapy and Systemic-Behavioral Couple Therapy on the Family Function in Women with Substance-Dependent Spouse [Research]. *Research on Addiction*, 14(56), 247-266. <https://doi.org/10.29252/etiadjpajohi.14.56.247>
- Shirzadi, S., Shafiabady, A., & Dokaneheefard, F. (2018). The comparison of effectiveness of family therapy Bowen's and Menuchin on emotional divorce and improvement quality of life couples clients to health house. *Educational Administration Research*, 9(35), 25-40. [https://jeaq.riau.ac.ir/m/article\\_1236.html?lang=en](https://jeaq.riau.ac.ir/m/article_1236.html?lang=en)
- Snyder, D. K., & Balderrama-Durbin, C. (2012). Integrative Approaches to Couple Therapy: Implications for Clinical Practice and Research. *Behavior therapy*, 43(1), 13-24. <https://doi.org/https://doi.org/10.1016/j.beth.2011.03.004>
- Soheili, N., Zahrakar, K., Asadpour, S., & Mohsenzadeh, F. (2019). Effectiveness of Group Counseling Based on Integrative Behavioral Therapy on Quality of Marital Relationship of Female Nurses [Research]. *Journal of nursing education*, 7(5), 72-78. <http://ijpn.ir/article-1-1383-en.html>
- Son, A. (2019). Anxiety as a Main Cause of Church Conflicts Based on Bowen Family Systems Theory. *Journal of Pastoral Care & Counseling*, 73(1), 9-18. <https://doi.org/10.1177/1542305018822959>
- Spencer, T.-A. (2015). *Exploring the lived experiences of marriage and family therapy students who study Bowen Family Systems Theory, and relating those experiences to concepts of differentiation of self and emotional intelligence: An*

*interpretative phenomenological analysis*. Nova Southeastern University.

<https://search.proquest.com/openview/e8776434fdda29b37877a17271da4930/1?pq-origsite=gscholar&cbl=18750>

Thomas, P. A., Liu, H., & Umberson, D. (2017). Family Relationships and Well-Being. *Innovation in Aging, 1*(3). <https://doi.org/10.1093/geroni/igx025>

Tsibidaki, A. (2020). Family functioning and strengths in families raising a child with cerebral palsy. *Research in Developmental Disabilities, 106*, 103767. <https://doi.org/https://doi.org/10.1016/j.ridd.2020.103767>

Yousefi, N. (2011). Comparison of the Effectiveness of Family Therapy Based on Schema Therapy and Bowen's™ Emotional System Therapy on Divorce Tendency Among Divorce Applicant Clients. *Journal of Clinical Psychology, 3*(3), 53-64. <https://doi.org/10.22075/jcp.2017.2062>