

The Effectiveness of Movement-Based Psychotherapy on Couple Intimacy

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ABSTRACT

Objective: The aim of the present study was to examine the effectiveness of movement-based psychotherapy on couple intimacy.

Method: The research employed a single-case experimental design with multiple baselines. The statistical population consisted of all couples who visited counseling centers in Bojnord City in 2021. From this population, three couples who met the inclusion criteria were selected through purposive criterion-based sampling. Measurements were conducted using the validated Couple Intimacy Needs Questionnaire by Bagarozzi (2012). Participants were assessed over three baseline sessions, 12 intervention sessions, and three follow-up sessions. Data analysis was performed using visual analysis at both within-case and between-case levels.

Findings: Results indicated an increase in intimacy for all participants. The graph lines demonstrated an upward trend in data changes during the intervention phase, with a high percentage of Nonoverlapping Data (PND) and a low percentage of Overlapping Data (POD). Additionally, in the follow-up phase, intimacy continued to increase for four individuals (two couples) and remained within the intervention range for two individuals (one couple), indicating that movement-based psychotherapy was effective in enhancing intimacy between couples.

Conclusion: The results showed that movement-based psychotherapy, by utilizing the body as a tool to access the unconscious and applying techniques such as mirroring and fostering an understanding of each individual's needs and emotions in their partner, increased awareness and recognition of personal and partner needs, thereby enhancing intimacy between couples. It is recommended that this method be implemented in therapeutic and counseling centers to enrich marital relationships.

Keywords: Movement-based psychotherapy, couple intimacy, single-case design.

1. Introduction

From the perspective of psychologists, intimate communication between couples is defined as a sense of closeness, mutual concern for each other's well-being, trust, security, honesty, openness, and mutual support (Atapour & Darbani, 2024; Babaei et al., 2024; Parsakia et al., 2023). Intimacy is characterized as a closeness, similarity, and personal romantic or emotional relationship with another person, requiring deep understanding and recognition of the individual, as well as the expression of thoughts and feelings that signify their similarity (Labrecque & Whisman, 2019). It is evident that intimacy is one of the main dimensions and identifiers of human relationships, gaining more significance in marital relationships as it determines the harmony of a family and, in turn, affects other family members.

Josselson (1988) describes intimacy across eight dimensions, each associated with a potential pathology: interest or maintenance, attachment, emotion, validation, identity and ideal self, reciprocity and revalidation, enclosure, and care (Josselson, 1988). Waring (1980, 1983) considers intimacy between spouses as a combination of seven elements: affection or emotion, expressiveness and self-disclosure, adaptation, solidarity and commitment, sexual relations, conflict, and autonomy (Waring & Reddon, 1983). The developmental perspective by Furman (1999) views the ability for intimacy as a developmental phenomenon, categorized into two dimensions: early relationships and the ability for closeness and sensitivity to rejection, and romantic relationships (Furman & Wehner, 1997). Therefore, intimacy can be described as a developmental, interactive, dynamic, evolutionary, multidimensional, and composite phenomenon—a skill and an art (Etemadi, 2008). Intimate relationships create a context for emotional experiences between couples, shaping the nature of their relationship. These mutual intimate relationships influence couples' evaluations of their partner and their experiences in the relationship. However, it appears that the most problematic areas of conflict among couples are the lack of intimacy and the failure to express affection (Homaei et al., 2023; Parsakia et al., 2023).

It can be said that the absence of intimate communication, empathy skills, dysfunctional interaction, and chaotic relationships in men and women are influenced by their developmental teachings (Bagarozzi & Rezazadeh, 2007). As a result, couple therapists aim to correct these teachings through various methods to increase the level of intimacy

between couples. They utilize different human capacities to facilitate these changes. The bodily expressions of clients during therapy sessions reveal many of their issues; therefore, in addition to communication through behavior, emotional expression, and thoughts, therapists may gain further insights into the complexities of the relationship by engaging in the couple's physical interactions (Vulcan & Engelhard, 2019). One method that employs the body (and movement) for therapeutic purposes is movement-based psychotherapy. Recognizing the movement characteristics of another person's body plays an important role in understanding their goals and empathy (Gallese, 2009). The main goal of this approach to couples' psychotherapy is to increase awareness of the physical and kinetic aspects of their interactions and to verbalize the sensory-physical experiences that influence the emotions and actions of the relationship.

Movement-based psychotherapy for couples can provide a framework for identifying and labeling bodily sensations and their related emotions (Engelhard, 2018a, 2018b, 2019a, 2019b; Engelhard & Vulcan, 2021). This method helps individuals improve communication and nonverbal expression, deepen the mind-body connection, and use the body and its expressive abilities as a gateway to the inner world (Engelhard, 2019a, 2019b). Recognizing the movement characteristics of another person's body influences the understanding of others' goals and enhances empathy (Gallese, 2009). Movement-based psychotherapy can provide couples with a framework to identify and label bodily sensations and their related emotions (Engelhard, 2019a, 2019b). The multidimensional communication of couples, both verbal and nonverbal, must be recognized and expressed by both partners and the therapist. Focusing on the physical and kinetic dimensions during therapy may be effective in understanding the "embodied implicit knowledge" that each partner brings to the relationship (Vulcan & Engelhard, 2019).

Mirroring is a key intervention in movement-based psychotherapy, where the therapist imitates the client's movement to enhance resonance and empathy (Lacson, 2019). Familiarity with the content expressed through the body can prevent the use of primal defenses (fight or flight) in relationships (Engelhard, 2018a, 2018b). In couple relationships, the physical reflection of another's bodily messages creates an emotional experience in the relationship (Engelhard, 2018a, 2018b; Engelhard & Vulcan, 2021). Mirroring enhances an individual's emotional understanding of others by activating the mirror neuron system (MNS). The

primary and fundamental registration of communication in any relationship is physical. Each partner sees, listens to, processes, interprets, and responds to the other through the body (Chaiklin & Wengrower, 2009). The underlying assumption is that bodily memories play an important role in relationships before verbalization and mentalization, and intimate experiences between spouses affect their relationship. The primary goal of this approach in couples' psychotherapy is to raise awareness of the physical and kinetic aspects of their interactions and to verbalize the sensory-physical experiences that influence their emotions and actions within the relationship (Chaiklin & Wengrower, 2009; Engelhard, 2018b; Engelhard & Vulcan, 2021; Vulcan & Engelhard, 2019).

Another tool used in therapy sessions is music. When we listen to music, the cerebellum is activated. This structure is involved in rhythm tracking, coordination, and movement timing (Levitin, 2013). The cerebellum is also closely connected to the amygdala, a key structure in the brain's limbic system, and thus plays a role in emotional processing (Hartwell, 2019). Based on the phenomenon of mutual influence, when two stimuli occur simultaneously, one affects the other (Christensen et al., 2014). Therefore, this phenomenon can be leveraged to enhance the therapeutic process.

Resnick (2018) believes that the body, bodily states, and their impact on relationships between couples are of special importance. He explains that the body is a tool he uses most as a therapist and should be a primary tool for all therapists (Kierr, 2019). He uses personal space, posture, gestures, and micro-breathing movements to gather information that might not be easily discovered or reported verbally when trust exists between the individuals involved. He explains how to use the body to improve couple relationships (Kierr, 2019). In a qualitative study conducted by Kim et al. (2013), it was found that expressive movement experiences (using movement instead of speech) positively impacted couples' understanding of their relationship and improved their emotional coordination (Kim et al., 2013). Chaiklin and Wengrower (2009) explored the relationship between rhythmic bodily movements, essential related concepts, and how they are used in human interaction and development, as well as the connection between music and humans. They pointed out how bodily movements and music can be used for therapeutic purposes (Chaiklin & Wengrower, 2009). Sensory and motor systems influence our emotions and performance in various social situations (Damasio, 2011), and bodily movements affect emotional experiences and

cognitive understanding (Shafir et al., 2013). This reciprocal influence can be utilized in therapy to improve couples' intimate relationships.

Considering that movement-based psychotherapy is the "psychotherapeutic use of movement to promote the emotional, cognitive, physical, and social integration of the individual", and it emphasizes the nonverbal realm and uses the body as a path to the unconscious (Levy, 2005), it appears that this method can assist couples in understanding their partner's goals and needs. Based on this, the central research question of this study is whether movement-based psychotherapy can effectively enhance intimacy between couples.

2. Methods and Materials

2.1. Study Design and Participants

The research method employed in this study is a single-case experimental design with a multiple baseline approach, consisting of three phases (A-B-A). The statistical population included couples who visited counseling centers in the city of Bojnord in 2021, and participants were selected using purposive criterion-based sampling from among the applicants. The sample consisted of three couples (six participants) who were selected after an initial interview to diagnose communication issues. The inclusion criteria were as follows: seeking couples counseling, no active infidelity or addiction, no physical limitations preventing participation in movement exercises, and a score lower than 7 on the Bagarozzi Couple Intimacy Needs Questionnaire. Measurements were conducted in three stages: before the intervention (baseline, A), during the intervention (B), and after the intervention or follow-up (A). The intervention process for each couple involved 12 sessions of movement-based psychotherapy for couples (DMP-C). The data obtained were analyzed through visual analysis at both within-case and between-case levels, and the data were charted, with the phases compared. Within-case analysis involved evaluating absolute level, relative level, trend, and variability of the data in each phase (baseline, intervention, and follow-up), while between-case analysis compared the changes in these indicators across adjacent phases. The data were analyzed using charts, median lines, trends, stability envelopes, and comparisons of changes at each phase of the research. The results were presented in both descriptive and analytical forms.

The implementation of the research was carried out as follows: First, a call for participation was issued to invite

couples who were attending counseling centers in Bojnord. The call was distributed across all counseling centers in the city. From the 14 individuals (7 couples) who expressed interest, three couples who scored below 7 (the cutoff point) on the Couple Intimacy Needs Questionnaire—indicating low intimacy—were selected for counseling sessions. The counseling sessions for each couple were conducted independently from the other couples, and the results were recorded separately. The sessions followed the multiple baseline single-case experimental design (A-B-A), with three counseling sessions (one per week) held prior to the psychotherapy intervention. These sessions aimed to familiarize the couple with the implicit bodily knowledge, the influence of emotions on bodily interactions, and the understanding of how their behaviors relate to the communication patterns developed during their upbringing. This phase also served as the baseline measurement of intimacy across different dimensions before the intervention. In the intervention phase, the couples participated in 12 sessions of Movement-Based Psychotherapy for Couples (DMP-C), and after each session (except for those with identical content), they were assessed using the Couple Intimacy Needs Questionnaire, with scores charted for analysis. Following the psychotherapy sessions, the couples were evaluated once a week for three weeks as part of the follow-up phase to assess the intervention's effectiveness.

2.2. Measures

2.2.1. Couple Intimacy

This questionnaire was developed by Bagarozzi (2001) to assess the levels of intimacy needs across nine dimensions (emotional, psychological, intellectual, sexual, physical, spiritual, aesthetic, social and recreational, and temporal) and evaluate how well these needs are met by partners. It is rated on a 10-point scale, ranging from 1 (this need does not exist in me at all) to 10 (this need is very strong in me). The questionnaire was first translated by Etemadi (2006), with an overall Cronbach's alpha reliability coefficient of 0.93 (Etemadi, 2008; Etemadi et al., 2006). The questionnaire was validated by Houshmand (2012) and standardized by Mashaiekh and Askarian (2017), yielding a Cronbach's alpha coefficient of 0.95. In exploratory factor analysis, an additional factor called "satisfaction with spouse," comprising 16 questions related to satisfaction across all dimensions of intimacy, was added. In confirmatory factor analysis, all indicators showed sufficient correlation with the related factors ($t > 1.96$) (Houshmand, 2012; Mashaiekh &

Askariyan, 2017). In the present study, the standardized version of the questionnaire (Mashaiekh & Askariyan, 2017) was used, with a reliability coefficient of 0.95.

2.3. Interventions

2.3.1. Movement-Based Psychotherapy for Couples

This protocol includes objectives, content, movement instructions, and dialogues between the counselor and clients, and it is based on the research of Englehard (2019). The structure of the intervention sessions involved 12 couple therapy sessions, each lasting approximately one hour, conducted twice a week. The sessions are based on the technique of mirroring. In each session, the previous session's topics were reviewed, the effects and changes in the couple's relationship were discussed, and the topic of concern raised by the couple was addressed. Based on these concerns, movement instructions were executed, and the session concluded with a summary. Each session consisted of three parts: (1) discussing the couple's communication issues, (2) providing and performing movement instructions, and (3) interpreting the movement content and its connection to each partner's needs and attachment wounds, followed by a discussion of how to express needs, the partner's method, and the insights gained regarding their own and their partner's needs (Engelhard, 2018a, 2018b, 2019a, 2019b; Engelhard & Vulcan, 2021).

Session 1: Seeing and Being Seen

In this session, couples are asked to move around the room without making eye contact. After a few moments, they are instructed to find a comfortable way to make eye contact with their partner. The goal is to explore each partner's need for visual attention, understand the differences in their needs, and reflect on how these needs may have originated in childhood and how they influence current relationships.

Session 2: Synesthetic (Visual) Coordination

One partner begins moving according to a rhythm that feels comfortable for them, and the other partner follows, mimicking their rhythm and movements. This exercise aims to create harmony in movement rhythm, allowing each partner to become aware of the flexibility of the other's body and understand how it differs from their own. The session also helps explore the emotions that accompany these differences.

Session 3: Dependency, Tendency, and Physical Support

Couples sit back-to-back, and each partner separately explores how much they can lean on the other by gradually

transferring their weight to find comfort. Both partners seek options for relying on and supporting each other physically. In a mirroring exercise, one partner transfers their weight in a way that feels pleasant to the other, who then mirrors this experience with their own body. The goal is to become familiar with the need for support and learn how to manage and communicate this need in the relationship.

Session 4: For Support and Physical Assistance (Part 2)

Couples stand facing each other, touching palms. They use different parts of their bodies to hold a sponge ball between them and transfer it to different body areas while alternating between standing still and walking. In the mirroring activity, the non-moving partner gently touches various body parts to signal the other to relax. The aim is to build coordination and acceptance of each partner's need for support.

Session 5 and 6: Leadership, Guidance, and Communication in Marital Relationships

In Session 5, one partner leads the movement while the other mimics it, matching the speed, direction, and type of movement. In Session 6, one partner initiates a movement, expressing their emotions through the movement, while the other observes and "listens." The second partner then decides when to join as the leader to continue the movement dialogue, repeating the story they have observed. These sessions aim to understand the concepts of leadership and following, clarify each partner's need for space in decision-making, and create harmony in the relationship.

Session 7 and 8: Power, Intensity, and Expressing Anger

Couples begin by holding hands and moving together. One partner increases the intensity, guiding the movement while the other relaxes their muscles to be led. In the next session, one partner holds a large pillow on their chest while the other kicks it, ensuring no harm is caused. The mirroring exercise involves one partner showing how they prefer the intensity of the relationship to be expressed through movement. These sessions help partners explore their desire for control, how they express emotions (especially anger), and the impact of these expressions on the other partner.

Session 9: Personal Space, Proximity, and Distance

Couples are instructed to create a shared space using props like ropes, scarves, or hoops, without speaking. They experience "leaving" and "approaching" each other within this space, with one partner staying in place while the other searches for a comfortable proximity. In the mirroring exercise, one partner reflects the other's use of shared space.

This session aims to help couples understand their need for personal space and freedom while fostering awareness of the importance of maintaining personal boundaries in a relationship.

Session 10 and 11: Touch and Intimacy

Couples explore different types of touch, such as "respectful," "fearful," "hesitant," and "admiring." In the first part of the session, both partners initiate touch, and in the second part, one partner becomes passive while the other explores preferred types of touch. In the next session, couples engage in movements together without touch, gradually introducing and removing points of physical contact. These sessions help couples understand each other's physical preferences, recognize differences, and create harmony in physical intimacy.

Session 12: Summary and Final Processing of Embodied Language

One partner uses a previously unused movement quality to express a concept through motion, while the other mirrors the movement, paying attention to eye contact, rhythm, proximity, guidance, weight, and touch. Couples are also encouraged to revisit an experience from a previous session. The session concludes with a reflection on the effectiveness of body language in reducing conflicts, increasing understanding of each other's needs, and incorporating these insights into their relationship.

2.4. Data Analysis

The results of the movement-based psychotherapy on intimacy were analyzed through descriptive visual analysis.

3. Findings and Results

The study included three couples, with a total of six participants: three women and three men. The age range for the participants was between 30 and 45 years, with an average age of 38.3 years ($SD = 3.9$). The average duration of marriage was 13.6 years ($SD = 7.7$). In terms of employment, two women were homemakers and one was employed, while two men were employed and one was self-employed. The couples had between 1 and 3 children. Regarding education, two participants had a high school diploma, one held a bachelor's degree, two had master's degrees, and one had a bachelor's degree.

The data obtained from each couple are presented in Table 1.

Table 1

Scores of Participants during the Baseline, Intervention, and Follow-up Phases

Participant	1	2	3	4	5	6
Measurement Phases	Woman	Man	Woman	Man	Woman	Man
Baseline 1	5.47	5.61	5.48	5.12	4.96	6.30
Baseline 2	4.67	5.46	5.50	5.72	4.73	6.30
Baseline 3	4.62	5.72	5.29	5.62	4.73	6.17
Intervention 1	4.93	5.96	5.85	5.75	5.40	6.72
Intervention 2	6.06	5.48	5.58	5.87	5.60	6.87
Intervention 4	5.35	5.67	6.00	6.15	5.80	7.25
Intervention 6	5.11	6.07	6.02	6.62	5.86	7.57
Intervention 8	6.32	6.13	6.52	6.72	6.22	7.62
Intervention 9	6.12	6.28	6.82	7.22	5.82	7.55
Intervention 10	6.60	6.70	7.05	7.27	6.42	8.12
Intervention 11	6.30	6.42	7.52	7.18	6.65	8.12
Intervention 12	7.00	6.78	7.23	7.35	6.00	8.17
Follow-up 1	7.30	6.97	7.26	7.22	6.93	8.32
Follow-up 2	6.80	6.67	7.38	7.32	7.07	8.37
Follow-up 3	7.03	6.90	7.23	7.21	6.95	8.20

Trend charts of changes in intimacy scores among couples during the three research phases for the three couples (6 participants)

Figure 1

Trend Chart for Couple 1

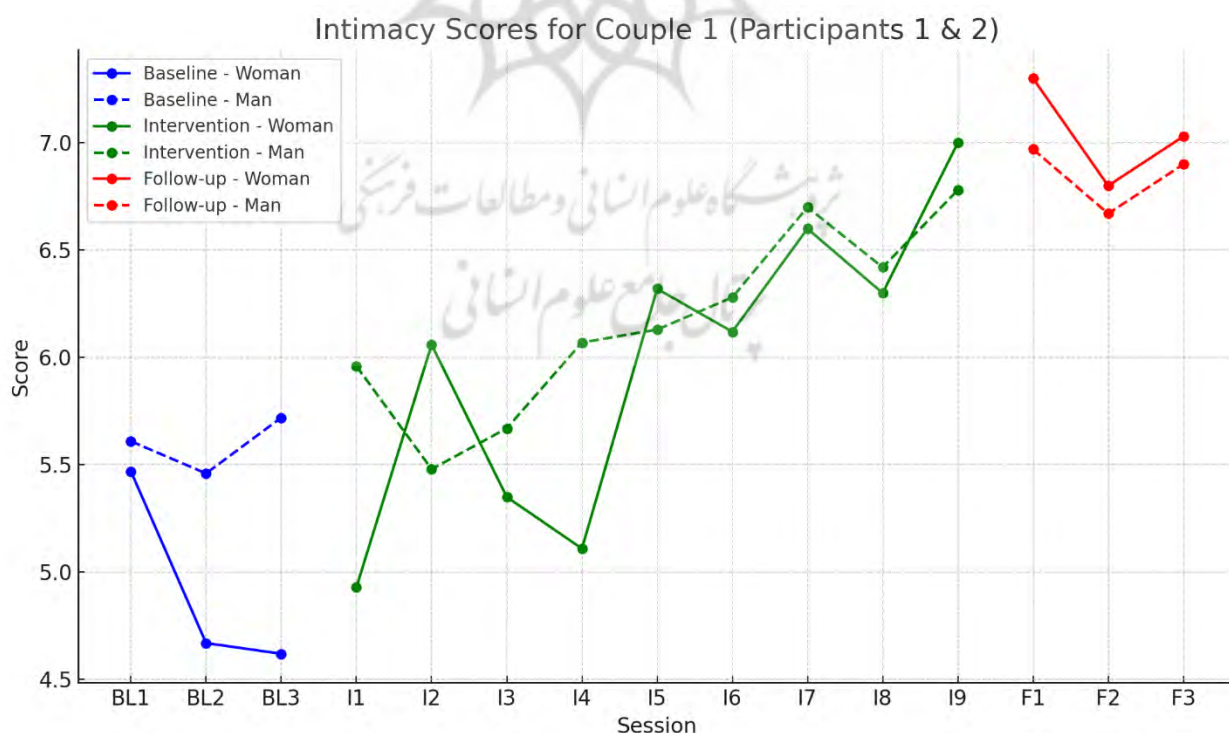


Figure 2

Trend Chart for Couple 2

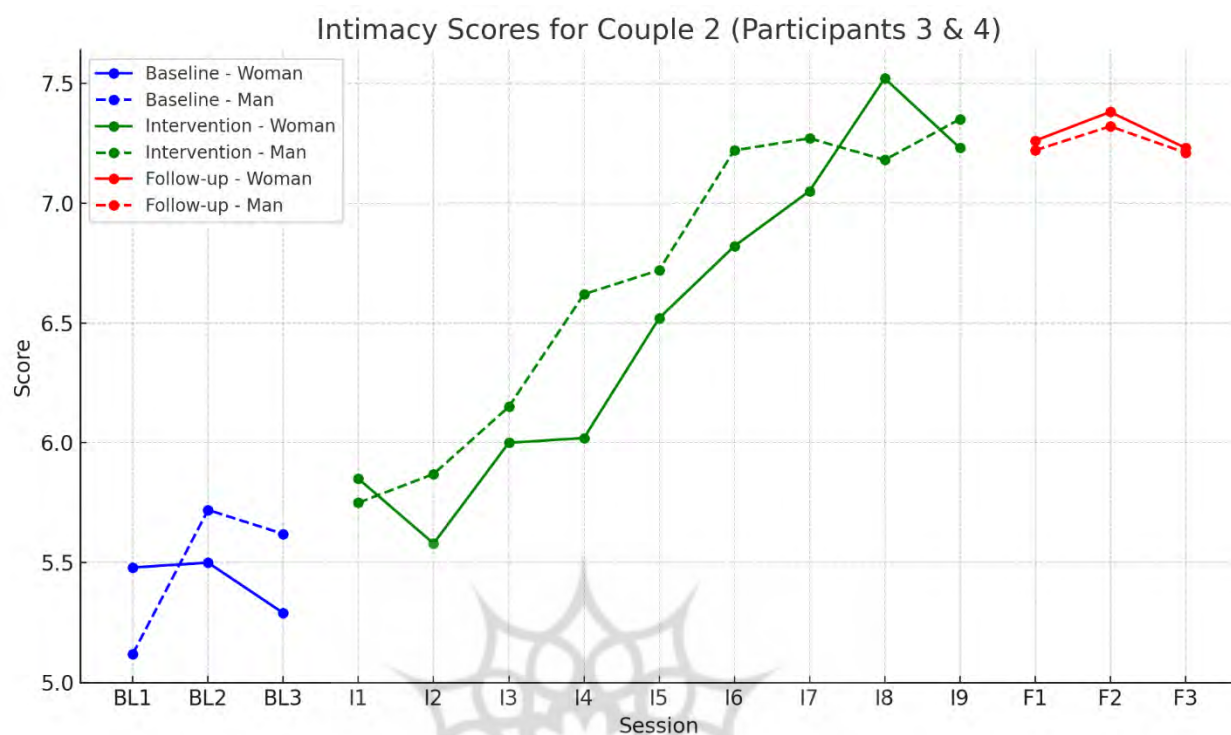


Figure 3

Trend Chart for Couple 3

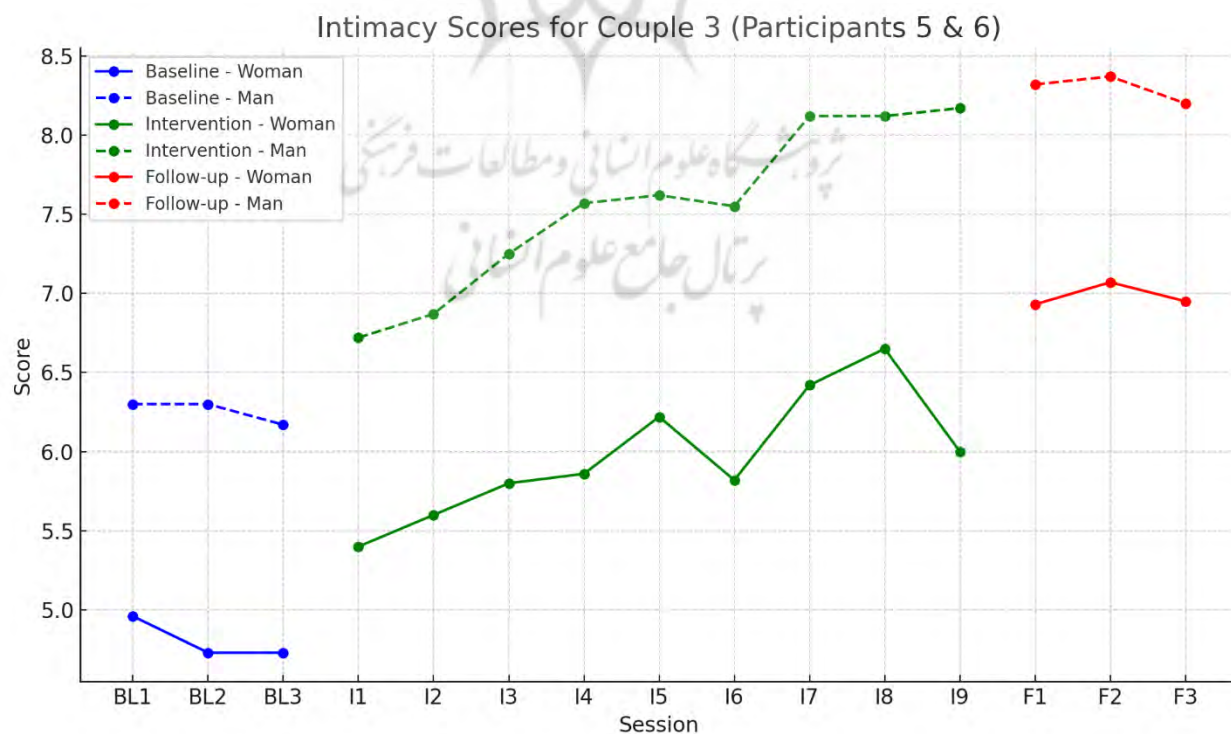


Figure 1 indicate the effectiveness of the intervention for Couple 1. Accordingly, 67% of the intervention data for the woman and 78% for the man were higher than the highest baseline data (PND), suggesting that the intervention can be considered effective.

Figure 2 indicate the effectiveness of the intervention for Couple 2. Accordingly, 100% of the intervention data for

both individuals were higher than the highest baseline data (PND), confirming the effectiveness of the intervention.

Figure 3 show the effectiveness of the intervention for Couple 3. Accordingly, 100% of the intervention data for both individuals were higher than the highest baseline data (PND), indicating that the intervention was effective for this couple.

Table 2

Between-phase analysis of intimacy needs for Participant 1 (woman from Couple 1)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Downward to Upward	Upward to Downward
Trend type	Positive	Negative
Stability change	Stable to Stable	Stable to Stable
Relative level change	4.62 to 5.35	6.42 to 7.07
Absolute level change	4.57 to 4.93	7.00 to 7.35
Median change	4.67 to 6.20	6.20 to 7.03
Mean change	4.88 to 5.97	5.97 to 7.06
PND	67%	66.66%
POD	33%	33.33%

According to Table 2, the trend for Participant 1 shifted from downward to upward between the baseline and intervention phases. The data remained stable during the

intervention and follow-up phases, indicating that the intervention was effective.

Table 3

Between-phase analysis of intimacy needs for Participant 2 (man from Couple 1)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Stable to Upward	Upward to Downward
Trend type	Positive	Negative
Stability change	Stable to Stable	Stable to Stable
Relative level change	5.56 to 5.96	6.42 to 6.82
Absolute level change	5.72 to 5.96	6.78 to 6.97
Median change	5.59 to 6.13	6.13 to 6.90
Mean change	5.61 to 6.16	6.16 to 6.85
PND	78%	66.66%
POD	22%	33.33%

According to Table 3, the trend for Participant 2 shifted from stable to upward between the baseline and intervention phases. The data remained stable during the intervention and

follow-up phases, indicating the effectiveness of the intervention.

Table 4

Between-phase analysis of intimacy needs for Participant 3 (woman from Couple 2)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Downward to Upward	Upward to Downward
Trend type	Positive	Negative
Stability change	Stable to Stable	Stable to Stable
Relative level change	5.39 to 5.97	7.02 to 7.29
Absolute level change	5.29 to 5.29	7.16 to 7.23
Median change	5.48 to 6.55	6.55 to 7.23

Mean change	5.42 to 6.52	6.52 to 7.23
PND	100%	0%
POD	0%	100%

According to Table 4, the trend for Participant 3 shifted from downward to upward between the baseline and intervention phases. The data remained stable during both

the intervention and follow-up phases, indicating the effectiveness of the intervention.

Table 5

Between-phase analysis of intimacy needs for Participant 4 (man from Couple 2)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Upward to Upward	Upward to Upward
Trend type	Positive	Positive
Stability change	Stable to Stable	Stable to Stable
Relative level change	5.67 to 6.15	7.22 to 7.21
Absolute level change	5.62 to 5.75	7.35 to 7.22
Median change	5.62 to 6.72	6.72 to 7.22
Mean change	5.48 to 6.68	6.58 to 7.25
PND	100%	0%
POD	0%	100%

According to Table 5, the trend for Participant 4 remained upward from the baseline through the intervention and

follow-up phases, indicating the effectiveness of the intervention.

Table 6

Between-phase analysis of intimacy needs for Participant 5 (woman from Couple 3)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Downward to Upward	Upward to Stable
Trend type	Positive	Zero
Stability change	Stable to Stable	Stable to Stable
Relative level change	4.73 to 5.80	6.00 to 7.00
Absolute level change	4.73 to 5.40	6.00 to 6.93
Median change	4.73 to 5.86	5.86 to 6.95
Mean change	4.80 to 5.96	5.97 to 6.98
PND	100%	100%
POD	0%	0%

According to Table 6, the trend for Participant 5 shifted from downward to upward between the baseline and

intervention phases, with stability maintained in the follow-up phase, indicating the intervention's effectiveness.

Table 7

Between-phase analysis of intimacy needs for Participant 6 (man from Couple 3)

Phase changes	Baseline and Intervention	Intervention and Follow-up
Direction change	Downward to Upward	Upward to Downward
Trend type	Positive	Negative
Stability change	Stable to Stable	Stable to Stable
Relative level change	6.23 to 7.25	8.12 to 8.34
Absolute level change	6.16 to 6.72	8.17 to 8.32
Median change	6.30 to 7.57	7.57 to 8.32
Mean change	6.25 to 7.54	7.54 to 8.29
PND	100%	100%
POD	0%	0%

According to Table 7, the trend for Participant 6 shifted from downward to upward between the baseline and intervention phases, with stability maintained in the follow-up phase, indicating the intervention's effectiveness.

The findings indicate that the intervention phase led to increased intimacy for all participants, and in the follow-up phase, the effect continued to increase for four participants (Couples 1 and 3) and remained within the intervention range for two participants (Couple 2). Therefore, the research hypothesis is confirmed, and movement-based psychotherapy was effective in enhancing intimacy between couples.

4. Discussion and Conclusion

The present study aimed to evaluate the effectiveness of movement-based psychotherapy on couple intimacy. The results indicated that movement-based psychotherapy, which simultaneously incorporates bodily (movement), auditory, tactile, cognitive, and emotional components, leads to an improvement in intimacy between couples. These findings are consistent with the studies of Englehard and Volkan (2021) regarding improved communication (Englehard & Vulcan, 2021), Lacson (2019) on increased resonance and empathy (Lacson, 2019), Dunphy et al. (2015) on improved interactions and reduced depression and anxiety (Dunphy et al., 2015), Koch et al. (2014) on mental health improvement, Kessel (2014) on repairing attachment wounds (Koch et al., 2014), Shafir et al. (2013), and Kim et al. (2013) on increased self-awareness and emotional adjustment (Kim et al., 2013; Shafir et al., 2013), Damasio (2011) on improved social interactions, and Chaklin and Wengrower (2009) on enhanced mutual understanding and emotional coordination, all of which positively impact intimacy dimensions (Chaiklin & Wengrower, 2009; Damasio, 2011).

In explaining the results, it can be stated that movement-based psychotherapy helps couples become familiar with how they communicate with each other through their bodies, thereby facilitating more intimate communication in their relationships (Englehard, 2018b). This method, through the use of physical mirroring, helps to create and evoke calmness, make the partner available in the therapeutic process, and reflect, identify, and label emotions for the spouse, which leads to improved intimacy and greater affection between partners. This technique, by activating the mirror neuron system (MNS) in both individuals, results in

better functioning of the limbic system and, consequently, increased empathic responses (Lacson, 2019).

With increased empathy, couples gain a better understanding of each other's emotions and feelings, which leads to greater emotional expression, reduced fear of rejection and emotional neglect, and increased expression of both positive and negative feelings in a safer environment. Additionally, by helping individuals understand each other's differences (especially among couples), it increases compassion and gratitude toward one another (Wagner & Hurst, 2018), thereby improving emotional and psychological intimacy.

One of the primary reasons for defensive reactions in relationships is the misinterpretation of each other's behavior. This method, by fostering an understanding of the partner's feelings and emotions, changes the cognitive pattern regarding the partner's reactions and helps in managing defenses, thereby improving cognitive intimacy. Moreover, the therapeutic process provides a model for individuals to manage their social interactions. The mutual sense of collaboration during therapy is a critical criterion for determining the appropriateness of this method for treatment.

This method provides a space for the disclosure and processing of relational content, which is accompanied by increased joy, creativity, and playfulness in the relationship (Englehard & Vulcan, 2021). The level of intimacy in these interactions, both during and outside therapy sessions, can be evaluated by analyzing each partner's cooperation in creating meaning, expressing empathy, and accepting the other. This affirms the relationship as a partnership (Rampage, 1994) and enhances intimacy in the social-recreational and aesthetic dimensions. Additionally, this method stimulates dysfunctional relational patterns caused by insecure attachment, which have led to marital conflicts, and provides significant potential for repairing dysfunctional interactions (Englehard & Vulcan, 2021; Vulcan & Englehard, 2019).

Movement-based psychotherapy brings implicit bodily knowledge, avoidance behaviors, and unmet needs to the surface through movement-based instructions, helping in identifying and expressing them. It also aids in repairing insecure attachments, thereby strengthening the couple's relationship and increasing intimacy. Throughout the sessions, focused therapeutic attention on care, power, knowledge of others, and mutual acceptance can effectively enhance the experience of cooperation and partnership

between couples, which seems to be inextricably tied to moments of intimacy (Rampage, 1994).

The work and exercises in movement-based psychotherapy have similarities and differences with the work of Masters and Johnson (SF) in treating sexual problems in couples. The common goal of both approaches is to focus on the sensory-emotional experience in the here and now. In SF, the long-term goal is to raise awareness of each partner's needs, teach communication about needs, desires, and sexual fantasies, and create positive experiences (Engelhard, 2019a, 2019b). In contrast, the goal of DMP is twofold: increasing awareness of individual sensory experiences during interactions and, most importantly, raising awareness of the partner's experience. Therefore, it can be concluded that movement-based psychotherapy improves sexual intimacy as well.

Movement and touch offer a new language for challenging old attachment patterns and possibly finding new ways of connecting and experiencing relationships (Kessel, 2013). This allows couples to recognize their partner's body movements and motor behaviors, identify their needs, and work toward fulfilling them. This leads to increased physical intimacy and reduces verbal conflicts.

5. Suggestions and Limitations

Movement-based psychotherapy is an effective method for fostering awareness of each other's emotions and involves engaging and enjoyable sessions that enhance the quality of marital relationships. This method also has the potential to prevent relationship issues, making it useful for counseling centers and other institutions focused on enriching couple relationships. Since this method relies on using the body, movement, and mirroring exercises with one's partner, it can also be effective for couples with hearing impairments or conditions like autism. Thus, it is recommended for use in rehabilitation centers and institutions serving individuals and couples with intellectual disabilities.

The implementation of this psychotherapy requires an environment where couples have enough space for movement. Due to limitations in participant selection, it is recommended that future researchers expand the participant range and extend the follow-up phase after the intervention. Furthermore, considering the influence of culture on marital relationships, the effectiveness of movement-based psychotherapy should be compared across different ethnic groups.

Authors' Contributions

All authors have contributed significantly to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

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

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