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Comparison of the Effectiveness of Mentalization-Based Therapy and Dialectical Behavior Therapy on Emotion Regulation, Impulsivity, and Self-Esteem in Individuals with Borderline Personality Disorder

Elham. Mostafavi[1], Hossein. Rahimlooei Aghdam[2*]

[1] Ph.D. Student, Department of Psychology, North Tehran Branch, Islamic Azad University, Tehran, Iran
[2] M.D, Talieh Mehr Yazdan Medical Center, Tehran, Iran

*** Corresponding author email address**: Dr.rahimloo@yahoo.com

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A B S T R A C T

Objective: Borderline Personality Disorder (BPD) begins in adolescence or early adulthood and can lead to difficulties in conflict resolution and emotion regulation. The aim of this study was to compare the effectiveness of Mentalization-Based Therapy (MBT) and Dialectical Behavior Therapy (DBT) on emotion regulation, impulsivity, and self-esteem in individuals with Borderline Personality Disorder.

Methods and Materials: This study employed an applied research design and a quasi-experimental pretest-posttest and follow-up design with a control group. The statistical population included all individuals with Borderline Personality Disorder in Tehran. The sample comprised 45 individuals with Borderline Personality Disorder selected through convenience sampling. Data were collected using the Jackson and Claridge Borderline Personality Inventory (1991), the Garnefski et al. Emotion Regulation Questionnaire (2001), the Dickman Impulsivity Inventory (1990), and the Rosenberg Self-Esteem Scale (1965). Data were analyzed using repeated measures ANOVA and SPSS-26 software.

Findings: The results indicated a significant difference between the two therapy groups (MBT and DBT) on emotion regulation, impulsivity, and self-esteem in individuals with Borderline Personality Disorder. Dialectical Behavior Therapy had a greater impact on improving emotion regulation, impulsivity, and self-esteem in individuals with Borderline Personality Disorder (P<0.001).

Conclusion: It can be concluded that both Dialectical Behavior Therapy and Mentalization-Based Therapy can be effective intervention methods for improving emotion regulation, impulsivity, and self-esteem in individuals with Borderline Personality Disorder.

Keywords: *Mentalization, Dialectical Behavior Therapy, Emotion Regulation, Impulsivity, Self-Esteem, Borderline Personality Disorder.*

1. Introduction

Borderline Personality Disorder (BPD) begins in adolescence or early adulthood. These individuals typically exhibit behaviors such as self-harm, creating scratches and cuts on their body, suicide, disrupting friendships, and using disruptive substances. They also display constant boredom, behavioral disorders like recklessness or theft, mood swings, sudden and intense anger, and uncertainty about sexual identity (Bohus et al., 2021; Gunderson et al., 2018; Kliem et al., 2010; Kröger et al., 2013; Vogt & Norman, 2019; Wright et al., 2022). Other symptoms of this personality disorder include extravagant spending, substance abuse, and reckless driving. It should be noted that physical illnesses can exacerbate symptoms (Bohus et al., 2021). The cause of this disorder is not precisely known, but previous research has shown that individuals with BPD have emotional problems (Bohus et al., 2021; Gunderson et al., 2018). Borderline patients usually have difficulty resolving conflicts (Vogt & Norman, 2019; Wright et al., 2022). Additionally, they show high sensitivity to negative stimuli (Bohus et al., 2021).

There is a significant positive relationship between dysfunctional cognitive emotion regulation strategies and mental disorders (depression, anxiety, and personality disorders). Regulating awareness and increasing effective emotion regulation strategies reduce deliberate self-harm in borderline patients. Emotions play a crucial role in many aspects of daily life and significantly impact adaptation to stressful events and life changes (Cheng et al., 2022). Emotions are biological reactions that appear during significant life challenges and situations to coordinate coping and responding. Although emotions have a biological basis, individuals can influence their emotions and ways of expressing them, a process called emotion regulation (Swerdlow & Johnson, 2022). Inability to regulate emotions leads to prolonged activation of the endocrine glands and the autonomic nervous system, resulting in psychosomatic illnesses or physical symptoms. Emotions also regulate spinal reflexes, where pleasant emotions can inhibit receptors and reduce pain intensity. In contrast, physical symptoms and unpleasant emotions increase receptor activity and pain severity (Ehmann et al., 2020). Emotion regulation helps individuals manage arousal and negative emotions, which is directly related to growth, progress, and the development of mental disorders. Various traits are associated with emotion regulation, including borderline traits or personality (Cheng et al., 2022; Garnefski et al., 2001; Hatamian et al., 2019; Jalal & Bagher, 2019).

Self-esteem, as another related component, is associated with Borderline Personality Disorder (Gunderson et al., 2018) and represents an overall attitude and feeling toward oneself, a form of self-evaluation (Hosogi et al., 2012; Wright et al., 2022). In individuals with BPD, these protective mechanisms of self-esteem are damaged, leading to reduced and unstable self-esteem. The more severe the borderline symptoms, the more fragile and vulnerable their self-esteem becomes (Wright et al., 2022). Additionally, the type of relationship with parents is a determinant of self-esteem (Hosogi et al., 2012). Emotional support from parents can increase self-esteem over time (Harter, 2013).

Another psychological characteristic related to emotion regulation is impulsive behavior. Impulsive behaviors, referred to as risky behaviors in some approaches, involve actions that, while somewhat accompanied by potential harm, provide a form of reward (Estévez et al., 2018). These behaviors must have three factors: a) choosing an option among several with potential rewards, b) one of the options being accompanied by the possibility of adverse outcomes, and c) the probability of adverse outcomes being unclear at the time of the behavior (Reynolds et al., 2006). Many people engage in impulsive behaviors in daily life (Estévez et al., 2018). Impulsivity encompasses a wide range of behaviors that are poorly considered and immaturely expressed to achieve a reward or pleasure, carry high risk, and have significant unintended consequences (Sharma et al., 2014). Impulsivity from a behavioral perspective involves short-term, less valuable benefits (Reynolds et al., 2006).

Given the issues discussed and the relatively high prevalence of individuals with BPD, indicating the presence of impulsivity, dysfunctional emotion regulation, and low self-esteem, interventions can be used to improve these variables. One such intervention is Dialectical Behavior Therapy (DBT), which appears to be effective for individuals with BPD (Kliem et al., 2010). DBT helps individuals with BPD develop skills to control intense emotions, reduce self-centered behaviors, and improve interpersonal relationships. It is an integrative therapeutic approach that teaches individuals to recognize and resolve internal conflicts or conflicts between themselves and their environment through combining and integrating them into a functional outcome (Kröger et al., 2013). DBT skills training includes four main areas: mindfulness, emotion regulation, interpersonal effectiveness, and distress tolerance. This

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method encourages individuals to use mindfulness in daily activities. As Linehan describes (Linehan & Wilks, 2015), mindfulness skills training is the most crucial component of DBT, a prerequisite for teaching the other three components. Mindfulness skills training in DBT helps individuals change maladaptive behaviors, emotions, thoughts, and interpersonal relationships in life (Afshari & Hasani, 2020).

Another therapy proposed for BPD is Mentalization-Based Treatment (MBT). This treatment model is based on two main concepts: 1) Bowlby's attachment theory and 2) mentalization (Bateman & Fonagy, 2004; Bateman, 2022). The main assumption of this therapeutic approach is that a lack of mentalization capacity leads to BPD symptoms. Mentalization capacity, considered a reflective function, is the ability to understand one's own and others' mental states through interpersonal relationships during childhood, particularly attachment relationships, and is the basis of overt behaviors (Kröger et al., 2013). The primary focus of this approach is to help the client bring their mental experiences to consciousness and perceive themselves as an integrated whole. Therefore, the goal of treatment is to develop and strengthen mentalization capacity through the therapeutic relationship and enhance the ability to recognize thoughts and feelings experienced (Bateman & Fonagy, 2004).

The most crucial difference between these two intervention programs is that DBT combines client-centered acceptance and empathy with cognitive-behavioral problem-solving and social skills training, following a Socratic style to identify and change negative thinking patterns, leading to positive behavioral changes, and focusing more on psychological, cognitive, and social aspects of treatment (Bateman, 2022). However, MBT emphasizes enhancing individuals' ability to distinguish internal from external reality and internal emotional and mental processes from interpersonal events (Steinmair et al., 2021). The strength of this therapeutic approach is that mentalization requires attention to self and others and vice versa. This reflective and thoughtful way of thinking helps individuals predict, manage, and understand behaviors and reduce experiences of confusion, lack of control, and distrust when dealing with intense emotions. In fact, MBT clarifies how emotions are understood and helps individuals increase their ability to understand others' emotions (Vogt & Norman, 2019). Given the difference between these two programs, where one focuses on emotion and interpersonal relationships and the other on behavior change, comparative interventions can help better understand their differences. Furthermore, given that BPD is highly distressing and requires treatment, and therapeutic interventions for these individuals are mainly provided during suicidal crises, pharmacotherapy does not significantly help these individuals as most stop taking medication after a while. Therefore, this specific group of patients needs specialized therapeutic methods that directly target their problems and symptoms. Hence, research on BPD and approaches to reduce its symptoms is critically necessary. Considering the few studies conducted in Iran comparing different therapeutic methods for improving symptoms in individuals with BPD and to determine an effective and cost-efficient intervention, the present study aimed to compare the effectiveness of Mentalization-Based Therapy and Dialectical Behavior Therapy on emotion regulation, impulsivity, and self-esteem in individuals with BPD.

2. Methods and Materials

2.1. Study Design and Participants

The present study is a quasi-experimental design with a pretest-posttest and control group with a one-month follow-up period. The statistical population included all individuals with BPD aged 19-38 who visited counseling centers in Tehran from September to November 2022. The sample size was conveniently selected, and 45 individuals were chosen and assigned to two experimental groups and one control group. The groups were assessed before and after the treatment using the Borderline Personality Questionnaire and DSM-5 criteria interviews. Inclusion criteria included scoring above the cut-off score of 13 on the Borderline Personality Questionnaire, the ability to attend therapy sessions regularly, stopping medications under specialist supervision, and not having any other specific problems such as a history of hospitalization. Exclusion criteria included starting medication, missing more than one session, and withdrawing from the study.

After making the necessary arrangements and considering ethical considerations, the research objectives were explained, and the counseling center officials were informed. The participants' consent was obtained for their participation in the research. The participants were briefed on the research goals and were asked to attend the therapy sessions for the disorder. Before starting the educational methods, both experimental groups underwent a pre-test and were asked to complete the relevant questionnaires according to their characteristics. The sessions were monitored as much as possible. Additionally, two assistants

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were employed for better control of the participants. Each of the two experimental groups received Mentalization-Based Therapy and Dialectical Behavior Therapy, while the control group received no intervention. Ethical considerations in this research included voluntary participation. Before starting the study, participants were informed about the study's details and regulations. The participants' views and beliefs were respected, and they could withdraw from the study at any stage. Furthermore, the control group members could receive the intervention after the study if interested. All documents, questionnaires, and confidential records were only accessible to the researchers. Informed written consent was obtained from all volunteers.

2.2. Measures

2.2.1. Borderline Personality

This questionnaire, designed by Jackson and Claridge (1991), consists of 18 items answered as yes/no. A yes response scores one point, and no scores zero. During the adaptation of this scale with DSM-IV-TR criteria by Mohammadzadeh et al. (2005), six additional items were added to cover the DSM-IV-TR definition of BPD, making the scale 24 items. Jackson and Claridge (1991) reported a test-retest reliability coefficient of 0.61 over four weeks. Concurrent validity of the STB with neuroticism and psychoticism scales in the original culture was reported as 64% and 44%, respectively. In Iran, Mohammadzadeh et al. (2005) used the revised form of the Eysenck Personality Questionnaire (EPQ-R) for concurrent validity, showing correlations of 0.64 and 0.29 with neuroticism and psychoticism subscales, respectively (Zakerzadeh et al., 2020, 2021). The reliability of this questionnaire using Cronbach's alpha was reported as 0.77 in this study.

2.2.2. Emotion Regulation

Developed by Garnefski, Kraaij, and Spinhoven (2001), this multidimensional self-report tool comprises 36 items with separate forms for adults and children. Garnefski et al. reported satisfactory reliability and validity for this questionnaire. It uses a five-point Likert scale (from always to never), assessing nine factors: self-blame, acceptance, rumination, positive refocusing, refocusing on planning, positive reappraisal, perspective-taking, catastrophizing, and blaming others. The Persian form was validated by Samani and Sadeghi (2009), with Cronbach's alpha for negative emotion regulation strategies at 0.78, positive emotion regulation strategies at 0.83, and the overall scale at 0.81 (Afshari & Hasani, 2020; Samani & Sadeghi, 2010). In this study, the reliability of the questionnaire using Cronbach's alpha was 0.79.

2.2.3. Impulsivity

A self-report questionnaire assessing functional and dysfunctional impulsivity with 23 yes/no items. Dickman reported Cronbach's alpha for functional impulsivity at 0.83 and dysfunctional impulsivity at 0.86 (Gomes et al., 2017). Reliability analysis showed appropriate internal consistency for both subscales, with Cronbach's alpha of 0.76 for functional impulsivity and 0.74 for the American version. Cronbach's alpha for dysfunctional impulsivity was 0.84 for the German version and 0.85 for the American version (Khodarahimi, 2013).

2.2.4. Self-Esteem

Created by Rosenberg in 1965, this 10-item scale uses a four-point Likert scale for responses. The scoring method gives one point for agreeing with items 1-5 and one point for disagreeing with items 6-10. Wiley (1989) reported Cronbach's alpha ranging from 0.72 to 0.87. Ahadi (2009) reported Cronbach's alpha for this scale as 0.85 (Gorjinpor et al., 2020).

2.3. Interventions

2.3.1. Dialectical Behavior Therapy

Dialectical Behavior Therapy included eight 90-minute weekly sessions over two months based on Linehan's training package (Afshari & Hasani, 2020; Kliem et al., 2010; Kröger et al., 2013; Linehan & Wilks, 2015).

Session One

Introduction to the concept of mindfulness and the three states of mind (reasonable mind, emotional mind, and wise mind).

Session Two

Teaching two sets of skills to achieve mindfulness: the "what" skills (observing, describing, and participating) and the "how" skills (non-judgmentally, one-mindfully, and effectively).

Session Three

Teaching distraction strategies.

Session Four

Teaching self-soothing with the five senses.

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Session Five

Teaching skills for improving the moment and the pros and cons technique.

Session Six

Teaching reality acceptance (including radical acceptance, turning the mind, and willingness).

Session Seven

Emotion regulation (including identifying and labeling emotions to increase control over them).

Session Eight

Emotion regulation (teaching the creation of positive emotional experiences through short-term positive experiences); summarizing and reviewing previous sessions; evaluating participants' feedback; conducting post-tests.

2.3.2. Mentalization-Based Therapy

The intervention for the experimental group was conducted based on the Rabble & Keir (2011) model, consisting of 15 two-hour weekly sessions at a psychotherapy clinic. (Bateman, 2022; Steinmair et al., 2021; Vogt & Norman, 2019)

Session One

Establishing therapeutic alliance and rapport (to help individuals understand that therapy is beneficial and the therapist is trustworthy), taking personal history (using open-ended and descriptive questions), providing an understanding of mentalization-based therapy and how it works, assigning homework (completing a psychotherapy file), summarizing the session with individuals.

Session Two

Collecting personal history and formulating a list of target problems, encouraging insight and awareness of the primary sources of problems, assigning homework (creating a diary to identify target problems, describing related behaviors, and determining triggering factors), summarizing the session with individuals.

Session Three

Collecting personal history (to identify a cycle of repetitive and dysfunctional thoughts and behaviors and to understand significant reciprocal roles), reformulating based on the emergence and development of problems and symptoms, summarizing the session with individuals.

Session Four

Reformulating based on dysfunctional thoughts, belief systems, and behaviors, focusing on object relations, dysfunctional defense mechanisms, and ego strength, and finally writing a reformulation letter to the individual, summarizing the session with individuals.

Session Five

Reviewing feedback from the reformulation letter, setting therapeutic goals, and developing a final formulation based on the initial formulation regarding problems and clinical symptoms, summarizing the session with individuals.

Session Six

Identifying triggering events for dysfunctional behaviors, individual strengths and capabilities, identifying sequential maladaptive patterns and reciprocal roles with the therapist's help, assigning homework (identifying the frequency of dysfunctional behavior patterns), summarizing the session with individuals.

Session Seven

Recognizing emotional instability and compiling a list to identify dysfunctional processes and thoughts with the individuals, identifying maladaptive patterns in interpersonal contexts during the session, accurately recognizing dysfunctional patterns occurring during the session and using them as a tool for change and learning, predicting emotions of transference and countertransference based on the reformulation letter, summarizing the session with individuals.

Session Eight

Reviewing and challenging old acquired patterns affecting life through interpersonal relationships, teaching techniques to review dysfunctional patterns and correct these relationships, addressing symptoms and growth in life, summarizing the session with individuals.

Session Nine

Reviewing the evaluation of symptoms and signs and correcting individual reviews, helping the individual understand where each dysfunctional behavior fits with others, increasing awareness of the cycle of repetitive behaviors, summarizing the session with individuals.

Session Ten

Procedural revision based on understanding the impact of the patient's emotions and behaviors on the symptoms and awareness of how old schemas related to dysfunctional defense mechanisms, object relations, and ego strength persist, analyzing maladaptive patterns and identifying their place with others, helping the individual behave in new ways, summarizing the session with individuals.

Session Eleven

Procedural revision based on identifying and mapping the individual's valuation of negative emotions and evaluating

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spontaneous negative thoughts, summarizing the session with individuals.

Session Twelve

Procedural revision based on improving the evaluation of the individual's current state, using various reinforcement techniques to accelerate change and recovery (providing positive reinforcement, role-playing, and thinking about new ideas or problem-solving), helping the individual gain insight into issues and how to confirm and stabilize realistic roles, summarizing the session with individuals.

Session Thirteen

Procedural revision based on correcting interpersonal roles and social supports, summarizing the session with individuals.

Session Fourteen

Procedural revision based on helping the individual achieve more effective behavioral patterns, assisting the individual in identifying traps and barriers to intrapersonal and interpersonal growth, summarizing the session with individuals.

Session Fifteen

Procedural revision based on increasing insight and awareness of the individual's developmental path of problems to reduce the use of dysfunctional defense mechanisms, improving object relations and ego strength, writing a farewell letter, and the ability to manage behavior outside of therapy and in real life, summarizing the session with individuals.

2.4. Data analysis

Descriptive statistics were used to calculate the statistical indicators for each research variable. In the inferential statistics section, repeated measures ANOVA and SPSS-22 software were used.

3. Findings and Results

The mean (standard deviation) age of participants in the Dialectical Behavior Therapy group was 33.7 (9.4), the Mentalization-Based Therapy group was 34.6 (9.4), and the control group was 34.9 (9.9). There were no significant age differences among the three groups (P=0.865).

Table 1

Central Tendency and Dispersion Indices of Research Variables in Two Experimental Groups and the Control Group

Variable	Group	Pre-test Mean (SD)	Post-test Mean (SD)	Follow-up Mean (SD)
Impulsivity	Dialectical Behavior Therapy	16.11 (2.50)	10.32 (2.01)	10.44 (2.10)
	Mentalization-Based Therapy	17.89 (2.69)	13.13 (2.44)	13.05 (2.56)
	Control	17.21 (2.55)	17.38 (2.37)	17.63 (2.40)
Emotion Regulation	Dialectical Behavior Therapy	59.15 (5.52)	74.45 (6.12)	73.35 (5.74)
	Mentalization-Based Therapy	59.30 (5.66)	65.05 (5.33)	64.20 (4.97)
	Control	57.40 (5.04)	57.10 (5.02)	57.00 (5.26)
Self-esteem	Dialectical Behavior Therapy	17.05 (4.87)	29.50 (7.61)	28.30 (8.77)
	Mentalization-Based Therapy	15.05 (3.52)	21.22 (4.01)	22.75 (4.10)
	Control	14.45 (3.61)	14.30 (3.63)	14.25 (3.54)

To assess the significance of the differences in emotion regulation, self-esteem, and impulsivity scores between the two experimental groups and the control group, repeated measures ANOVA was used. The results of the Kolmogorov-Smirnov test for the research variables indicated that the data were normally distributed. Levene's test for homogeneity of variances in the experimental and control groups showed equal variances for the research variables across the pre-test, post-test, and follow-up stages. Additionally, Mauchly's test of sphericity indicated the violation of the assumption of sphericity, thus requiring the use of the Greenhouse-Geisser correction.

Table 2

Repeated Measures ANOVA for Comparing Pre-test, Post-test, and Follow-up Scores of Emotion Regulation, Self-esteem, and Impulsivity in the Experimental and Control Groups

Scale	Source of Effect	Sum of Squares	df	Mean Square	F	p	Eta Squared
Impulsivity	Time	119.46	1.13	92.71	148.15	<0.001	0.84
	Time × Group	93.95	2.26	72.91	116.52	<0.001	0.80
	Group	146.94	2	146.94	41.16	<0.001	0.59

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Emotion Regulation	Time	400.08	1.13	296.70	261.46	<0.001	0.90
	Time × Group	277.06	2.26	205.46	181.07	<0.001	0.86
	Group	260.10	2	260.10	4.93	0.035	0.35
Self-esteem	Time	59.267	1.13	55.448	12.761	0.001	0.313
	Group	112.067	1	112.067	32.063	0.001	0.534
	Time × Group	159.756	2	79.878	29.803	0.001	0.516

The results in Table 2 indicate that the ANOVA for the within-subjects factor (time) is significant, and the between-subjects factor (group) is also significant. These results mean that considering the effect of the group, the effect of time alone is significant. Additionally, the interaction between group and time is significant. For pairwise comparisons, the Bonferroni post hoc test was used.

Table 3

Bonferroni Post Hoc Test Results for Comparing Emotion Regulation, Self-esteem, and Impulsivity

Variable	Group 1	Group 2	Mean Difference	p
Impulsivity	Dialectical Behavior Therapy	Mentalization-Based Therapy	-2.40	0.015
	Dialectical Behavior Therapy	Control	-6.05	<0.001
	Mentalization-Based Therapy	Control	-3.14	<0.001
Emotion Regulation	Dialectical Behavior Therapy	Mentalization-Based Therapy	9.22	<0.001
	Dialectical Behavior Therapy	Control	17.56	<0.001
	Mentalization-Based Therapy	Control	8.43	<0.001
Self-esteem	Dialectical Behavior Therapy	Mentalization-Based Therapy	8.01	<0.001
	Dialectical Behavior Therapy	Control	15.63	<0.001
	Mentalization-Based Therapy	Control	7.83	<0.001

The results in Table 3 show that emotion regulation and self-esteem in the Dialectical Behavior Therapy and Mentalization-Based Therapy groups were higher, and impulsivity was lower compared to the control group in the post-test stage ($p<0.01$). Additionally, a comparison of the two experimental groups showed significant differences in the scores of emotion regulation, self-esteem, and impulsivity ($p<0.05$), indicating that Dialectical Behavior Therapy had a greater impact on improving emotion regulation and self-esteem and reducing impulsivity in individuals with Borderline Personality Disorder compared to Mentalization-Based Therapy.

4. Discussion and Conclusion

This study aimed to compare the effectiveness of Mentalization-Based Therapy and Dialectical Behavior Therapy on emotion regulation, impulsivity, and self-esteem in individuals with Borderline Personality Disorder. The findings indicate that both therapies were effective in improving emotion regulation, impulsivity, and self-esteem in individuals with BPD. These findings are consistent with those of prior findings (Afshari & Hasani, 2020; Bateman, 2022; Kliem et al., 2010; Kröger et al., 2013; Vogt & Norman, 2019).

In explaining these findings, it can be said that Dialectical Behavior Therapy, with the application of mindfulness skills, distress tolerance, emotion regulation, and interpersonal effectiveness in patients with BPD, provides a suitable ground for change. In fact, DBT, by relying on behavior-based learning foundations, the necessity of applying learned skills, and the generalization of specific skills, prevents the patients' dysfunctional behavior cycles, reduces their emotional and distressing experiences, and helps them choose new behavioral skills, recognize their emotional experiences, increase their frustration tolerance, and implement these skills in real-life settings (Kröger et al., 2013). On the other hand, DBT, by increasing clients' capabilities through teaching new skills that are not effectively used, enhancing motivation, ensuring the generalization of treatment to real-world environments, providing structure through professional and social networks, and increasing the therapist's capabilities and motivation through enhancing their skills, offers a new path in treating BPD (Kliem et al., 2010).

Another critical factor in the effectiveness of DBT in BPD is distress tolerance training, which prepares the patient to accept and cope with painful environments and emotions simultaneously. This technique helps the client engage in activities (e.g., calling a close friend or even tidying up a

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room), participate in tasks (e.g., cooking for someone or surprising a friend with a gift), compare themselves to those in worse situations, create deliberate positive emotions (e.g., watching a movie), temporarily suppress painful conditions (e.g., imagining a wall between themselves and their problems), substitute thoughts, and reinforce other senses (e.g., squeezing ice cubes or listening to loud music), thus increasing their tolerance for distress and improving BPD symptoms.

In explaining these findings, it can be stated that individuals with BPD often develop epistemic mistrust due to disorganized attachment in childhood, hindering constructive social interactions. Mentalization-Based Therapy increases epistemic trust through pretended cues, allowing individuals to better understand issues and open their minds to comprehend their emotions. Overcoming epistemic mistrust helps stabilize positive social information previously rejected and enables belief change (Bohus et al., 2021). Moreover, MBT offers a "not-knowing" stance, providing a foundation for exploring the individual's perspective, enhancing empathic validation, and creating an emotional platform shared between the patient and therapist. This experience reassures the patient that they are not alone and shows that another mind can be useful in identifying mental states and increasing dynamic responsiveness, reducing alienation and improving BPD symptoms (Gunderson et al., 2018; Vogt & Norman, 2019).

Thus, MBT, by clarifying problems, mentalizing details of issues, mentalizing relationships, and interpersonal processes within the therapy group, facilitates cognitive trust in individuals with BPD, which, in turn, improves their mental functioning in interpersonal and stressful situations (Steinmair et al., 2021; Vogt & Norman, 2019).

The present study's results, comparing the effectiveness of these two therapeutic approaches on BPD symptoms, indicated that Dialectical Behavior Therapy was more effective than Mentalization-Based Therapy. In the literature review, no comparative study of these two therapeutic approaches was found. However, it can be explained that DBT is not merely a behavior-prescribing change therapy, while MBT is primarily focused on acceptance. Unlike cognitive approaches that simultaneously focus on acceptance and change, DBT emphasizes reducing life-threatening behaviors, such as suicide, disruptive behaviors, and behaviors that impair quality of life, increasing behavioral skills (e.g., interpersonal skills, distress tolerance skills, emotion regulation skills, and mindfulness skills), reducing post-traumatic stress, and enhancing self-respect (including developing various positive aspects of self, self-respect, self-confidence, and self-soothing). This focus can explain the greater effectiveness of DBT compared to MBT in reducing BPD symptoms.

5. Limitations & Suggestions

The limitations of this study included geographical limitation (Tehran), short follow-up duration, and the use of purposive sampling. It is recommended that future studies replicate this research with other populations using random sampling and longer follow-up periods to enhance external validity. Practically, considering the greater effectiveness of DBT compared to MBT, therapists and counselors should use DBT to improve BPD symptoms.

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Declaration

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

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethics 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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Authors' Contributions

All authors contributed equally.

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