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A Series of Panic Disorder Cases Treated with Detached Mindfulness

ABSTRACT

Background: Studies evaluating the efficacy of detached mindfulness (DM) as a standalone intervention for patients with panic disorder are lacking in the literature. In this context, the aim of this open study was to evaluate the efficacy of DM in patients with panic disorder.

Methods: The study was conducted in 11 patients (7 females and 4 males). The DM therapy process was applied to the patients. The clinical course was followed using the Panic Disorder Severity Scale (PDSS), the Beck Anxiety Inventory (BAI), and the Beck Depression Inventory (BDI).

Results: Patients' attendance at therapy and completion of DM homework were found to be quite good. Patients' PDSS scores decreased significantly at the end of treatment compared to baseline. A similar change was seen in the BAI and BDI scores.

Conclusion: In conclusion, it can be stated that DM is an effective, easily applicable, and highly therapeutic method for the treatment of patients with panic disorder. However, the present study needs to be supported by future studies with larger samples.

Keywords: Panic disorder, mindfulness, metacognition, psychotherapy

Introduction

Panic disorder is a disorder classified as an anxiety disorder in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).[1] The DSM-5 criteria for panic disorder include the occurrence of recurrent panic attacks, with one or more attacks being followed by at least 1 month of fear of another panic attack or the engagement in significant maladaptive behavior related to the attacks.[1] Although approximately one-quarter of the population is at risk of experiencing a panic attack at some point in their lives, the prevalence of panic disorder in the general population is estimated to be approximately 2%, with a 12-month prevalence rate. The disorder typically manifests in the twenties, with a higher prevalence in women.[2,3] Panic disorder has a profound impact on quality of life and the ability to work. It frequently co-occurs with other psychiatric disorders, particularly other anxiety disorders, mood disorders, and substance use disorders.[4,5]

The use of medication, particularly selective serotonin reuptake inhibitors (SSRIs), has proven to be an effective treatment for panic disorder. Cognitive behavioral therapy (CBT) is also highly efficacious in the management of panic disorder and is recommended as a first-line treatment.[6-9] In the implementation of CBT for panic disorder, the main stages can be defined as psychoeducation about panic disorder, cognitive restructuring, and then hierarchical rehearsal of the feared situations accompanied by behavioral approaches, that is, interoceptive exposure.[10]

While the efficacy of treatment is a crucial aspect, it is equally important to ensure that patients receive and adhere to the recommended treatment plan. Dropout is a significant challenge encountered in various forms of psychotherapy. The act of dropping out has a negative impact on the psychotherapy process for the patient and on the morale and motivation

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of the therapist. Wierzbicki and Pekarik reported an average dropout rate of 46.86%, which varied significantly depending on the definition of dropout.[11] As evidenced by the aforementioned studies, dropout appears to be a significant challenge across various forms of psychotherapy, including those based on cognitive principles, such as CBT. In light of the observations made in the field of psychiatry, it can be argued that the necessity for more straightforward, tangible, and concise therapeutic approaches is becoming increasingly apparent.

A more recent therapy trend introduced by Wells, which is considered one of the third-wave schools of cognitive therapy, is metacognitive therapy (MCT).[12] The primary distinction between this approach and CBT is that it focuses on modifying the way we respond to triggering thoughts rather than the content of those thoughts. Additionally, it works on how we think rather than what we think, and teaches this to the patient.[12] A single study compared the efficacy of MCT with that of CBT in patients diagnosed with post-traumatic stress disorder, social anxiety disorder, and panic disorder.[13] The authors found no significant differences in the impact on comorbid diagnoses and symptoms between the 2 therapy modalities. However, they did suggest that MCT produced more change in personality problems, with a more rapid effect on anxiety symptoms. A preliminary study indicated that MCT was more efficacious than CBT in reducing anxiety and worry.[14]

It is evident that detached mindfulness (DM) represents one of the most pivotal techniques employed in MCT.[15] Although it shares similarities with the mindfulness employed in mindfulness-based therapies, it also exhibits notable distinctions in terms of its practical applications. From the perspective of an MCT therapist, it can be stated that this technique is highly effective and useful, particularly when employed extensively in psychiatric practice. The aim of DM is to foster a distinctive relationship with the patient, thereby enhancing their meta-awareness.[15] It involves creating awareness of passively observing thoughts, rather than dealing with thoughts and mind-blowing thoughts. Flexible control of thought and attention is key. The objective of DM is to enhance the capacity to perceive mental events as such, without reacting to them, without attempting to control them, and without exhibiting any mental or behavioral response to them. In fact, the aim is to put them in their own place.[16] As the name implies, the technique comprises 2 distinct elements: detachment and mindfulness. Mindfulness can be described as being aware of internal events without being attached to thoughts, beliefs, emotions, or memories.[16] Detachment, on the other hand, is the passive establishment of a relationship by separating mental events from the self. This is in contrast to the relationship that a person establishes by seeing oneself as part of the mental events. During DM psychoeducation, it is essential that the patient is made aware that they should refrain from interfering with mental events, whether through behavioral or conceptual means. The use of DM enables the therapist to facilitate the patient's transition from the object mode, where thoughts and facts are intertwined, to the metacognitive mode, where the 2 are distinctly separated. The technique of DM is straightforward to employ and efficacious when adequately elucidated and experienced by the patient. A review of the existing literature did not identify any studies that had examined the efficacy of using DM in isolation in patients with panic disorder. A recently published open-label study evaluated the efficacy of DM in patients with obsessive-compulsive disorder (OCD).[17] The study included 17 adult patients with OCD who had scores of 16 and above on the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) and were receiving ongoing psychotropic medication. The clinical course was followed using the Y-BOCS and the Beck Depression Inventory (BDI). A comparison of the scores obtained at the beginning and end of treatment indicated a statistically significant difference. It was observed that the DM technique, one of the principal techniques employed in MCT, is markedly advantageous in patients exhibiting a certain degree of severity. It was recommended that further studies be conducted to replicate these findings and demonstrate the efficacy of this technique in cases exhibiting significant treatment resistance.[17]

MAIN POINTS

- *Detached mindfulness is an important technique in metacognitive therapy (MCT).*
- *The patients' mean PDSS score was 17.36 ± 2.58 at baseline and 9.64 ± 3.01 at the end of the study.*
- *The DM technique is significantly beneficial for patients with a certain degree of severity.*

In this context, we postulated that DM may be an efficacious and valuable therapeutic option due to its capacity to target metacognitive processes, emphasize cognitive flexibility, reduce reliance on thought content, have a shorter treatment duration, and have low dropout rates. Although medication and CBT are proven treatment options for people with panic disorder, the existence of new therapies can strengthen the clinician's hand in the treatment process, given the dropout rates in CBT and the groups of patients who refuse drug treatment because of drug side effects and prejudice against drugs.

Methods

Subjects

This study was conducted on outpatients and inpatients admitted to the Psychiatry Clinic of the Firat University School of Medicine, involving 11 patients (7 women and 4 men). Patients were followed up with weekly interviews between February 1, 2023, and September 1, 2023. All patients started and completed the treatment, and none discontinued the treatment prematurely. Written informed consent was obtained from the patients after a detailed explanation of the procedures and the study process. The study was also approved by the local ethics committee of the Firat University School of Medicine, number 2024/06-10. In addition, all patients underwent a physical examination and basic laboratory tests for an organic differential diagnosis. They also underwent a detailed psychiatric assessment. The diagnosis of panic disorder was made on the basis of this detailed clinical assessment and using the Structured Clinical Interview for DSM-5.[18] The study adhered strictly to the tenets of the Declaration of Helsinki for research involving human subjects. Four of the patients were not currently taking any medication, and 5 of the remaining patients had been on a stable dose of psychopharmacological agents for at least 1 month. The remaining 2 patients had been on a stable dose of medication for at least 1 month due to recent changes in treatment.

Exclusion and Inclusion Criteria

Some exclusion criteria were used for patients who did not want to be included in the study. These criteria were presence of an Axis I disorder other than panic disorder, excluding depression; presence

of clinical mental retardation; being under 18 years of age; refusal to give written consent; presence of an organic illness that might interfere with the conduct of the interview; presence of a history of alcohol and/or substance use disorder in the past 6 months; having undergone a similar or mindfulness-oriented therapy process; having talked about or attempted suicide currently or in the past few months; having a lifetime history of psychotic disorder and bipolar disorder; and having antisocial personality disorder. Patients who were taking unstable doses of medication or who had to change their medication in the previous month were also excluded from the study. The inclusion criteria were being diagnosed with panic disorder; being drug-naive or having been on a stable dose of psychotropic medication for at least 1 month; being 18 years of age or older; not being mentally incapacitated; being willing to complete the tests to be administered; and being willing to sign for volunteer work.

Scales

The Panic Disorder Severity Scale (PDSS) was used as the primary outcome measure to assess the results.[19] We used a PDSS score of 12 and above as an inclusion criterion to demonstrate treatment efficacy. All patients were assessed with the Beck Anxiety Inventory (BAI)[20] and the Beck Depression Inventory (BDI)[21] at baseline, with the exception of the PDSS. We designed the study as an open-label trial.

Procedure for Detached Mindfulness

M.A., who is also a metacognitive therapist trained at the Institute of Metacognitive Therapy in Manchester, ran the DM practice. Therapy sessions took place once a week, or at most every 10 days. The first stage of the treatment was planned as psychoeducation, as in all cognitive-oriented therapies. The topic of what panic disorder means in terms of metacognitive theory in psychoeducation was discussed. Indeed, the idea was emphasized that an inappropriate way of relating to thoughts and responding to thoughts leads to psychiatric disorders and that this style perpetuates the disorder in panic disorder. The experience of seeing thoughts mixed with reality, i.e., the object mode, is problematic; in fact, it has been tried to establish the knowledge that if we establish a new style of relating to thoughts and change the way we respond to our thoughts, this can be beneficial. The next stage focused on thoughts as powerless things that pass through the mind and the unnecessary need to interfere with them. We then applied the free association task.[15] The aim of this task was to enable the patient to see their relationship with neutral thoughts. During this task, the patients were asked to sit quietly. Some neutral words were said to the patients, and they were asked to let these words circulate freely in their minds. For example, "tree," "flower," "butterfly," "cloud," "toy," "chocolate," and "beach." They were asked to allow these words to circulate freely without interfering with the thoughts that had formed in their minds. It may or may not be a form or a memory. They were told that it didn't matter, that all they had to do was to allow these thoughts to circulate freely in their minds. They were simply asked to passively observe how their mind responded to these thoughts. Once the free association task was understood, the tiger task suggested by Wells was carried out. In this task, patients were asked to think of a tiger. They were told to just watch passively and not interfere, leaving the tiger where it was in their minds. The instructions were, "The tiger may or may not move its tail, it doesn't matter, just watch." They were asked to adopt an approach of "the tiger may or may not move, just watch it without interfering with whatever it is doing."[16] At this point, some suggestions were made to help patients to remain attentive. The next step was to look at the patients' automatic thoughts. For example, an automatic thought of "I am going to die." They were asked to bring this automatic thought into their minds. They were allowed to passively observe this thought without interfering and allow it to circulate freely in their minds. When enough was achieved, the neutral words were switched back on. This time they were asked to leave these words where they had formed in their minds and to leave this thought in their own minds to take a few steps back and just passively observe these thoughts. The same words were used for this task, such as "tree," "flower," "butterfly," "cloud," "toy," "chocolate," and "beach." Finally, they were asked to think of one of the automatic thoughts they had often experienced, such as "I am going to die." This time they were asked to leave these words where they formed in their minds and to leave this thought in their own minds to take a few steps back and just passively observe these thoughts. It was emphasized that thought is not a part of the body, the brain, or the mind but only a temporary activity in the mind. The idea that we are trying to create a new way of relating to thoughts has been tried. Patients were asked to observe and record their automatic thoughts as homework. They were asked to do the DM exercise on each automatic thought and to record the change in belief and emotion about the thought as soon as possible. The treatment period consisted of 4 sessions for all patients. All patients completed the treatment without dropping out. During the study, the patients were given several psychological tests, namely the Panic Disorder Severity Scale (PDSS),[19] the BAI,[20] and the BDI.[21] Turkish validity and reliability studies have been conducted for all 3 scales.[22] Scale scores were measured throughout the treatment. Patients' compliance with homework was rated on a scale of 0 to 10 after each session.

Statistical Analysis

The Statistical Package for Social Sciences (SPSS) version 22.0 was used to analyze the data (SPSS Inc., Chicago, IL, USA). We reported patient demographics and clinical measures using descriptive statistics and used the independent *t*-test for analysis of PDSS, BAI, and BDI scale scores obtained during treatment. In addition to the scale scores, the homework ratings at the second, third, and fourth sessions were reported in the descriptive statistics. The power analysis for the sample size showed that the power was over 80%.

Results

The study group consisted of 11 patients with panic disorder. Seven of the patients were women, and 4 were men. All patients completed the treatment period, and none dropped out of the study. The mean age was 36.63 ± 8.15 years. Of the patients, 6 were university graduates, 3 were high school graduates, and the rest were secondary school graduates. As mentioned in the Methods section, all patients completed the treatment process, and there were no patients who discontinued treatment prematurely. All patients continued their therapy sessions regularly. However, 2 of the patients did not attend the third interview, and 1 did not attend the second interview, but the interview was conducted by telephone although not in a structured manner. One patient could not attend the third session due to a particular social problem and could not be contacted by telephone. Sociodemographic and clinical data are shown in Table 1.

The PDSS, BAI, and BDI scores are shown in Table 2, together with the scores for the patients' homework assessments. Baseline PDSS, BDI, and BAI scores were 17.36 ± 2.58, 21.82 ± 6.69, and 28.45 ± 6.46,

Table 1. Demographic and Clinical Data of the Patients

Patients with Panic Disorder (n = 11)	(Mean ± SD)
Age (years)	36.63 ± 8.15
Gender (F/M)	7/4
Panic Disorder Severity Scale	17.36 ± 2.58
Beck Anxiety Inventory	28.45 ± 6.46
Beck Depression Inventory	21.82 ± 6.69
Duration of illness (years)	8.91 ± 3.99

SD, Standard Deviation.

respectively, and final scores were 9.64 ± 3.01, 10.91 ± 2.88, and 16.18 ± 5.19, respectively, indicating a highly statistically significant difference ($P < .001$). The homework ratings clearly showed that the patients with panic disorder did the homework well. We found a value of 8.36 ± 0.92 in the second session homework control, while the third and fourth homework ratings were 8.00 ± 0.77 and 7.82 ± 0.75, respectively. This was a good rate of completion of the DM homework for patients with panic disorder. There was no significant difference in the homework ratings between sessions ($P > .05$). Figures 1-4 show the change in PDSS, BDI, BAI, and homework assessment scores.

Table 2. Scale Score Changes and Homework Ratings

Patients with Panic Disorder (n = 11)	(Mean ± SD)	*t*	*P*
Panic Disorder Severity Scale			
Session 1	17.36 ± 2.58		
Session 2	14.73 ± 2.79*	12.97	= 0.001
Session 3	12.73 ± 3.10*	11.29	= 0.001
Session 4	9.64 ± 3.01*	11.44	= 0.001
Beck Anxiety Inventory			
Session 1	28.45 ± 6.46		
Session 2	23.91 ± 5.43*	7.66	= 0.001
Session 3	20.36 ± 4.95*	11.06	= 0.001
Session 4	16.18 ± 5.19*	8.52	= 0.001
Beck Depression Inventory			
Session 1	21.82 ± 6.69		
Session 2	17.91 ± 5.65*	8.97	= 0.001
Session 3	14.09 ± 3.85*	8.73	= 0.001
Session 4	10.91 ± 2.88*	7.73	= 0.001
Homework ratings			
Session 2	8.36 ± 0.92		
Session 3	8.00 ± 0.77	1.31	= 0.221
Session 4	7.82 ± 0.75	1.94	= 0.082

*$P < .001$, compared to baseline using paired samples *t*-test.

Discussion

This study represents the inaugural investigation into the efficacy of DM as a standalone treatment for patients with panic disorder. In this context, we will now discuss some of the key findings of our study. First of all, it should be noted that no patient was dropped out of the study. In this type of study, the dropout rate is very important. Second, PDSS scores decreased significantly at the end of treatment compared to baseline. Beck depression inventory and BAI scores also decreased significantly at the end of treatment. The final significant finding was that the completion rate of the DM homework was found to be quite high.

Detached mindfulness can be a powerful tool in the treatment of panic disorder. The cultivation of a state of detached awareness enables individuals to observe their thoughts, feelings, and physical sensations without becoming overly absorbed in them or reacting impulsively. This approach enables individuals to gain greater control and perspective during panic attacks. It allows them to step back from the intensity of the experience and recognize it for what it is: a temporary state of heightened anxiety. The practice of detached mindfulness can facilitate the development of a more compassionate and accepting attitude towards panic symptoms, which in turn can reduce the frequency and severity of attacks. Furthermore, detached mindfulness enables individuals to employ efficacious coping strategies, such as deep breathing or progressive muscle relaxation, rather than being overwhelmed by fear. In summary, mindfulness can offer profound relief and empowerment to those struggling with panic disorder by fostering a detached perspective.

A more recent therapeutic approach, MCT, was introduced by Wells and is considered one of the third-wave schools of cognitive

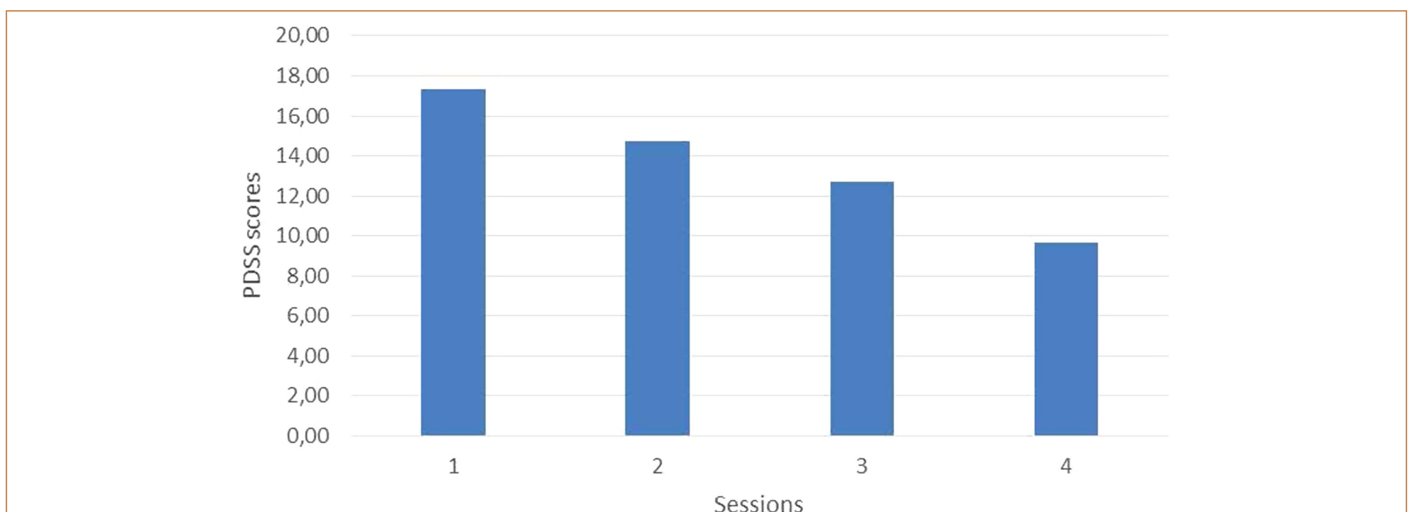

Figure 1. Change in Panic Disorder Severity Scale (PDSS) scores by session.

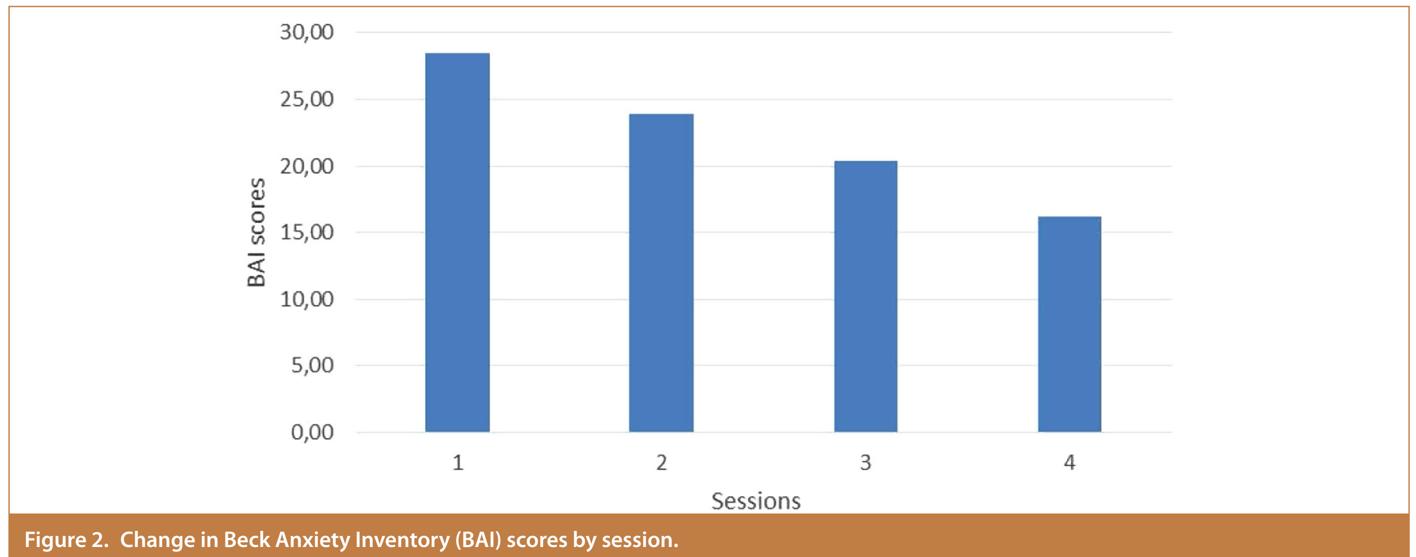

Figure 2. Change in Beck Anxiety Inventory (BAI) scores by session.

therapy.[12] Metacognitive Therapy has been used with great success for a variety of psychiatric disorders.[12,25,26] The primary differentiating aspect between MCT and CBT is that while CBT prioritizes modifying the content of thoughts, the fundamental tenet of MCT is to alter the manner in which we interact with thought processes. In MCT, patients are instructed in a novel approach to thought regulation.[12] The efficacy of DM was evaluated in a study of patients diagnosed with social anxiety disorder, post-traumatic stress disorder, and panic disorder. In this study, the researchers compared the effectiveness of CBT and DM and found that there was no significant difference between the 2 treatments in terms of comorbid conditions and symptoms. Additionally, they observed that MCT had a faster effect on anxiety symptoms.[13] Furthermore, a study with a limited number of participants demonstrated that MCT was more efficacious than CBT in reducing anxiety and worry.[14] A recent article evaluated the efficacy of DM in patients with OCD in an open-label study.[17] In this study, Y-BOCS scores decreased significantly at the end of therapy compared to baseline. It was observed that the DM technique is significantly beneficial for patients with a certain level of severity. The results of this study indicate that the DM is an efficacious treatment for both OCD and panic disorder, even when used as a standalone intervention. It is imperative that we direct our attention to the remarkable efficacy of the DM technique. Detached mindfulness is a technique that is easy to use and effective when well described and experienced by the patient. In the present study, it is noteworthy that the homework ratings of patients with panic disorder were exceptionally high. A limited number of studies have been conducted on the use of DM alone in patients with psychiatric disorders. In one of the studies, the authors compared the effectiveness of cognitive restructuring and DM in patients with OCD.[27] The results of this research demonstrated that both DM and cognitive restructuring were efficacious, as evidenced by a reduction in the Y-BOCS score.[27]

Although MCT has been demonstrated to be an efficacious therapy in numerous studies, it can be argued that it has transdiagnostic efficacy in many psychiatric disorders. The technique of DM is relatively concrete and straightforward, which likely enhances its comprehensibility and effectiveness. From this perspective, the utility of an accessible approach is at least encouraging for patients with panic

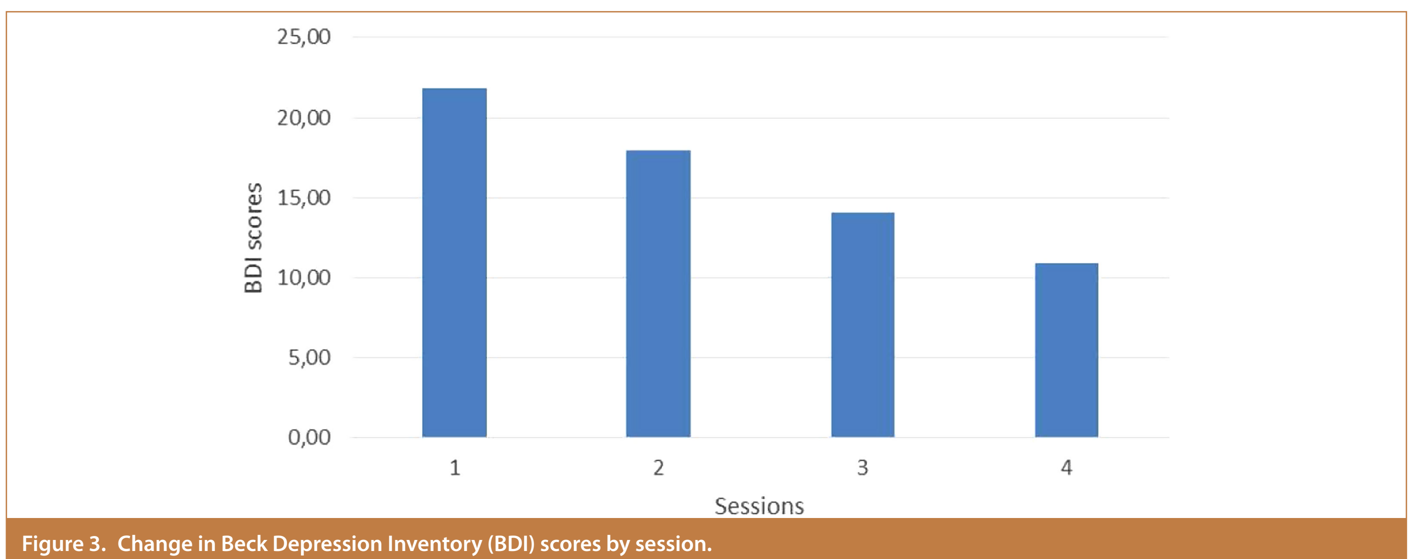

Figure 3. Change in Beck Depression Inventory (BDI) scores by session.

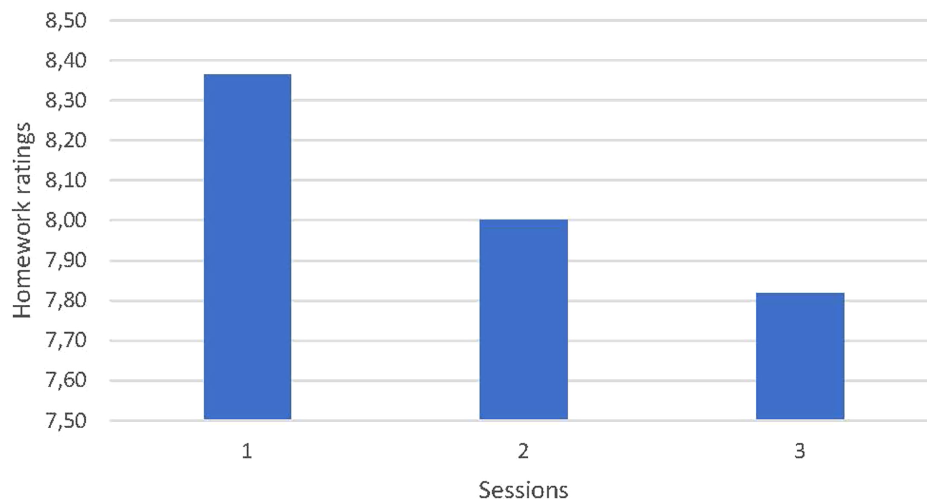

Figure 4. Change in homework ratings by session.

disorder. Furthermore, with regard to compliance with the tasks assigned, it was emphasized in the results section that patients with panic disorder exhibited a high degree of compliance. We consider this to be of significant importance, particularly in light of the issue of treatment dropout. We believe that the ease of use, clarity, and efficacy of DM have contributed significantly to this outcome. The question remains as to the duration of this state of well-being in patients with panic disorder. It is possible that studies with larger sample sizes and a longitudinal nature may provide answers to this question.

It is also important to acknowledge certain limitations of this work. It is our contention that an appreciation of the constraints inherent in the study data will enhance the objectivity of our study. Firstly, the sample size was not sufficiently large to yield statistically significant results. However, given the significant challenges inherent in conducting studies with large sample sizes in psychotherapy research, this limitation can be regarded as a relatively acceptable trade-off. The second limitation, and arguably the most significant, is that our study was an open trial and did not include a comparison group with another treatment method, including medication. This situation represents a limitation in the evaluation of the results of our study. Another significant limitation was that some patients were not permitted to continue psychopharmacotherapy despite having been on a stable dose for an extended period. This may have been a confounding factor in determining whether efficacy was directly related to DM. In contrast, the study's strengths include the patients' high compliance with DM therapy. Secondly, as can be seen in the table, the homework scores were found to be quite high.

Conclusion

In conclusion, it can be stated that DM appears to be an effective and readily applicable therapeutic method in the treatment of patients with panic disorder. Nevertheless, further research is required to substantiate these findings. The study demonstrates that DM has significant short-term effects on patients with panic disorder. However, to gain a more comprehensive understanding of the long-term effects of DM on this population, it is necessary to perform follow-up studies with larger samples.

Data Availability Statement: *The data are not publicly available due to privacy or ethical restrictions. The data that support the findings of this study are available from the corresponding author upon reasonable request.*

Ethics Committee Approval: *This study was approved by the Ethics Committee of Firat University (Approval No: 2024/06-10).*

Informed Consent: *Written informed consent was obtained from the patients who agreed to take part in the study.*

Peer-review: *Externally peer-reviewed.*

Author Contributions: *Concept – M.A.; Design – M.A.; Supervision – M.F.T., M.G.G.; Resources – M.A., M.F.T.; Materials – M.F.T.; Data Collection and/or Processing – M.A., M.F.T., M.G.G.; Analysis and/or Interpretation – M.F.T.; Literature Search – M.A., M.F.T., M.G.G.; Writing – M.A., M.F.T., M.G.G.; Critical Review – M.G.G.*

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