



A Case Study of a Ukrainian Refugee in Turkey: Metaphoric Associative Cards (MACs) and Eye Movement Desensitization and Reprocessing (EMDR) Therapy for Post-Traumatic Stress Disorder (PTSD)

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EMDR is a well-known intervention technique widely used in psychological trauma cases, while Metaphoric Associative cards are a relatively new diagnostic and psychocorrectional tool. In this study, Eye Movement Desensitization and Reprocessing (EMDR), along with Metaphoric Associative Cards (MAC), were used to treat PTSD in a 37-year-old refugee from Ukraine after escaping the war, felt anxious and unsafe, had trouble sleeping, and constantly worried about daily life. After six sessions of this combined therapy, her mood improved, her anxiety decreased, and she felt hopeful about the future. The State-Trait Anxiety Inventory for Adults (STAI-AD) was used to measure her anxiety before and after the therapy. Results revealed a significant decrease in state anxiety ($p=0.034$) after the treatment, indicating that after a few sessions of EMDR paired with MACs, there were remarkable improvements, proving it can be one of the treatment methods for PTSD.

Keywords: Eye movement Desensitization and Reprocessing, Metaphoric Associative Cards, Post-traumatic Stress Disorder, State-Trait Anxiety Inventory (STAI).

INTRODUCTION

Over the last few years, the global number of forcibly displaced people has risen dramatically, with a significant increase in the total number of refugees. According to the United Nations High Commissioner for Refugees (UNHCR), in 2022, over 83.9 million people were forcibly displaced worldwide by the end of 2021, mainly due to reasons of persecution, conflict, general violence, and human rights abuses. The report further indicates that due to the displacement caused by the war in Ukraine and other crises in 2022, forced displacement worldwide now exceeds 100 million people (UNHCR, 2022). The war in Ukraine has been a significant contributor to this trend, heavily impacting neighboring countries. Turkey, one of these countries, hosts over 145,000 Ukrainian refugees, and the actual figure may be higher due to the unregistered population (UNHCR, 2022). Notably, Turkey ranks as the sixth country globally in terms of hosting the most significant number of Ukrainian refugees

(UNHCR, 2022).

Traumatic life experiences often force refugees to leave their homes: rape, torture, starvation, injury, threats of murder, and the disappearance of family members. These trauma experiences have been consistently shown to have a strong relationship with mental health problems in refugee populations through research (Rousseau et al., 2001; Trautman et al., 2002). For example, a study of refugees in camps on the Thailand-Cambodia border revealed that 55% of the population had depression, while 15% were diagnosed with post-traumatic stress disorder (PTSD) (Mollica et al., 1993). Even without the presence of clinically significant symptoms, up to 68% of individuals exposed to traumatic events are at risk of developing delayed-onset PTSD [2]. North (2007) highlights that trauma survivors frequently experience a variety of psychological issues, including depression, phobias, substance abuse, psychotic reactions, and conversion symptoms. Similarly, Brady et al. (2000) found that among assault victims, adverse life events can lead to PTSD, major depressive disorder (60%), and substance

abuse (25%). Refugees are often forced to leave their homes due to traumatic life experiences, including rape, torture, starvation, injury, threats of murder, and the disappearance of family members. Research consistently shows a strong relationship between these traumatic experiences and mental health problems in refugee populations (Rousseau et al., 2001; Trautman et al., 2002). For example, a study of refugees in camps on the Thailand-Cambodia border revealed that 55% of the population had depression, while 15% were diagnosed with post-traumatic stress disorder (PTSD) (Mollica et al., 1993). Even without the presence of clinically significant symptoms, up to 68% of individuals exposed to traumatic events are at risk of developing delayed-onset PTSD [2]

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Mass traumas, such as wars, tsunamis, and earthquakes, affect large populations and often lead to repeated exposure to stressors even after the initial event. Refugees and other trauma victims frequently encounter additional challenges, including loss, migration, and poverty, which can erode resilience, reduce the quality of life, and increase the risk of health problems. An early intervention program can help prevent the development of more serious mental illnesses, create resilience, avoid community conflicts, and stop the incubation of PTSD, depression, and anxiety (Slobodin & de Jong, 2015). Since traumatic stress is a significant risk factor for PTSD and other trauma-related disorders, timely and effective interventions are essential for mitigating distress and preventing pathology.

Trauma can be conceptualized as a disruption of the brain's integrative functions, rendering it unable to assimilate and process the fragmented elements of traumatic memories [31]. Following the 1989 earthquake in the San Francisco Bay Area, Francine Shapiro [22] discovered that recent traumas required a different approach, as the memory may not have had sufficient time to consolidate into an integrated whole. Shapiro then presented the Recent Event Protocol as an application of the standard EMDR protocol, considering the recent traumatic events as fragmented experiences that a client has not yet consolidated. This approach led to the development of the Recent Traumatic Episode Protocol (R-TEP), an integrative trauma-focused protocol for early EMDR intervention, which emphasizes containment and safety procedures that therapists can implement on consecutive days without requiring homework [26],[11].

According to Irtelli and Gabrielli (2014), trauma involves exposure to situations that diminish an individual's well-being. Shebanova (2020) describes psychological trauma as the ongoing experience of the nervous system's effects following a distressing and frightening event, leading to thoughts, feelings, behaviors, and emotional disturbances. When the impact of a traumatic event persists, or the individual develops recurring trauma symptoms, the

condition may progress to post-traumatic stress disorder (PTSD). Anxiety disorders like PTSD arise from exposure to stressful situations, like natural or human-made disasters [17]. Its symptoms include re-experiencing the traumatic event through nightmares and flashbacks, avoiding related thoughts, memories, or places, and enduring persistent negative beliefs about oneself, others, or the world [1].

Cochrane reviews of controlled studies confirm that effective psychological interventions exist for individuals exposed to traumatic events [3], Roberts et al., 2010). Many international clinical guidelines recommend EMDR therapy as the preferred treatment for PTSD [3], [5]. Additionally, there is evidence that EMDR therapy has been employed in cases of mass disasters, with positive outcomes [12], [18], [19].

EMDR therapy is particularly effective in processing traumatic memories, making it well-suited for early intervention. According to Shapiro (2001), Shapiro and Solomon (2017), and Shapiro et al. (2007), current symptoms arise from disturbing experiences that the person has not adequately processed, resulting in dysfunctionally encoded memories. The core of EMDR therapy involves transforming these dysfunctionally stored experiences into an adaptive resolution that promotes psychological well-being [24].

Many scientists regard EMDR therapy as one of the most effective psychological approaches for treating trauma. EMDR, an empowerment-based intervention, helps individuals process traumatic memories and associated negative beliefs, allowing them to develop a more adaptive and positive self-image (Gupta & Choudhary, 2014; Korn, 2009). Studies have demonstrated that EMDR effectively reduces the emotional intensity and vividness of traumatic images [13], [23]. The therapy follows an eight-phase protocol: history taking and treatment planning, preparation, assessment, desensitization, installation, body scan, closure, and re-evaluation [21]. Bilateral stimulation, typically through side-to-side eye movements, is central to processing traumatic memories [13]. As a result, EMDR enables the transformation of traumatic memories into adaptive perspectives and strengthens individuals' internal resources to foster behavioral and interpersonal changes [22].

When a client cannot express trauma verbally, it becomes essential to explore non-verbal, psychologically safe methods of expression. One practical approach involves using metaphors, which enable individuals to gradually approach traumatic memories indirectly yet meaningfully.

Metaphoric associative cards (MACs) are a particularly effective and ecologically safe tool for engaging with the subconscious mind. MACs typically consist of images similar in size to playing cards or postcards, depicting various scenes such as people, life situations, landscapes, animals, and abstract compositions.

Moreover, MACs are a therapeutic tool that helps self-discovery and expression among clients who cannot talk about their feelings. These cards offer a visual and symbolic means of exploring inner experiences and have been used effectively in trauma therapy [20]. The OH cards, in particular, are designed to evoke emotions and thoughts that a client can process during therapeutic sessions [7].

The cards are referred to as "metaphorical" because they encourage metaphorical thinking. Metaphor and association are closely related in this context, functioning almost as synonyms. A *metaphor* is a cognitive tool by which the mind encapsulates complex information about life experiences into more accessible representations; this aligns with Lakoff and Johnson's (1980) theory, which posits that metaphors fundamentally shape human thought and experience.

The brain constantly processes an immense volume of information, and it is the role of the instinctual brain to filter this input, emphasizing what is relevant and discarding what is not [28]. Meaningful information often carries emotional significance and is processed deeper within the subconscious mind. However, only the most critical, emotionally charged information reaches this level, contributing to a person's emotional perception of the world [16].

A single word or image can evoke unique associations for each individual. When consciousness accesses these key subconscious processes, a connection is formed between the conscious and subconscious mind, resulting in insight. Insight, a sudden realization or understanding, can lead to cognitive and emotional reorganization. This phenomenon aligns with psychological theory's "aha" moments that help facilitate profound personal change [14].

An insight triggers an emotional response, reprogramming the individual's perception of the event. When this shift occurs, the metaphor through which the individual interprets their experiences changes, often becoming more adaptive or functional. This transformation of metaphor influences the flow of subsequent life events, as the new metaphor attracts different cognitive and emotional responses to situations [28].

I. MEASUREMENTS

Impact of Event Scale—Revised (IES-R):

The Impact of Event Scale—Revised is a self-report measure initiated to assess the symptoms of PTSD. It has 22 questions, the five additional items added to the original IES to capture the DSM-IV criteria for PTSD [32]. Good psychometric properties were demonstrated in various populations using the IES-R. Earlier studies have used a cutoff value of 33 to indicate the presence of PTSD [32].

State-Trait Anxiety Inventory for Adults (STAI-AD):

The State-Trait Anxiety Inventory for Adults (STAI-AD) is a self-report measure that assesses anxiety in both adolescents and adults. It consists of two subscales: the S-Anxiety scale, which measures state anxiety (a temporary emotional condition), and the T-Anxiety scale, which assesses trait anxiety (a more general and enduring characteristic) [29], [30]. The S-Anxiety scale contains 20 items rated on a Likert scale, with 10 items reflecting anxiety-present states (e.g., "I feel nervous") and 10 items representing anxiety-absent states (e.g., "I feel calm"). Scores on the S-Anxiety scale range from 20 to 80, with normative scores for working adult men averaging 35.72 and for women averaging 35.20 [30]. The STAI-AD has been extensively used to detect changes in state anxiety

before and after interventions such as counseling, psychotherapy, and behavior modification programs.

Subjective Units of Disturbance Scale (SUDs):

The Subjective Units of Disturbance Scale (SUDs) is a single-item scale used to measure the level of distress or disturbance an individual experiences in relation to a specific incident. The scale ranges from 0 (no disturbance at all) to 10 (most disturbance imaginable) [33]. It is commonly used in therapeutic settings, particularly in EMDR and cognitive-behavioral therapy, to assess changes in distress over the course of treatment.

Validity of Cognition Scale (VOC):

The Validity of Cognition Scale (VOC) is another single-item scale that measures the degree to which an individual believes in a positive cognition related to their trauma. Responses are rated on a 7-point Likert scale, ranging from 1 (completely false) to 7 (completely true) [26]. The VOC is frequently used in EMDR therapy to evaluate shifts in cognitive beliefs as traumatic memories are reprocessed.

II. CASE OUTLINE

Anna (a pseudonym to protect the client's identity) is a 37-year-old woman who had been living with her family in a northern Ukrainian city until Russian airstrikes devastated her hometown. After two months of hiding in a basement to escape the shelling, Anna and her parents managed to flee Ukraine and relocate to Turkey in search of safety. In the initial weeks following their escape, Anna exhibited many symptoms commonly associated with PTSD, including difficulty concentrating, general reluctance to engage with others, introversion, sleep disturbances, suicidal thoughts, and severe anxiety.

III. INTERVENTION

Anna (to protect the client's identity, a pseudonym is used) is a 37-year-old woman who lived with her family in one of the northern cities in Ukraine until Russian airstrikes ruined her hometown. Anna and her parents had spent two months in hiding in a basement due to shelling before they succeeded in fleeing Ukraine and resettling in Turkey for safety. During the first couple of weeks following their escape, Anna was symptomatic in most ways for PTSD: poor concentration, general reluctance to engage in people, introversion, sleep disturbances, suicidal thoughts, and anxiety.

Session 1: History

In the first session, a full history was taken. It seemed that Anna's symptoms of PTSD had persisted, not subsiding since she had left the war zone. She related staying at her parents' home, which had been hit during the first bombardment. When she described what happened, she spoke about the sensory aspects of the explosions - the sounds, physical feelings, especially headaches and pressure in the temples. Anna clearly remembers the first night they had to spend in the basement. Among the most frightening moments, she described a man, armed to the teeth, who came into the basement to check on them. He turned out to be from the local territorial defense force. "I thought it was Russian soldiers,

that they had taken over our city. I was so scared I couldn't comprehend he was one of us," she said. Anna reported that her headaches became more frequent after this incident, eventually triggering migraine episodes.

Session 2: Metaphoric Associative Cards (MACs)

The second session started with a review of confidentiality and setting boundaries. The therapist introduced metaphoric associative cards and explained their use and how they were to be used. It was impressed that there were no right or wrong answers to reassure Anna about the technique. Grounding was introduced as deep breathing and visualizing a safe place to assist Anna in relaxing and preparing for the session. The goal of the session was to focus on the trauma and anxiety that the client has as a result of his experiences as a war refugee, to gain insights, and to find ways to move towards a state of peace and security.

Anna was instructed to draw five cards from the deck of OH Cards intuitively [19]:

1. One card about the current situation in her emotional life (Image 1) .
2. The other card shows an emotional feeling she wants to achieve (Image 5).
3. Three cards showing the steps or actions to close the gap between her current and desired states. (Images 2-4).



Session 3: EMDR and BLS

During the third session, the therapist explained the treatment and introduced the client to the procedures, practicing eye movement and other bilateral stimulation components. This session was also focused on the resources for affect management that gave her strength. She noted that she strongly believes in her guardian angel and feels grateful for his protection. Her ways to get distracted while in occupation were sleeping, reading, drinking coffee, and working. Since she lived with her parents, she could rely on their support whenever needed. Then, a safe place exercise was conducted, and the client confirmed that the constructed safe place was peaceful. For her, the safe place was described as an uninhabited island where she could live alone and have everything she needed.

Session 4: Target Memories

This session concentrated on target memory that came to mind most frequently. One of Anna's target memories was when she learned the news of the beginning of the war. She recalled the worst part of this memory as seeing the headlines in the information on the internet. Anna described feeling "sick," especially when hearing music on the radio, and we identified that she held a feeling of responsibility or blame for not leaving the country when her sister was offering her, with

her negative cognition being "I am in danger," "I should have done something to avoid this." Anna's desired positive awareness was "I am safe" and "I was doing my best," where the VOC was rated 1-2. Anna reported a SUD between 8 and 9 about her target image and negative cognition. When asked to go back in time and recall the earliest memory when she felt in danger and insecure, she placed the memory of being a kid with pneumonia in the hospital by herself. The client could vividly remember how terrified she was and complained about nightmares where she was running away from the hospital she was still seeing at this age. The distressing emotion connected to that traumatic event was placed in the neck and chest, the same place as targeted memories about the recent war. The session continued with the desensitization phase, which employed side-to-side eye movement. The SUD value for "I am in danger" decreased to 8 and then increased to 9. During the desensitization phase, she made the following sentences: "The worst thing is that freedom of movement disappears," "The lack of communication," "Constant worry," "I cannot plan even the next second," "Dark, cold basement," and "I understand it is in the past." Her VOC for "I'm safe now" balanced between 1 and 2. However, by the end of the session, she noted that when she thinks about the incident, she still feels the same emotions, such as fear, anxiety, and panic, but they are less intense now. Eye movement sets were applied until the positive cognition could reach a credibility level of a maximum of 5 and couldn't progress more during that session. However, in the body scanning stage, she noted disturbing bodily sensations moving to her chest and throat in the body scanning stage. At the end of the session, she recalled a dream she had the day before her city was liberated from the invaders. She called it a "dream about freedom." Anna was in a different town, skating in a yellow bikini on the streets and not caring about what anyone would think of her. This dream gave her comfort and hope for approaching liberation.

Session 5: Desensitization Phase II

In the fifth session, the client selected "anxiety" as an emotion, identified SUD value 6, and chose "brain" as the body sensation before desensitization. This step was repeated using the previously determined image, and it was stated that the SUD value decreased to 1. The therapist asked Anna to visualize the safe place and breathe deeply in the desensitization phase. Slowly, the following pleasant images of pre-war life started to come up: university studies, meeting with groupmates after the year of graduation in a favorite cafe, designing courses, and walking along the river next to her house. In the body scan, a disturbing sensation went down to her shoulders, hands, and then fingers, almost wholly leaving her body. In the installation phase, the image of flowers emerged. It was paired with the optimistic belief that she is now in control, increasing the VOC to 5, and proceeded with the installation.

Session 6: Present Trigger's and Future Templates

The client and therapist examined future templates and today's triggers in the sixth session. The customer stated that intense shelling in a different place catalyzed their situation. Whether she returned to Ukraine, she feared being shelled and

losing her independence and control over her life. She said, "I am worried it will happen again in my hometown." Once more, body scanning, installation, desensitization, and assessment were done. The history of the traumatic phenomenon experienced is placed in the context of the past, present, and future, which is one of the main characteristics of the EMDR intervention (Kavakçı).

The most precise picture of the client about future triggers was "the moment when the air alarm goes off." Positive cognition is "I can get over it," whereas negative cognition is "I cannot handle it." The physical sensation was head, the degree of anxiety and discomfort (SUD) was 7, and the positive cognition belief value (VOC) score was 1. Two sets of two-way eye stimulation were applied throughout the desensitization phase, and the SUD dropped to 1, which is likewise acceptable regarding EMDR. Additionally, the therapist used two-way eye motions throughout the installation phase to enhance the degree of belief that "I will survive" (VOC), which grew to 6-7 during the session. The phrases started to stand out: "I think I can do it" and "I can get over it." In the body scanning stage, "the head" and SUD (degree of discomfort) were specified as one and decreased to 0.

Session 7: Follow-up

The last session was carried out a year later via video call. Anna stated that her sleep pattern was more regular than it used to be, and the feeling of losing balance decreased while she had fewer headaches than before. The initial PTSD reactions almost disappeared, and she could perform her daily functions. Moreover, the client indicated that she was so busy with work that there was hardly time to worry about the war. One project she was working on was a heart transplantation hospital. She had to see a similar hospital in the capital city for that. Surprisingly, she did not experience such an adverse reaction as she expected. Anna even experienced fun and joy with her colleagues when dressed in a medical uniform during their hospital visit. Generally, she was relaxed and felt peaceful. Fig. 1 below shows her pre-test and post-test scores on the Impact of Events Scale-Revised (IES-R) and The State-Trait Anxiety Inventory for Adults (STAI-AD).

IV. RESULTS

As Fig. 1 shows, Anna scored 42 in the pre-test on the Impact of Events Scale-Revised IES-R, reflecting a significant level of distress and impact on the daily functioning of the trauma. Post-therapy, Anna scored 23 on the IES-R, reflecting some infrequent occasions where she might be reminded of what happened suddenly and experience some emotion, but not to a level that caused clinical concern as it did not exceed 24 (to discussion part).

Anna scored 71 (severe anxiety condition) on trait anxiety and 60 (moderate anxiety level) on the state-anxiety dimension of The State-Trait Anxiety Inventory for Adults STAI-AD, while post-test scores were 35 and 37, respectively.

The combined graph illustrates Anna's pre-therapy and post-therapy scores for the Impact of Event Scale-Revised

(IES-R), Trait Anxiety (STAI-T), and State Anxiety (STAI-S). The visualization effectively demonstrates the substantial reductions in her scores following therapy, highlighting the significant impact of the interventions on her trauma and anxiety levels. The marked improvements across all measures underscore the effectiveness of the therapeutic approach in addressing Anna's symptoms.

Fig. 1. Pre-therapy vs Post-therapy Scores

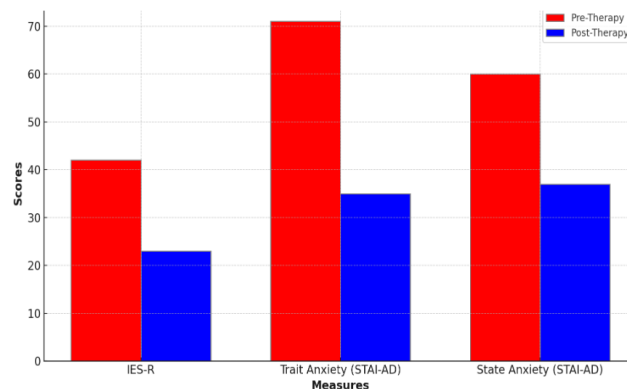
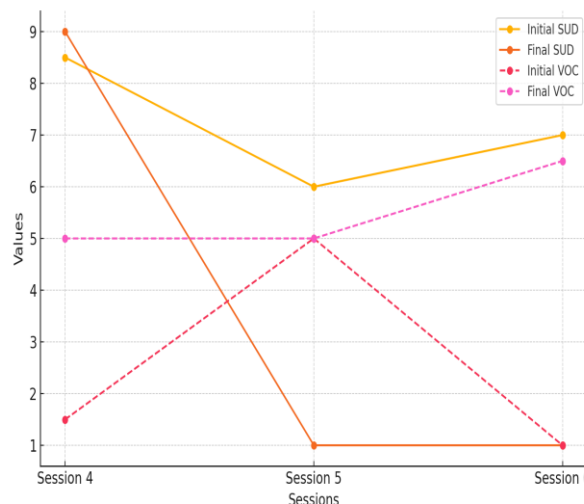


Fig. 2. Initial and Final SUD and VOC Values across Sessions



The EMDR sessions effectively reduced distress (SUD) and strengthened the client's positive cognitions (VOC), particularly in the later sessions. Fig. 2 shows a general trend of decreasing distress over the therapy sessions, which indicates a positive outcome. However, Session 4 is a notable exception, as the distress level did not decrease as anticipated, but subsequent sessions showed

significant emotional regulation and cognitive shifts. Conversely, the Positive Cognition Scores (VOC) exhibit a consistent upward trend, reflecting an increase in the client's positive beliefs and sense of safety. By Session 6, the client displayed substantial improvements in their emotional state and belief in their ability to handle future stressors.

V. DISCUSSION

The EMDR sessions conducted with the client, who presented with symptoms of PTSD resulting from the Ukrainian-Russian war, demonstrated a significant reduction in her trauma-related symptoms — incorporating Metaphoric Associative Cards assisted in the non-verbal description of emotions and trauma. Research shows that survivors of trauma are often unable to talk about their experiences, and MACs are the type of non-verbal tool invaluable to trauma therapy [20]. These cards allowed the client to communicate with her subconscious and bring meaningful insights into awareness, which were integrated afterward within her EMDR intervention. During the second session, the therapist employed MACs to help the client visually represent her emotional state, desired outcomes, and the steps needed to bridge the gap between the two. This method not only provided a psychologically safe way for the client to explore her trauma but also helped her translate abstract emotions into concrete, actionable steps such as attending therapy and building a support network. The MACs facilitated access to metaphorical thinking, which has been shown to enhance emotional insight and cognitive reorganization [15]. The client's ability to identify support systems, establish boundaries, and build social networks through this process highlights the therapeutic potential of metaphoric tools in trauma recovery.

The integration of MACs into the EMDR framework has drastically reduced the client's PTSD symptoms, both qualitatively observed and quantitatively measured. These findings are consistent with previous research that suggested metaphors used by trauma victims serve as expressive indicators of Acute Stress Disorder (ASD) symptoms, pointing to the possibility of using metaphor analysis in clinical practice to deepen an understanding and diagnose psychopathological experience [15]. Specifically, more negative and self-referential metaphors are produced by people whose re-experiencing and hyperarousal symptoms are more pronounced, suggesting that these metaphors reflect these individuals' emotional and cognitive states. Moreover, research into the metaphorical language used by women who have bipolar disorder revealed that such metaphors described the problematic experiences and emotional states of the women, with positive metaphors directed toward their family members and negative metaphors referring to their disorders and relationships.

Other studies on EMDR interventions have also described a decrease in avoidance behaviors related to PTSD following treatment. For example, Yurtsever et al. (2018)

found that EMDR interventions significantly decreased symptoms of both PTSD and depression in refugees, hence lending support to its efficiency in addressing trauma in displaced populations. Furthermore, all sensory experiences, including auditory and body sensations, were more acute during the EMDR sessions than before, particularly when narrating pictures related to the war; this is confirmed by a study by Funakoshi et al. (2014) suggesting that individuals experiencing traumatic events are typically sensitive to sensory stimuli. Because of traumatic memories related to his friend's loss, the client, in this case, has heightened some behaviors, such as social withdrawal and limited interaction with people. During the safe-place exercise, which helped the client process the memories emotionally and cognitively, the family became a core symbolic image, underscoring the roles of belief systems and hope in trauma recovery.

In particular, through bilateral stimulation, the EMDR sessions made reprocessing traumatic memories possible and strengthened the client's strengths. During the installation phase, she came to believe in herself; she realized she was strong and resilient, an energizing emotional empowerment enabled by EMDR. Trauma memories are said to be stored in the body and manifested through body sensations [8]; this allowed the client to regain control via these sensations during EMDR sessions and modulate her emotional response, which helped reduce physiological arousal and maladaptive beliefs.

The EMDR intervention targeted previous trauma but also included a future template exercise. When the client reported hearing about an earthquake, her discomfort was targeted for EMDR re-evaluation, where she could re-affirm her belief in her strengths and things for which she felt grateful. This component of the intervention illustrates the need to incorporate strategies that orient the individual toward the future in trauma work, as research studies on EMDR with disaster-affected populations have substantiated.

CONCLUSION

Trauma can produce enduring effects on the everyday functioning of an individual and thus demands efficient interventions able to treat such complex interplay of emotions, cognitions, and bodily sensations tied to trauma. Interventions using EMDR with metaphoric associative cards provide a vital avenue for reprocessing traumatic memories in a way that will enlist the subconscious mind through metaphorical thinking. In this study, the use of MACs allowed the client a non-verbal yet psychologically safe avenue through which she could explore and express her trauma, facilitating deeper emotional insight and cognitive reorganization.

Further research into the use of MACs in the context of EMDR should be done in the future, with particular attention to populations for whom words are challenging. It is also strongly recommended that trainee psychological counselors should be trained in EMDR and other non-verbal therapeutic interventions, like MACs, to enable them to assist traumatized

clients coming from different populations. Finally, disseminating research findings regarding these interventions will be important in legitimizing and building on the evidence base for EMDR and its integration with creative therapeutic approaches.

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