

Investigation of the Effect of EMDR Therapy on Psychosomatic Symptoms and Early Maladaptive Schemas: An Analysis of 5 Cases

Kahraman Güler¹ , Elif Fulya Baysal² 

¹Department of Psychology, Faculty of Economics, Administrative and Social Sciences, İstanbul Nişantaşı University, İstanbul, Türkiye;

²Department of Psychology, 5N1K Psychoacademy, Graduate Education Institute, Clinical Psychology, İstanbul, Türkiye

Abstract:

Objective: This study examined the effects of Eye Movement Desensitization and Reprocessing (EMDR) therapy on psychosomatic symptoms and early maladaptive schemas.

Methods: This study used a single-group pretest-posttest multiple case design, conducted without a control group. Five voluntary participants aged 18 and over were selected via purposive sampling. Data were collected through a Demographic Information Form, the Young Schema Questionnaire, and the Somatization Scale(33 items, derived from the MMPI).

Results: All participants showed decreases in early maladaptive schemas and psychosomatic symptoms after EMDR therapy, indicating its effectiveness in reducing both cognitive and somatic distress.

Conclusion: EMDR therapy appears effective in alleviating psychosomatic symptoms and maladaptive schemas. These findings support its clinical use and highlight the need for further research with larger samples.

Keywords: EMDR, Psychosomatic Symptom, Early Maladaptive Schemas, Psychosomatization

Schema-focused therapy methods center on intervening in early maladaptive schemas, which Young [1] described as highly fixed, permanent beliefs that hinder treatment. Schema therapy posits that these schemas originate in early childhood [2], encompassing memories, cognitions, emotions, and bodily sensations causing functional impairments. Eye movement desensitization and reprocessing (EMDR) therapy primarily targets memories and intrusive thoughts, activating negative beliefs - early maladaptive schemas - via memory processing according to the adaptive information processing (AIP) model.

The AIP model integrates unresolved negative

memories into existing memory networks; failure causes disconnection and psychopathology [3]. EMDR facilitates reprocessing through bilateral stimulation, organizing memories semantically and promoting positive cognitions [4]. Mares [5] linked early maladaptive schemas to core beliefs formed in early childhood. Schema therapy highlights that unmet emotional needs lead to pathology and unconscious negative coping [6]. These schemas arise from conscious and unconscious emotional and physical domains [7].

Numerous studies report positive physical and psychological outcomes after EMDR. Van Rood and de Roos [8] associated EMDR with improvements in

Submitted : June 19, 2025 Accepted: September 8, 2025 Published Online: September 23, 2025

How to cite this article: Güler K, Baysal EF. Investigation of the Effect of EMDR Therapy on Psychosomatic Symptoms and Early Maladaptive Schemas: An Analysis of 5 Cases. *Eur Res J.* 2026;12(5):543-554. doi: 10.18621/eurj.1723165

Corresponding author: Kahraman Güler, PhD., Assoc. Prof., Phone: 90 212 210 10 10, E-mail: kahramanguler@nisantasi.edu.tr

This is an open-access article distributed under the terms of a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it.

Available Online at <https://www.eurj.org.tr>



unexplained chronic pain. Tesarz *et al.* [9] emphasized psychosocial factors and emotional processing deficits in chronic pain, concluding EMDR alleviates psychosomatic symptoms.

Early maladaptive schemas are shaped by adverse childhood experiences and contribute to psychosomatic symptoms [10]. EMDR therapy may reduce their impact by targeting core cognitions. Unlike schema therapy's long-term focus, EMDR offers faster processing of underlying trauma. The aim of this study is to examine the effects of EMDR therapy on early maladaptive schemas and psychosomatic symptoms. Unlike schema therapy, which involves a long-term treatment process, EMDR provides a relatively rapid reprocessing of traumatic memories. By focusing on this distinction, the study seeks to contribute to the limited body of literature investigating the impact of EMDR on both schemas and psychosomatic complaints.

METHODS

Model

Since the study aimed to examine the effect of EMDR therapy on psychosomatic symptoms and early maladaptive schemas, a quasi-experimental pretest-posttest design without a control group was used [11]. In this design, participants are measured with the same dependent variables before and after the experimental procedure [12].

Population and Sample

The study included five voluntary participants aged 18 and over, who presented with psychosomatic symptoms. Participants were selected using purposive sampling based on specific inclusion and exclusion criteria. The inclusion criteria were being 18 years or older, experiencing psychosomatic complaints, and providing informed consent to participate in the study. Participants were excluded if they had severe psychiatric disorders such as psychosis or major depression, were undergoing ongoing psychotherapy or pharmacotherapy that could interfere with EMDR, had neurological disorders, or were unable to attend the full intervention sessions. Data were collected on demographic characteristics, early maladaptive schemas, and psychosomatic symptoms using a

Demographic Information Form, the Young Schema Questionnaire, and the Somatization Scale.

Data Collection Tools

In this study, demographic information form, Young Schema Scale- Form 3 and Minnesota Multiphasic Personality Inventory somatization subscale was used to collect data.

Demographic Information Form

This form consists of 11 questions and includes demographic information such as gender, age, education etc., as well as whether the participant has a chronic or psychological disorder.

Young Schema Scale

In this form developed by Jeffrey Young [7] based on Schema Therapy, 18 dimensions covering the schema areas of Disconnection and Rejection, Impaired Autonomy and Self-Exposure, Impaired Boundaries, Other Orientation, Hyper-vigilance and Repression are proposed. This scale includes 90 items and is graded on a 6-point Likert scale. Soygüt *et al.* [13] studied its reliability and validity in Turkey.

Somatization Scale (33 items, derived from the MMPI)

The Somatization Scale was developed by selecting 33 items related to somatization disorder from the Minnesota Multiphasic Personality Inventory (MMPI). Its validity and reliability in Turkey were examined by Dülgerler (unpublished master's thesis, 2000). The internal consistency reliability coefficient was 0.83, the test-retest reliability coefficient was 0.996, the first-half Alpha value was 0.8810, the second-half Alpha value was 0.8439, and its correlation with the SCL-90-R somatization subscale was 0.80. The scale includes both positively and negatively worded items, each answered as either "true" or "false." Total scores range from 0 to 33, with higher scores indicating greater somatization symptoms.

Process

This study was approved by the İstanbul Aydın University Social and Human Sciences Ethics

Committee (Decision No: 2023/10; date: 21.12.2023). Five volunteers with psychosomatic symptoms were selected via purposive sampling from 5N1K Psychoacademy. Informed consent was obtained. Participants received eight weekly EMDR sessions over two months. Pre- and post-assessments were conducted. The study is adapted from the second author's master's thesis.

Statistical Analysis

In this study, statistical analyses were evaluated using SPSS 27 software. The pre-test and post-test scores of the Somatization Scale and Young Schema Scale for each participant were calculated and presented in the form of a descriptive table.

RESULTS

PARTICIPANT 1

History Taking Phase (SESSIONS 1-2)

Participant M.Y., a 28-year-old single university graduate from Istanbul, reported difficulties in romantic relationships, anger issues, and recurrent headaches with no medical diagnosis. She described herself as worthless and undeserving of love due to traumatic experiences and emotional distress. Based on these factors, the Young Schema Questionnaire and Somatization Scale were administered, and EMDR therapy was initiated to target both somatic symptoms and early maladaptive schemas.

Participant 1 Formulation

A. I am incompetent

First memory: Being offended by the teacher in primary school because of a question he did not know (Subjective Units of Disturbance [SUD] 7)

Worst memory: Abuse experienced at age 7-8 (SUD 9)

Last memory: Unable to prevent a partner from attempting intimacy against her will (SUD 8)

Any other memories: —

B. I'm worthless

First memory: Abuse experienced at age 7-8 (SUD 9)

Worst memory: Abuse experienced at age 7-8 (SUD 9)

Last memory: Attempted intimacy without

consent of last partner (SUD 7)

Any other memories: —

C. I am helpless

First memory: Abuse experienced at age 7-8 (SUD 9)

Worst memory: Abuse experienced at age 7-8 (SUD 9)

Last memory: Attempted intimacy without consent of last partner (SUD 7)

Any other memories: Moments when her mother touched her body without her consent (SUD 6)

Note: Headache and physical sensations were reported for all memories.

Preparation Phase: SESSION 3

At this stage, she was informed about EMDR therapy and relaxation exercises were applied.

Evaluation Phase: SESSION 4

In this session, the participant's target memory and associated elements—including the image, negative and positive cognitions, Validity of Cognition (VOC), emotion, SUD, and body sensations—were evaluated. The negative belief identified was "I am helpless," and the target image was "the moment the perpetrator placed M.Y. on his lap and touched her genital area," selected as both the earliest and most distressing memory. Current triggers included her boyfriend's unsolicited physical advances, cohabitation with the perpetrator, emotionally neglectful behavior from her mother, and exposure to abuse scenes in media.

Desensitization Phase: SESSION 5

She experienced intense crying during the initial sets. The memory unfolded with scenes such as "meeting in the parking lot" and "recognizing his voice in the apartment," followed by sensory details like the tracksuit color and perfume scent. Although she showed no emotional expression afterward, she reported occasional headaches. As the target memory proved distressing and her SUD level remained at 8, the session was concluded using the incomplete session protocol.

SESSION 6

In this session, which started with the evaluation of the previous session, she mentioned that her

headaches continued and remembered memories about her mother between the sets. She scored her SUD as 6 and the session ended with a safe place exercise.

SESSION 7

In this session, she continued her memories about her mother in the sets and towards the end of the sets, she made positive statements and stated her SUD score as 4.

SESSION 8

At the beginning of the session, M.Y. reported only three vague headaches during the week and rated her SUD score as 3. Following 28 sets, she expressed positive shifts such as "I am free now; these experiences are in the past." With a final SUD score of 0 and noted physical relaxation, the session concluded by completing the past, present, and future phases of the EMDR protocol, including placement, body scan, closure, and reassessment.

PARTICIPANT 2

History Taking Phase (SESSIONS 1-2)

Participant O.L. is a 30-year-old married university graduate living with his family in Istanbul and is the youngest of two siblings. He reported difficulties in emotional closeness with his spouse, anger issues, and medically unexplained pain in his head, shoulders, and back. He also expressed challenges in setting boundaries, a need for constant approval, and traumatic experiences with his father. He described himself as unlovable, unsuccessful, and worthless, and reported difficulty initiating tasks without others' approval. Based on these factors, the Somatization Scale and Young Schema Questionnaire were administered, and EMDR therapy was initiated to address both somatic symptoms and early maladaptive schemas.

Participant 2 Formulation

A. I am incompetent

First memory: When he was 8 years old, he was told to take care of his visually impaired brother (SUD 8)

Worst memory: When his recommended stock market purchases lost value and a senior figure called him to account (SUD 9).

Last memory: Having to pay the bill when his friend insisted on inviting him to dinner with guests from abroad (SUD 6)

Any other memories: —

B. I'm worthless

First memory: When he was 12 years old and his father did not come to the hospital during surgery (SUD 7)

Worst memory: At age 24, when he was at university, his father did not come to his graduation (SUD 9)

Last memory: At age 28, an argument with his wife during his military service (SUD 8)

Any other memories: —

Note: For all memories, the physical sensation of tightness in the throat was reported.

Preparation Phase: SESSION 3

At the beginning of this session, he was given information about EMDR and relaxation exercises were practiced.

Evaluation Phase: SESSION 3

During this stage, the participant's problem, memory, image, negative and positive cognitions, Validity of Cognition (VOC), emotion, SUD, and bodily sensations were evaluated. It was decided to start working with the belief of 'valuelism' by determining the first and worst memories. Current triggers included difficulties with his spouse, the fact that his close friend had moved away, ongoing difficulties in starting tasks, and not communicating with his father.

Desensitization Phase: SESSION 4

He began the sets with crying and reported feeling sad. He focused on the memory of his father not coming to his graduation, recalling details such as "receiving the diploma on stage" and "his father not being there." The participant reported a SUD score of 6, and the session was concluded using the incomplete session protocol.

SESSION 5

In this session, he reviewed the previous session and reported a SUD score of 4. The memory unfolded with scenes such as "seeing his mother alone" and

“everyone applauding and smiling at him,” leading to the emergence of positive cognitions. After 32 sets, he reported physical relaxation and a SUD score of 0. The three-phase EMDR protocol—installation, body scan, and closure—was completed for this memory. Since the initial phases of another target memory had already been conducted, he was reminded of it, and desensitization was scheduled for the following session.

SESSION 6

In this session, the memory “when he was told to take care of his visually impaired brother at age 8” was selected, and his negative and positive cognitions, VOC, emotion, SUD, and body sensations were determined. He stated his negative cognition as “I am inadequate.” After reviewing the first and last memory, the desensitization phase was started.

Desensitization Phase

When the target memory was activated, he reported a SUD score of 8 along with sensations of throat tightness and back pain. The memory unfolded through scenes such as “when the neighbors came over” and “when they turned to him while watching television and told him to take care of his brother.” He reported experiencing intense fear. Following 30 sets, he demonstrated a cognitive shift, stating, “It wasn’t my fault; I was a child. My family was responsible for taking care of me too,” and his SUD score decreased to 4. The session concluded using the incomplete session protocol.

SESSION 7

In this session, he reported a SUD score of 0 related to the memory after the sets.

Placement Phase: SESSION 8

The sets continued until the VOC score reached 7, and the past, present, and future phases of the EMDR protocol were completed for this memory, including the body scan, closure, and reassessment stages.

PARTICIPANT 3

History Taking Phase (SESSIONS 1-2-3)

Participant G.Y. is an 18-year-old single high

school senior living alone. She struggles with social communication and has low self-confidence in romantic relationships. Her father is perfectionistic, and her mother seeks constant approval. G.Y. feels inadequate, experiences anger and fear of failure, has communication issues with her father, and suffers from persistent headaches without medical diagnosis. Based on these factors, the Somatization Scale and Young Schema Questionnaire were administered, and EMDR therapy was initiated.

Participant 3 Formulation

A. I am incompetent

First memory: Childhood experience of fecal incontinence (SUD 10)

Worst memory: Childhood experience of fecal incontinence (SUD 10)

Last memory: The moment her father yelled at her (SUD 9)

Any other memories: The first moment she appeared on stage (SUD 9)

Note: Physical sensations of headache were reported for all memories.

Preparation Phase: SESSION 4

At this stage, she was informed about EMDR, and relaxation exercises were practiced.

Evaluation Phase: SESSION 5

During this session, her problem was identified, and the first and worst memory was determined as “wetting herself in primary school.” The associated image, negative cognition, positive cognition, Validity of Cognition (VOC), emotion, SUD, and bodily sensations were assessed. Current triggers included ongoing exams at school, relatives’ ongoing success expectations, and comparisons with her older sister.

Desensitization Phase: SESSION 6

When the selected memory was activated, it began with “the moment she started to sit in the classroom, the moment her teacher did not allow her to go to the toilet, the moment she felt wetness.” After 16 sets, she reported feelings of shrinkage, verbalized associated thoughts, and stated her SUD score as 8. The session was concluded using the incomplete session protocol.

SESSION 7

In this session, she reported a recurring memory from the previous session. She described experiencing heart palpitations and physical stiffness when stepping onto the stage for a school presentation, which contributed to strong feelings of inadequacy. During the sets, she expressed anxiety with statements such as “I’m nervous, I’m afraid of forgetting my memorization” and reported a SUD score of 6. Due to emerging shoulder pain, the session was concluded using the incomplete session protocol.

SESSION 8

In this session, she reported a significant decrease in body sensations and rated her SUD score as 4. After 25 sets, she made positive statements such as “My presentation was good; I deserved to be there.” When the SUD score reached 0, all three aspects of the EMDR protocol were completed, including memory placement, body scan, and reassessment.

PARTICIPANT 4

History Taking Phase (SESSIONS 1-2)

Participant M.B. is a 27-year-old single secondary school graduate and the youngest of three siblings. He works with his father but reported trust issues affecting his romantic relationships. He described communication problems with his father due to a significant age gap and his father's anger. He also stated that his mother is highly anxious and overreactive, and that his social circle is limited. Experiencing feelings of inadequacy, sudden anger, numbness, and unexplained waist, back, and headaches, the Somatization Scale and Young Schema Questionnaire were administered. Considering these traumatic memories, EMDR therapy was initiated.

Participant 4 Formulation

A. I am incompetent

First memory: Being ostracized by his friends at the Armenian school in primary school (SUD 8)

Worst memory: His father telling him "you're nothing" at home (SUD 9)

Last memory: The moment he got angry with his father at work and punched the wall (SUD 8)

Other memory if any: When he was 15 years old,

his father yelled at him for a job he couldn't do (SUD 9)

B. I am worthless

First memory: When he was 7 years old, sharing a dream with his father and he belittled him (SUD 8)

Worst memory: When his father took away the prize money he had won (SUD 8)

Last memory: He had made plans for New Year's Eve but his family did not wake him up (SUD 7)

Any other memories: When his friends told him it was canceled even though they had made plans, but they met on their own (SUD 9)

Note: For all memories, physical sensations of headache, lower back and back pain, and numbness in the legs were reported.

Preparation Phase: SESSION 3

In this session, he was informed about the functioning of EMDR therapy, and various relaxation exercises were applied.

Evaluation Phase: SESSION 4

The participant's problems were identified, focusing on the memory “nothing will come of you” said by his father at home. The associated image, negative cognition (NC), positive cognition (PC), VOC, emotion, SUD, and bodily sensations were determined. Memories related to the belief “I am inadequate” were evaluated. Current triggers included ongoing problems with his father, the pressure from his anxious mother, and conflicts at work.

Desensitization Phase: SESSION 5

In the first sets, he explored the source of the problems experienced with his father. In the following sets, he focused on “the moment his father yelled,” “the moment he felt guilty,” and “the moment his father said nothing would happen to him.” He reported a SUD level of 7, along with low back and back pain. The session was concluded using the incomplete session protocol.

SESSION 6

The participant initially reported a SUD score of 5 related to the memory and, after the ongoing sets, reported 0 with a relaxed body. The placement, body scan, closure, and reassessment stages were completed

for this memory. Since the initial stages for another memory were completed beforehand, the targeted memory was addressed with desensitization in the next session.

SESSION 7

In this session, the belief “I am worthless” was evaluated in detail through the memory “although his friends had plans, they met on their own without calling him.” The associated image, NC, PC, VOC, emotion, SUD, and bodily sensations were determined.

Desensitization Phase

During the sets, he recalled memories such as “the moment they all got into the car together” and “the moment his friends told him that the plan was canceled.” He reported increasing shoulder and back pain, with a SUD level of 6.

SESSION 8

The previous session was reviewed. Initially, he reported a SUD score of 4 and noted increased numbness at the start of the bilateral stimulation sets, followed by significant reduction after 10 sets. By the 17th set, he began expressing positive cognitions such as “I am not to blame” and “I am also valuable.” At the end of the processing, his SUD score decreased to 0. The EMDR protocol was completed by implementing the installation, body scan, closure, and reassessment phases related to the targeted memory.

PARTICIPANT 5

History Taking Phase (SESSIONS 1-2-3)

Participant F.T. is a 52-year-old lawyer and mother of two. She divorced at age 32 and currently works at a special education center. She sought therapy due to infidelity, crying spells, and unexplained headaches. Noting her dependent personality and the recent loss of her husband during therapy, she reported increasing feelings of helplessness. The Somatization Scale and Young Schema Questionnaire were administered, and considering her traumatic experiences and somatic symptoms, EMDR therapy was initiated.

Participant 5 Formulation

A. I am helpless

First memory: When she was 7-8 years old and brought to the hospital before her sister's death (SUD 8)

Worst memory: Ex-husband sending wedding candy to her home (SUD 9)

Last memory: Ex-husband's wife calling and threatening her (SUD 9)

Any other memories: Her ex-husband taking her and the children in the car during the divorce, speeding and risking death (SUD 9)

Note: Physical sensations of headache were reported for all memories.

Preparation Phase: SESSION 4

At this stage, she was informed about the functioning of the EMDR therapy process, and relaxation exercises were practiced.

Evaluation Phase: SESSION 4

Negative beliefs and memories related to “I am helpless” were evaluated. The memory “ex-husband sending wedding candy to her house” was determined as the worst memory. Positive cognition, VOC, emotion, SUD, and bodily sensations were assessed. Current triggers included problems at work, contact with her ex-husband, and the recent loss of her husband after the fifth session.

Desensitization Phase: SESSION 5

She experienced emotional difficulty following the recent loss of her ex-husband. During memory processing, she recalled distressing events such as seeing herself in a wedding dress and being accused of casting a spell on her son. After 25 sets of bilateral stimulation, a related memory emerged involving her children's father not attending their performance or taking them out to dinner. The session was concluded using the incomplete session protocol, as her SUD score remained at 7.

SESSION 6

When reviewing the previous session, she reported her SUD score as 4. After the loss of her husband, she noted that the infidelity affected her less than before and initially reflected on her children being fatherless. Following 30 sets, she began making positive statements, her SUD score reached 0, and the past,

TABLE 1. Young Schema Scale Pre-Test - Post-Test Results

	Participant 1		Participant 2		Participant 3		Participant 4		Participant 5	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Emotional deprivation	21	14	20	16	9	8	23	17	20	12
Social isolation/insecurity	30	23	28	24	35	24	22	18	25	18
Defectiveness	24	15	14	12	19	18	7	7	6	6
Emotional inhibition	22	14	20	15	24	20	17	13	23	16
Dependence	22	20	24	23	21	20	18	16	20	18
Abandonment	10	10	12	12	24	17	8	7	9	7
Vulnerability to harm	19	14	15	13	21	19	12	10	22	13
Failure	16	14	23	17	20	20	15	11	8	8
Negativism	13	11	13	10	18	13	14	13	12	6
Entitlement /Insufficient self-control	25	22	23	20	27	25	29	23	27	22
Self-sacrifice	12	10	22	16	12	9	15	12	7	6
Punitiveness	7	6	14	13	28	24	29	19	13	12
Unrelenting standards	9	7	15	9	18	16	10	8	10	7
Approval seeking	16	15	30	23	35	29	16	12	20	16

present, and future phases of the EMDR protocol were completed, including placement, body scan, closure, and reassessment. Another target memory was prepared for the next session, and desensitization was initiated.

SESSION 7

The memory “her ex-husband not coming to pick up her children” was selected. Her associated image, negative cognition, positive cognition, VOC, emotion, SUD, and bodily sensations were assessed.

Desensitization Phase

She reported a SUD score of 8 when the memory was activated. After 25 sets, she processed memories related to her husband’s departure and verbalized statements such as “you are no longer there, you hugged and left, you died, I forgave you.” The session ended with the incomplete session protocol.

SESSION 8

After 37 sets, she reported a SUD score of 4 and began making positive statements such as “I wish for happy events, I am enough.” By the end of the sets, her SUD score reached 0. The EMDR protocol was completed, including placement, body scan, closure, and reassessment phases.

Findings Related to Participants' Young Schema Scale Scores

When the findings related to the Table 1 are examined, the pre-test score of Emotional Deprivation schema of participant 1 is 21, post-test score is 14, the pre-test score of Social isolation/insecurity schema is 30, post-test score is 23, the pre-test score of Defectiveness schema is 24, post-test score 15, Emotional Inhibition schema pre-test score 22, post-test score 14, Dependence pre-test score 22, post-test score 20, Abandonment schema pre-test score 10, post-test score 10, Vulnerability to harm schema pre-test score 19, post-test score 14, Failure schema pre-test score 16, post-test score 14, Negativism schema pre-test score 13, post-test score 11, Entitlement /Insufficient Self-control schema pre-test score 25, post-test score 22, Self-Sacrifice schema pre-test score 12, post-test score 10, Punitiveness schema pre-test score 7, post-test score 6, Unrelenting

TABLE 2. Somatization Scale Pre-Test - Post-Test Results

	Participant 1		Participant 2		Participant 3		Participant 4		Participant 5	
	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test	Pre-test	Post-test
Somatization scale	27	9	22	7	29	9	25	7	26	8

standards schema pre-test score 9, post-test score 7, Approval seeking pre-test score 16, post-test score 15.

For participant 2, Emotional Deprivation schema pre-test score was 20, post-test score was 16, Social isolation/insecurity schema pre-test score was 28, post-test score was 24, Defectiveness schema pre-test score was 14, post-test score 12, Emotional Inhibition schema pre-test score was 20, post-test score 15, Dependence pre-test score was 24, post-test score 23, Abandonment schema pre-test score was 12, post-test score 12, Vulnerability to harm schema pre-test score was 15, post-test score 13, Failure schema pre-test score 23, post-test score 17, Negativism schema pre-test score 13, post-test score 10, Entitlement /Insufficient Self-control schema pre-test score 23, post-test score 20, Self-Sacrifice schema pre-test score 22, post-test score 16, Punitiveness schema pre-test score 14, post-test score 13, Unrelenting standards schema pre-test score 15, post-test score 9, Approval seeking pre-test score 30, post-test score 23.

For participant 3, Emotional Deprivation schema pre-test score was 9, post-test score 8, Social isolation/insecurity schema pre-test score was 35, post-test score 24, Defectiveness schema pre-test score was 19, post-test score 18, Emotional Inhibition schema pre-test score 24, post-test score 20, Dependence pre-test score was 21, post-test score was 20, Abandonment schema pre-test score 24, post-test score 17, Vulnerability to harm schema pre-test score was 21, post-test score 19, Failure schema pre-test score 20, post-test score 20, Negativism schema pre-test score 18, post-test score 13, Entitlement /Insufficient Self-control schema pre-test score 27, post-test score 25, Self-Sacrifice schema pre-test score 12, post-test score 9, Punitiveness schema pre-test score 28, post-test score 24, Unrelenting standards schema pre-test score 18, post-test score 16, Approval seeking pre-test score 35, post-test score 29.

For Participant 4, Emotional Deprivation schema pre-test score was 23, post-test score 17, Social

isolation/insecurity schema pre-test score was 22, post-test score 18, Defectiveness schema pre-test score was 7, post-test score 7, Emotional Inhibition schema pre-test score 17, post-test score 13, Dependence pre-test score was 18, post-test score 16, Abandonment schema pre-test score 8, post-test score 7, Vulnerability to harm schema pre-test score 12, post-test score 10, Failure schema pre-test score 15, post-test score 11, Negativism schema pre-test score 14, post-test score 13, Entitlement /Insufficient Self-control schema pre-test score 29, post-test score 23, Self-Sacrifice schema pre-test score 15, post-test score 12, Punitiveness schema pre-test score 29, post-test score 19, Unrelenting standards schema pre-test score 10, post-test score 8, Approval seeking pre-test score 16, post-test score 12.

For participant 5, Emotional Deprivation schema pre-test score was 20, post-test score 12, Social isolation/insecurity schema pre-test score was 25, post-test score 18, Defectiveness schema pre-test score was 6, post-test score 6, Emotional Inhibition schema pre-test score 23, post-test score 16, Dependence pre-test score was 20, post-test score 18, Abandonment schema pre-test score was 9, post-test score 7, Vulnerability to harm schema pre-test score was 22, post-test score 13, Failure schema pre-test score 8, post-test score 8, Negativism schema pre-test score 12, post-test score 6, Entitlement /Insufficient Self-control schema pre-test score 27, post-test score 22, Self-Sacrifice schema pre-test score 7, post-test score 6, Punitiveness schema pre-test score 13, post-test score 12, Unrelenting standards schema pre-test score 10, post-test score 7, Approval seeking pre-test score 20, post-test score 16.

Findings Related to Participants' Somatization Scale Scores

When the findings related to the Table 2 are examined, the somatization scale pre-test score of

participant 1 was 27 and the post-test score was 9. Participant 2's somatization scale pre-test score was 22 and post-test score was 7. Participant 3's somatization scale pre-test score was 29 and post-test score was 9. Participant 4's somatization scale pre-test score was 25 and post-test score was 7. Participant 5's somatization scale pre-test score was 26 and post-test score was 8.

DISCUSSION

In this study, the effects of EMDR Therapy on early maladaptive schemas and somatic symptoms were examined, and EMDR was applied to five volunteer participants. When the levels of early maladaptive schemas were evaluated in the five cases, decreases were observed after EMDR therapy compared to pre-treatment levels. These results suggest potential benefits of EMDR therapy in reducing early maladaptive schemas, consistent with previous research. When psychosomatic symptoms were evaluated, reductions were observed in all five participants after EMDR therapy, indicating a potential association with improvements in psychosomatic symptoms.

Discussion of the Effect of EMDR Therapy on Somatic Symptoms

Evaluation of Somatization Scale scores after EMDR therapy showed decreases in all five participants. Konuk *et al.* [14] suggested that EMDR therapy may be beneficial for chronic pain, applying it to 11 participants and reporting reductions in the duration and frequency of medically unexplained headaches. Similarly, Tesarz *et al.* [9] reported that although chronic pain is often defined as physical complaints, it may have psychological origins, and EMDR therapy may reduce these psychological symptoms. These findings suggest a potential association between EMDR therapy and alleviation of psychosomatic symptoms.

Discussion of the Effect of EMDR Therapy on Early Maladaptive Schemas

Decreases in early maladaptive schemas were observed in all five participants after EMDR therapy,

including social isolation/insecurity, resilience, suppression of emotions, self-sacrifice, entitlement/insufficient self-control, punitiveness, emotional deprivation, unrelenting standards, and approval seeking. Specifically, Participant 1 showed reductions in defectiveness, resilience, emotional deprivation, suppression of emotions, entitlement/insufficient self-control, social isolation/insecurity, and unrelenting standards. Participant 2 had decreases in social isolation/insecurity, self-sacrifice, emotional deprivation, failure, unrelenting standards, approval seeking, and suppression of emotions. Participant 3 showed declines in suppression of emotions, pessimism, abandonment, social isolation/insecurity, approval seeking, and punitiveness. Participant 4 exhibited reductions in suppression of emotions, social isolation/insecurity, entitlement/insufficient self-control, punitiveness, and emotional deprivation. Participant 5 experienced decreases in emotional deprivation, social isolation/insecurity, suppression of emotions, resilience, entitlement/insufficient self-control, and approval seeking. Lehnung [2] explains that early maladaptive schemas arise from memories, cognitions, emotions, and bodily sensations; EMDR therapy targets these through processing intrusive thoughts under the adaptive information processing model. These results are consistent with previous studies linking maladaptive schemas to psychosomatic symptoms and suggest a potential association between EMDR therapy and reductions in maladaptive schemas related to psychosomatic symptoms [15].

Practical Recommendations for Clinicians

- (1) Consider incorporating EMDR therapy when working with clients exhibiting early maladaptive schemas.
- (2) Monitor both psychological and somatic symptoms to assess therapy effectiveness.
- (3) Tailor EMDR sessions to individual client needs to enhance engagement and adherence.

CONCLUSION

This study is important as it directly investigates the effect of EMDR therapy on early maladaptive

schemas, a topic with limited prior research. The results align with existing literature, showing that EMDR therapy effectively reduces early maladaptive schemas and physical symptoms. Suggestions based on the findings:

1. More research is needed on the relationship between EMDR therapy and early maladaptive schemas.
2. Future studies should include larger samples to improve generalizability.
3. Investigating EMDR's effectiveness across various psychological disorders through case studies would benefit both research and clinical practice.

Ethics Approval and Consent to Participate

This study was approved by the İstanbul Aydın University Social and Human Sciences Ethics Committee (Decision No: 2023/10; date: 21.12.2023). All procedures were conducted in accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki Declaration and its later amendments. All participants provided written informed consent prior to participation. Participants were debriefed at the end of the sessions.

Data Availability

All data, analysis code, and research materials are available at [<https://osf.io/sq7b9/>]

Authors' Contribution

Study Conception: EFB; Study Design: KG; Supervision: EFB; Funding: KG; Materials: KG; Data Collection and/or Processing: KG; Statistical Analysis and/or Data Interpretation: EFB; Literature Review: EFB; Manuscript Preparation: KG; and Critical Review: KG.

Conflict of Interest

The author(s) disclosed no conflict of interest during the preparation or publication of this manuscript.

Financing

The author(s) disclosed that they did not receive any grant during the conduction or writing of this study.

Acknowledgments

The authors confirm that there are no acknowledgments to declare.

Generative Artificial Intelligence Statement

The author(s) declare that no artificial intelligence-based tools or applications were used during the preparation process of this manuscript. The all content of the study was produced by the author(s) in accordance with scientific research methods and academic ethical principles.

Editor's Note

All statements made in this article are solely those of the authors and do not represent the views of their affiliates or the publisher, editors, or reviewers. Any claims made by any product or manufacturer that may be evaluated in this article are not guaranteed or endorsed by the publisher.

REFERENCES

1. Young JE. Cognitive Therapy for Personality Disorders: A Schema-Focused Approach (Practitioner's Resource Series). 3rd ed., Sarasota, FL: Professional Resource Exchange; 1999.
2. Lehnung, M. Treating Belief Systems with EMDR Therapy. In: Hofmann A, Ostacoli L, Lehnung M, Hase M, Lubert M. Editors. Treating Depression with EMDR Therapy: Techniques and Interventions, 1st ed., Springer Publishing. 2022: pp. 109-120.
3. Shapiro F. Eye movement desensitization and reprocessing: Basic principles, protocols, and procedures. 3rd ed. New York: Guilford Press; 2018.
4. Amano T, Toichi M. The Role of Alternating Bilateral Stimulation in Establishing Positive Cognition in EMDR Therapy: A Multi-Channel Near-Infrared Spectroscopy Study. PLoS One. 2016;11(10):e0162735. doi: 10.1371/journal.pone.0162735.
5. Mares L. Unconscious processes in psychoanalysis, CBT, and schema therapy. J Psychother Integr. 2022;32(4):443-455. doi: 10.1037/int0000276
6. Rafaeli E, Bernstein DP, Young JE. Schema Therapy: Distinctive Features. 1st ed. London: Routledge; 2010.
7. Young JE, Klosko JS, Weishaar ME. Schema Therapy: A Practitioner's Guide. New York: Guilford Press; 2006.
8. Van Rood YR, De Roos C. EMDR in the treatment of medically unexplained symptoms: a systematic review. J EMDR Pract Res. 2009;3(4):248-263. doi: 10.1891/1933-3196.3.4.248.
9. Tesarz J, Wicking M, Bernardy K, Seidler GH. EMDR therapy's efficacy in the treatment of pain. J EMDR Pract Res. 2019;13(4):337-344. doi: 10.1891/1933-3196.13.4.337.

10. Dozois DJA, Rnic K. Core beliefs and self-schematic structure in depression. *Curr Opin Psychol.* 2015;4:98-103. doi: 10.1016/j.copsyc.2014.12.008.
11. Şata M. Nicel araştırma yaklaşımları. In: Oğuz E, editör. *Eğitimde araştırma yöntemleri.* Ankara: Eğiten Kitap Yayınları; 2020. p. 77-90.
12. Büyüköztürk Ş. *Deneysel Desenler: Öntest-Sontest Kontrol Grubu Desen ve Veri Analizi [Experimental Designs: Pretest-Posttest Control Group Design and Data Analysis]*, 11th ed.. Ankara: Pegem Akademi Yayıncılık; 2025. [Book in Turkish]
13. Soygüt G, Karaosmanoğlu A, Cakir Z. Erken Dönem Uyumsuz Semaların Değerlendirilmesi: Young Sema Ölçeği Kısa Form-3'ün Psikometrik Özelliklerine İlişkin Bir İnceleme [Assessment of early maladaptive schemas: a psychometric study of the Turkish young schema questionnaire-short form-3]. *Türk Psikiyatri Derg.* 2009;20(1):75-84. [Article in Turkish].
14. Konuk E, Epözdemir H, Atçeken ŞH, Aydın YE, Yurtsever A. EMDR Treatment of Migraine. *J EMDR Pract Res.* 2011;5(4):166-176. doi: 10.1891/1933-3196.5.4.166.
15. Henker J, Keller A, Reiss N, Siepmann M, Croy I, Weidner K. Early maladaptive schemas in patients with somatoform disorders and somatization. *Clin Psychol Psychother.* 2019;26(4):418-429. doi: 10.1002/cpp.2343.