

# Critical investigation of the mechanisms at work in EMDR

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<b>Ethical review</b>	Not approved
<b>Status</b>	Will not start
<b>Health condition type</b>	Anxiety disorders and symptoms
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON42938

### Source

ToetsingOnline

### Brief title

Working mechanisms in EMDR

### Condition

- Anxiety disorders and symptoms

### Synonym

Posttraumatic stress disorder; trauma

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Universiteit Utrecht

**Source(s) of monetary or material Support:** Ministerie van Defensie

## Intervention

**Keyword:** appraisal, EMDR, memory, trauma

## Outcome measures

### Primary outcome

Dysfunctional appraisals of memory recall.

### Secondary outcome

Memory vividness and memory emotionality.

## Study description

### Background summary

Eye movement desensitization and reprocessing (EMDR) is a treatment-of-choice for posttraumatic stress disorder (PTSD) in many western countries. However, EMDR is not effective for about one-third of patients, and little is known about its underlying mechanisms. A unique component of EMDR therapy is that patients recall the traumatic memory and engage in horizontal eye movement (EM) simultaneously, which has been shown to add to its efficacy. How can this be explained? In recent years, growing attention has been paid to working memory theory. It holds that EM during recall of a (traumatic) memory causes a competition for limited working memory resources. By consequence, visual imagery becomes less vivid and less emotional. While this theory held up to rigorous testing, it is silent about how the immediate changes in memory phenomenology result in PTSD symptom reduction. Without such explanation, the clinical relevance of the existing knowledge is questionable. Two theoretical possibilities have been proposed. First, the direct loss in memory detail may be reconsolidated in long-term memory, causing future recollections to evoke less extreme emotional responses. Alternatively, it has been suggested that the empowering experience of holding a diluted traumatic memory in mind changes dysfunctional beliefs about the trauma memory (e.g., \*I can now focus on it without becoming upset\*), much like how exposure therapy works. The current research will test the latter hypothesis.

### Study objective

The aim is to test whether EM in EMDR contributes to a reduction in dysfunctional beliefs about recalling the traumatic memory. A sample of Dutch veterans diagnosed with PTSD will be tested. During three EMDR treatment

sessions we will measure changes in memory vividness and emotionality (typical for experimental research on EMDR) and appraisals of memory recall (unique to the current research).

## **Study design**

This study will cover the first three EMDR treatment sessions. A first session will provide baseline measurements. The second and third sessions will comprise recall of the trauma memory, one session with EM, the other one without. During each session participants will fill out a series of short questionnaires. By means of a cross-over experimental design for every participant one session (either session two or three, depending on randomised allocation) will be devoid of the eye movement component. As such, participants serve as their own control group.

## **Intervention**

See "Study design": not applying the eye movements in one of the EMDR treatment sessions can be considered an intervention.

## **Study burden and risks**

Burdens are that participants have to fill out questionnaires. Filling out the questionnaires may elicit feelings of discomfort as they refer to the trauma memory. There are no risks associated with participation.

## **Contacts**

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Soldiers or veterans who developed PTSD, who are between 18-65 years old, and who have signed informed consent.

### Exclusion criteria

High risk of suicide; psychotic disorders; dissociative experiences during course of the study.

## Study design

### Design

Study type:	Interventional
Intervention model:	Crossover
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Will not start
Enrollment:	25

Type:

Anticipated

## Ethics review

Not approved

Date:

17-08-2016

Application type:

First submission

Review commission:

METC Universitair Medisch Centrum Utrecht (Utrecht)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

**Register**

CCMO

**ID**

NL58676.041.16