Eye movement desensitization and reprocessing (EMDR) is a psychotherapy that emphasizes disturbing memories as the cause of psychopathology and alleviates the symptoms of post-traumatic stress disorder (PTSD). EMDR was first developed by Francine Shapiro upon noticing that certain eye movements reduced the intensity of disturbing thought. She then conducted a scientific study in 1989. The success rate of that first study using trauma victims was posted in the Journal of Traumatic Stress. Shapiro noted that, when she was experiencing a disturbing thought, her eyes were involuntarily moving rapidly. She noticed further that, when she brought her eye movements under voluntary control while thinking a traumatic thought, anxiety was reduced.

According to Shapiro, when a traumatic or distressing experience occurs, it may overwhelm normal cognitive and neurological coping mechanisms. The memory and associated stimuli are inadequately processed and stored in an isolated memory network. The goal of EMDR therapy is to process these distressing memories, reducing their lingering effects and allowing clients to develop more adaptive coping mechanisms. This is done in an eight-step protocol that includes having clients recall distressing images while receiving one of several types of bilateral sensory input, including side to side eye movements.

The use of EMDR was originally developed to treat adults suffering from PTSD; however, it is also used to treat other conditions and children.[5] EMDR is now recommended as an effective treatment for trauma in the Practice Guidelines of the American Psychiatric Association.

**Phases of Treatment**

EMDR uses a structured eight-phase approach to address the past, present, and future aspects of a traumatic or distressing memory. The therapy process and procedures described below are according to Shapiro.

**Phase I: History and Treatment Planning**

The therapist will conduct an initial evaluation of the client’s history and develop a general plan for treatment.

**Phase II Processing**

During the processing phases of EMDR, the client focuses on the disturbing memory in multiple brief sets of about 15–30 seconds. Simultaneously, the client focuses on the dual attention stimulus, which consist on focusing on the trauma while the clinician initiates lateral eye movement. Following each set, the client is asked what associative information was elicited during the procedure. This new material usually becomes the focus of the next set. This process of personal association is repeated many times during the session.

**Phase III Assessment**
During phase III, the therapist will ask the client to visualize an image that represents the disturbing event. Along with it, the client will describe a thought or negative cognition (NC) associated with the image. The client will be asked to develop a positive cognition (PC) to be associated with the same image that is desired in place of the negative one. The client is asked how strongly he or she believes in the negative and positive cognitions to be true. The client is also asked to identify where in the body he or she is sensing discomfort.

Phase IV Desensitization

At this time, when the client is focused on the negative cognition as well as the disturbing image together, the therapist begins the bilateral gestures and requests the client to follow the gestures with their eyes. This process continues until the client no longer feels as strongly about the negative cognition in conjunction with the image.

Phase V Installation

At this time, the therapist will ask the client to focus on the positive cognition developed in phase III. The therapist will continue with the gestures and the client is to continue following with the eyes while focusing on the new and positive thought. When the client feels he or she is certain the positive cognition has replaced the negative cognition, the installation phase is complete.

Phase VI Body Scan

At this phase the goal of the therapist is to identify any uncomfortable sensations that could be lingering in the body. While thinking about the originally disturbing event, the client is asked to scan over his or her body entirely, searching for tension or other physical discomfort. Any negative sensations are targeted and then diminished, using the same bilateral stimulation technique from phases IV and V. The EMDR network has asserted that positive cognitions should be incorporated physically as well as intellectually. Phase VI is considered complete when the client is able to think and speak about the event without feeling any physical or emotional discomfort.

Phase VII Closure

Naturally, not all traumatic events will be resolved completely within the timeframe allotted. In this case the therapist will guide the client through relaxation techniques that are designed to bring about emotional stability and tranquility. The client will also be able to use these same techniques for experiences that might arise in between sessions such as, strong emotions, unwanted imagery, and dismal thoughts. The client may be encouraged to keep a journal of these experiences, allowing for easy recall and processing during the next session.

Phase VIII Reevaluation

With every new session, the therapist will reevaluate the work done in the prior session. The therapist will also assess how well the client managed on his or her own in between visits. At this point, the therapist will decide whether it is best to continue working on previous targets or continue to newer ones.

Recent Research and Related Information
In a 2007 review of 33 randomised controlled trials of various psychological treatments for PTSD, EMDR was rated as an effective method, not significantly different in effect from Trauma-Focused CBT (Cognitive Behavioral Therapy) or SM (Stress Management) treatments. EMDR did significantly better than other therapies, according to patient self-reports. The International Society of Stress Studies practice guidelines categorized EMDR as an evidence-based level A treatment for PTSD in adults. A number of international guidelines include EMDR as a recommended treatment for trauma.

Research on the application of EMDR therapy continues, and several meta-analyses have been performed to further evaluate its efficacy in the treatment of PTSD. In one meta-analysis of PTSD, EMDR was reported to be as effective as exposure therapy and SSRIs.

Two separate meta-analyses suggested that traditional exposure therapy and EMDR have equivalent effects both immediately after treatment and at follow-up. A 2007 meta-analysis of 38 randomized controlled trials for PTSD treatment suggested that the first-line psychological treatment for PTSD should be Trauma-Focused CBT (Cognitive Behavioral Therapy) or EMDR.

A review of rape treatment outcomes concluded that EMDR had some efficacy. Another meta-analysis concluded that all "bona fide" treatments were equally effective, but there was some debate regarding the study's selection of which treatments were "bona fide". A comparative review concluded EMDR to be of similar efficacy to other exposure therapies and more effective than SSRIs, problem-centred therapy, or treatment as usual.

Although EMDR is established as an evidence-based treatment for PTSD there are two main perspectives on EMDR therapy. First, Shapiro proposed that although a number of different processes underlie EMDR, the eye movements add to the therapy's effectiveness by evoking neurological and physiological changes that may aid in the processing of the trauma memories being treated. The other perspective is that the eye movements are an unnecessary epiphenomenon, and that EMDR is simply a form of desensitization.

Recent research, however, shows that the efficacy of EMDR therapy manifests through bilateral stimulation rather than eye movements specifically. This includes not only eye movements, but alternating hand taps, alternating auditory tones, and other bilateral stimuli that address all facets of the targeted memory network. The exact psychophysiology of bilateral stimulation is still largely unknown, although several correlations with eye movements and clinical results have been observed.

Controversy over Mechanisms and Effectiveness

EMDR has generated a great deal of controversy since its inception in 1989. Critics of EMDR argue that the eye movements do not play a central role, that the mechanisms of eye movements are speculative, and that the theory leading to the practice is not falsifiable and therefore not amenable to scientific inquiry.

The working mechanisms that underlie the effectiveness of EMDR, and whether the eye movement component in EMDR contributes to its clinical effectiveness are still points of uncertainty and contentious debate.
Although one meta-analysis concluded that EMDR is not as effective, or as long lasting, as traditional exposure therapy, several other researchers using meta-analysis have found EMDR to be at least equivalent in effect size to specific exposure therapies. Despite the treatment procedures being quite different between EMDR and traditional exposure therapy, some authors continue to argue that the main effective component in EMDR is exposure.

An early critical review and meta-analysis that looked at the contribution of eye movement to treatment effectiveness in EMDR concluded that eye movement is not necessary to the treatment effect.[38][39] Salkovskis (2002) reported that the eye movement is irrelevant, and that the effectiveness of the procedure is solely due to its having properties similar to cognitive behavioral therapies, such as desensitization and exposure. 

A 2009 review of EMDR suggests that further research with different populations is needed.

### Other Applications

Although controlled research has concentrated on the application of EMDR to PTSD, a number of studies have investigated EMDR’s efficacy with other disorders, for instance borderline personality disorder.

**In Children**

EMDR has been used effectively in the treatment of children who have experienced trauma and complex trauma, for instance child abuse. EMDR is often cited as a component in the treatment of complex post-traumatic stress disorder.

### References


"Eye Movement Desensitization and Reprocessing (EMDR)". The California Evidence-Based Clearinghouse. March 2013.


Social work today: Treating Child Abuse Trauma With EMDR


Kenneth Fletcher; Ricky Greenwald. "PRO and CON -- Eye Movement Desensitization and Reprocessing". Retrieved 2011-03-01


** The original version of this summary, with links to the referenced research, can be found on Wikipedia under EMDR. **