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# The impact of eye movements and tones on disturbing memories involving PTSD and other mental disorders



Ad de Jongh<sup>a,b,\*</sup>, Robert Ernst<sup>c,d</sup>, Lisa Marques<sup>c,e</sup>, Hellen Hornsveld<sup>c,f</sup>

<sup>a</sup>Department of Behavioural Sciences, Academic Centre for Dentistry Amsterdam (ACTA), University of Amsterdam and VU University Amsterdam, The Netherlands

<sup>b</sup>School of Health Sciences, Salford University, Manchester, United Kingdom

<sup>c</sup>Department of Clinical Psychology and Health Psychology, Utrecht University, The Netherlands

<sup>d</sup>PsyQ Almere, The Netherlands

<sup>e</sup>Military Mental Health, Regiocentrum Zuid, 's Hertogenbosch, The Netherlands

<sup>f</sup>Hornsveld Psychologen Praktijk, Utrecht, The Netherlands

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## ABSTRACT

**Background:** A wide array of experimental studies are supportive of a working memory explanation for the effects of eye movements in EMDR therapy. The working memory account predicts that, as a consequence of competition in working memory, traumatic memories lose their emotional charge.

**Method:** This study was aimed at investigating (1) the effects of taxing the working memory, as applied in EMDR, during recall of negative memories in 32 patients with posttraumatic stress disorder (PTSD), and 32 patients with other mental disorders, and (2) whether the results would differ between both groups. In a therapeutic session patients were asked to recollect a crucial upsetting memory while, in counter-balanced order (a) performing eye movements, (b) listening to tones and (c) watching a blank wall ('recall only'), each episode lasting 6 min.

**Results:** Eye movements were found to be more effective in diminishing the emotionality of the memory than 'recall only'. There was a trend showing that tones were less effective than eye movements, but more effective than 'recall only'. The majority of patients (64%) preferred tones to continue with. The effects of taxing working memory on disturbing memories did not differ between PTSD patients and those diagnosed with other conditions.

**Conclusions:** The findings provide further evidence for the value of employing eye movements in EMDR treatments. The results also support the notion that EMDR is a suitable option for resolving disturbing memories underlying a broader range of mental health problems than PTSD alone.

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