

EMDR And The Military In Action

A monthly newsletter to keep you informed.

This is a monthly e-newsletter created primarily for our colleagues trained in Eye Movement Desensitization and Desensitization (EMDR) who work with military, veterans, and their families. The purpose of **EMDR And The Military In Action** is to promote continued dialog regarding the efficacy and current developments with EMDR and its use with these special populations.

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Citations Of The Month - PTSD & Cardiac Events

Bergmann, U. (2012).

[Consciousness examined: An introduction to the foundations of neurobiology for EMDR](#). Journal of EMDR Practice and Research, 6(3), 87-91. doi:10.1891/1933-3196.6.3.87

The human mind is difficult to investigate, but the biological foundations of the mind, especially consciousness, are generally regarded as the most daunting. In this article, excerpted from the book Neurobiological Foundations for EMDR Practice (Bergmann, 2012), we introduce and outline aspects of consciousness, information processing, and their relationship to eye movement desensitization and reprocessing (EMDR). We examine consciousness with respect to three characteristics: unity of perception and function, subjectivity, and prediction. The relationship of these characteristics to EMDR is examined.

Lansing, K., Amen, D. G., Hanks, C., & Rudy, L. (2005, Fall). [High-resolution brain SPECT](#)



[imaging and eye movement desensitization and reprocessing in police officers with PTSD](#). Journal of Neuropsychiatry & Clinical Neurosciences, 17(4), 526-532. doi:10.1176/appi.neuropsych.17.4.526.

Eye movement desensitization and reprocessing (EMDR) has been shown to be an effective treatment for PTSD. In this study, the authors evaluated the effectiveness and physiological effects of EMDR in police officers involved with on-duty shootings and who had PTSD. 6 police officers involved with on-duty shootings and subsequent delayed-onset PTSD were evaluated with standard measures, the Posttraumatic Stress Diagnostic Scale (PDS), and high-resolution brain single photon emission computed tomography (SPECT) imaging before and after treatment. All police officers showed clinical improvement and marked reductions in the PDS score. In addition, there were decreases in the left and right occipital lobe, left parietal lobe, and right precentral frontal lobe as well as significant increased perfusion in the left inferior frontal gyrus. In our study EMDR was an effective treatment for PTSD in this police officer group, showing both clinical and brain imaging changes.

El Khoury-Malhame, M., Lanteaume, L., Beetz, E. M., Roques, J., Reynaud, E., Samuelian, J. C. Blin, O., Garcia, R., & Khalfa, S. (2011, September). [Attentional bias in post-traumatic stress disorder diminishes after symptom amelioration](#). Behavior Research and Therapy, 49(11), 796-801. doi:10.1016/j.brat.2011.08.006.

Background: Avoidance and hypervigilance to reminders of a traumatic event are among the main characteristics of post-traumatic stress disorder (PTSD). Attentional bias toward aversive cues in PTSD has been hypothesized as being part of the dysfunction causing etiology and maintenance of PTSD. The aim of the present study was to investigate the cognitive strategy underlying attentional bias in PTSD and whether normal cognitive processing is restored after a treatment suppressing core PTSD symptoms. Methods: Nineteen healthy controls were matched for age, sex, and education to 19 PTSD patients. We used the emotional stroop and detection of target tasks, before and after an average of 4.1 sessions of eye movement desensitization and reprocessing (EMDR) therapy. Results: We found that on both tasks, patients were slower than controls in responding in the presence of emotionally negative words compared to neutral ones. After symptoms removal, patients no longer had attentional bias, and responded similarly to controls. Conclusion: These results support the existence of an attentional bias in PTSD patients due to a disengagement difficulty. There was also preliminary evidence that the disengagement was linked to PTSD symptomatology. It should be further explored whether attentional bias and PTSD involve common brain mechanisms.

Stickgold, R. (2008). [Sleep-dependent memory processing and EMDR action](#). Journal of EMDR Practice and Research, 2(4), 289-299. doi:10.1891/1933-3196.2.4.289.

The unique efficacy of eye movement desensitization and reprocessing (EMDR) in the treatment of posttraumatic stress disorder is thought to result from changes in the brain/mind state induced by bilateral sensory stimulation, but the nature and specific consequences of these changes remain unknown. The possibility that bilateral stimulation induces a brain/mind state similar to that of rapid eye movement sleep is supported by studies showing that sleep facilitates forms of memory processing arguably necessary for the resolution of trauma. Such studies, along with direct studies of the impact of bilateral stimulation on memory and emotional processing, and dismantling studies identifying the requisite features of such bilateral stimulation for effective trauma processing, will eventually lead to an understanding of the neurobiological basis of EMDR.

From the EMDR Book Shelf

Bergmann, U. (2012). [Neurobiological foundations for EMDR practice](#). New York, NY: Springer Publishing Company.

This volume introduces the most current research about the neural underpinnings of consciousness and EMDR (eye movement desensitization and reprocessing) in regard to attachment traumatic stress and dissociation. It is the first book to comprehensively integrate new findings in information processing, consciousness, traumatic disorders of information processing, chronic trauma and autoimmune compromises, and EMDR's underlying mechanisms of action. The text examines online/wakeful information processing, including sensation, perception, somatosensory integration, cognition, memory, language and motricity, and off-line/sleep information processing, such as slow wave sleep and cognitive memorial processing, as well as REM/dream sleep and its function in emotional memory processing. The volume also addresses disorders of consciousness, including coma, anesthesia, and other neurological disorders, particularly disorders of Type 1 PTSD, complex PTSD/dissociative disorders, and personality disorders. It delves into chronic trauma and autoimmune function, especially in regard to disease of unknown origin, and examines them from the perspective of autoimmune compromises resulting from the unusual neuroendocrine profile of PTSD sufferers. The final section integrates all material to illustrate the ability of EMDR's bilateral neural stimulation to impact, mediate, and change the functioning of neural circuitry, thereby facilitating repair in the linking and binding of neural networks.

EMDR In The News

Shapiro, F. (2012, July 30, May 10, April 10, and March 26). [Expert Answers on E.M.D.R.](#) New York Times

Recently, readers of the Consults blog posed questions about eye movement desensitization and reprocessing, or E.M.D.R., a psychological therapy pioneered by Francine Shapiro that uses eye movements and other procedures to process traumatic memories. The therapy has been used increasingly to treat post-traumatic stress disorder and other traumas. You can learn more about what E.M.D.R. therapy is like here. [Excerpt]

Special Notes

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