

EYE MOVEMENT DESENSITIZATION AND REPROCESSING

Eye Movement Desensitization and Reprocessing (EMDR) is a successful method for treating trauma. It rapidly and effectively releases anxiety, disturbing emotions, and negative thoughts associated with trauma. “It is a complex and powerful method of psychotherapy that integrates many of the most successful elements of a wide range of therapeutic approaches. In addition, it uses eye movements or other forms of rhythmical stimulation, such as hand taps or tones, in a way that seems to assist the brain’s information processing system to proceed at a rapid rate” (Shapiro Forrest, 2004, p. 4-5). EMDR therapists are trained to focus on potential dangers of unexpected flashbacks or overload. It is a powerful tool that creates connections between current anxiety and childhood or adult trauma, and should be conducted only by trained therapists.

EMDR was developed by Francine Shapiro in 1989, when she “noticed that the upsetting emotions accompanying disturbing thoughts disappeared as her eyes moved rapidly back and forth” (Shapiro & Forrest, 2004, p. 270). Researchers performed neuroimaging on patients with PTSD and consistently found structural and functional changes in the brain regions associated with emotions and memory (Gurvits et al. 1996, Bremner, 1999; Hull, 2002; Gilbertson, et al 2002; Francati, et al., 2007). EMDR stimulates cerebellar processing and activates the dorso-lateral and orbito-frontal cortices via the optical region (Bergmann, 2000). This region is responsible for sensory interpretation and involved with memory and emotional processing associated in the hippocampus and amygdala (Carlson, 2007). EMDR permits neutral processing by low frequency stimulation of the brain, thus modifying memories in a safe environment (Rasolkhani-Kalhorn & Harper 2006). After EMDR, brain scans found increased activity in both the anterior cingulate gyrus and the left prefrontal cortex in patients, which is responsible for discriminating between imagined and real fears (Levin, Lazrove, & van der Kolk 1999; Oh & Choi, 2007). Therefore, the objective evidence of brain scans shows the effectiveness of EMDR in reprocessing traumatic events effectively.

Two of the research psychiatrists who have focused on trauma and brain functioning, Drs. Bessel Van der Kolk and Daniel Amen, have both demonstrated the efficacy of EMDR, documenting case studies of clients with PTSD who were treated with EMDR, and displayed “marked normalization” of brain activity (Amen, 1988, pp.183). Van der Kolk also conducted neuroimaging after cognitive behavioral therapy without EMDR, and demonstrated its failure to create significant brain activity changes (Van der Kolk 2002).

Some have questioned if EMDR elicits accurate childhood memories. To date, there has not been sufficient research to validate the truth of memories. Because perceptions of trauma create the disturbance, information is only as accurate as the individual’s discernment. Anxiety can originate from fears, rather than from actual incidents. Therefore memories may be a combination of fears and events, and are not to be taken as literal or accurate without validation. There has been no evidence that EMDR implants false memories. In fact, there is no therapeutic

method that is less suggestive, since all of the initial information and the ongoing connections come from the client (McDonald, 1995). Some have equated EMDR to hypnosis, as an altered state of consciousness, which would be inadmissible in court. However, EEG and brain scan research demonstrates normal brain waves during EMDR, and thus it is admissible in court (Shapiro & Forrest 2004). However, it is often advisable to delay EMDR until court proceedings are completed, because the lack of anxiety and reaction to a trauma may decrease the believability of a testimony.

As of 2004, approximately 20,000 psychotherapists have been EMDR trained, and over one million individuals have been helped (Shapiro & Forrest 2004). Shapiro found 84% to 90% of the client's trauma associated with rape, natural disasters, loss of a child, catastrophic illness, or other trauma have recovered from PTSD in three sessions. Other psychological methods addressing trauma achieved 55% success rate in seven to fifteen sessions (Shapiro & Forrest 2004).

EMDR poses no spiritual challenges. On the contrary, EMDR can be used by trained therapists, through the power and direction of the Holy Spirit. "The Spirit of the Lord is upon me, because the Lord has anointed me to bring good news to the suffering and afflicted. He has sent me to comfort the broken hearted, to announce liberty to captives, he will give beauty for ashes; joy instead of mourning, praise instead of heaviness" Isaiah 61: 1-3 (Living Bible).

References

- Bergmann, U. (2000). Further thought on the neurobiology of EMDR: The role of the cerebellum in accelerated information processing. *Traumatology*, 6, 175-200.
- Bremner, J. (1999). Does stress damage the brain? *Biological Psychiatry*, 45(7), 797-805.
- Carlson, N. R. (2007). *Physiology of behavior* (9th ed.). Boston: Pearson Allyn & Bacon.
- Francati, V. V., Vermetten, E. E., & Bremner, J. D. (2007). Functional neuroimaging studies in posttraumatic stress disorder: review of current methods and findings. *Depression & Anxiety* (1091-4269), 24(3), 202-218.
- Gilbertson, M. W., Shenton, M. E., Ciszewski, A., Kasai, K., Lasko, N. B., Orr, S. P., & Pitman, R. K. (2002). Smaller hippocampal volume predicts pathologic vulnerability to psychological trauma. *Nature Neuroscience*, 5(11), 1242.
- Gurvits, T. V., Shenton, M. E., Hokama, H., & Ohta, H. (1996). Magnetic resonance imaging study of hippocampal volume in chronic, combat-related posttraumatic stress disorder. *Biological Psychiatry*, 40(11), 1091-1099.

- Hull, A. M. (2002). Neuroimaging findings in post-traumatic stress. *British Journal of Psychiatry*, 181(2), 102-110.
- Levin, P., Lazrove, S., & van der Kolk, B. (1999). What psychological testing and neuroimaging tell us about the treatment of posttraumatic stress disorder by Eye Movement Desensitization and Reprocessing. *Journal of Anxiety Disorders*, 13(1-2), 159-172.
- McDonald, A. N. (1995). *Repressed memories: can you trust them?* Grand Rapids, Mich.: Fleming H. Revell.
- Oh, D., & Choi, J. (2007). Changes in the regional cerebral perfusion after eye movement desensitization and reprocessing: A SPECT study of two cases. *Journal of EMDR Practice and Research*, 1(1), 24-30.
- Rasolkhani-Kalhorn, T., & Harper, M. L. (2006). EMDR and Low Frequency Stimulation of the Brain. *Traumatology*, 12(1), 9-24. Taylor, K. N. (1983/1971). *The living Bible, paraphrased* (Red letter ed.). Wheaton, Ill.: Tyndale House.
- Shapiro, F., & Forrest, M. S. (2004). *EMDR: the breakthrough therapy for overcoming anxiety, stress, and trauma*. 4-8, 270-271. New York, NY: BasicBooks.
- Van der Kolk, B. A. (2002). Posttraumatic Therapy in the Age of Neuroscience. *Psychoanalytic Dialogues*, 12(3), 381.