

Treating PTSD with EMDR

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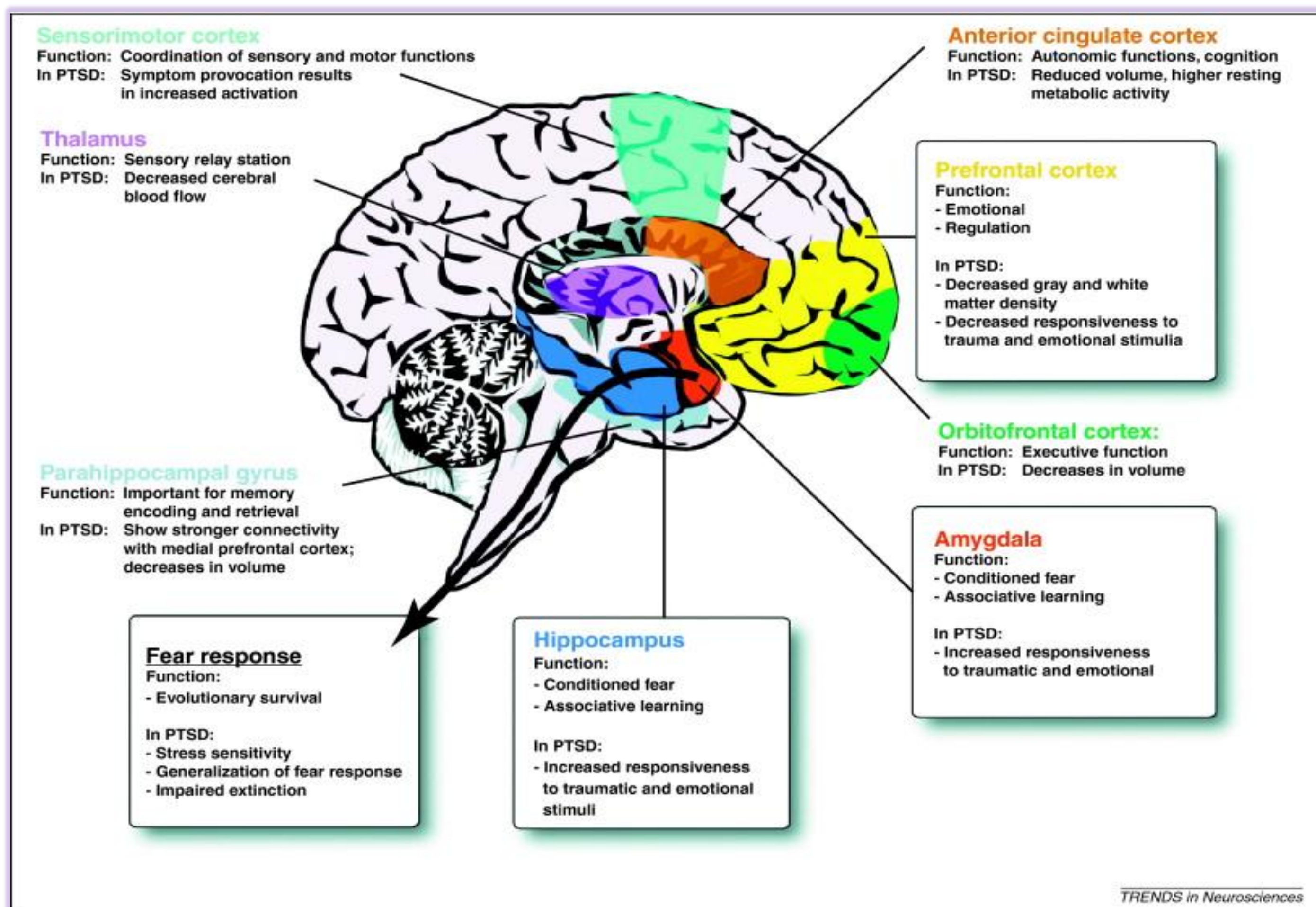
BACKGROUND

Post-Traumatic Stress Disorder (PTSD) is the most commonly diagnosed disorder on Axis I (Bradley, et. al., 2005), where 7% of the American population have been or are currently diagnosed with PTSD (Howard, & Crandall, 2007). Anyone who has faced war, torture, a severe accident, a natural disaster, the sudden death of a loved one, rape, child abuse, or physical abuse is at risk of developing PTSD. Eighty-Three percent of people with PTSD also have been diagnosed with one or more mental illness (Bradley, et. al., 2005), which makes it challenging to treat. The demand for treatment is on the rise in the U.S. 2.4 million American soldiers have served in the Iraq and Afghanistan war, where last year about 100,000 were treated for PTSD (NPRnews, 2012).

PTSD NEGATIVELY EFFECTS THE BRAIN

Multiple studies have correlated people diagnosed with PTSD often have a below normal volume of the hippocampus, which compromises brain function. In a study of 27 children ages 10 – 17, 16 were diagnosed with Posttraumatic Stress Symptoms (PTSS). The other 11 were used as the control group for the memory recall task. fMRI scans revealed lesser activity in the hippocampus while completing a memory recall task with more errors in those diagnosed with PTSS than the control (Carrion, et. Al., 2010). This suggests that post traumatic-stress effects memory tasks. Figure 1, below describes how other parts of the brain are negatively effected by PTSD.

Figure 1.



EYE MOVEMENT DESENSITIZATION AND REPROCESSING (EMDR)

Therapy Session

Francine Shapiro - 1989

Seven phases:

- 1. Client History and Treatment Planning**
- 2. Assessment** – Subjective Units of Distress Scale (SUDS) is given to develop a pre-treatment baseline.
- 3. Desensitization** – Exposure to a stimuli (figure 2) that endorses horizontal saccadic eye movement at a rate of one per second for about 24 eye movements. This phase is designed to decrease the SUDS score.
- 4. Installation** – A process that helps the patients to reconstruct negative self-statements that are often accompanied with a trauma. The self-statements are reconstructed into a positive phrase.
- 5. Body Scan** – While thinking of the positive self-statement the patients searches for any sensations within the body that feel tense. This sensation now becomes the focus for the next desensitization phase.
- 6. Closure** – The re-establishment of stability.
- 7. Re-evaluation** – Patients are asked to keep a journal/log to record emotions that may arise.

Research

EMDR vs. Fluoxetine (Prozac):

Van der Kolk, et. al. were motivated to contribute a comparison study to the body of literature, because health maintenance organization (HMO) supports SSRI's over therapy to 'process' trauma (2007).

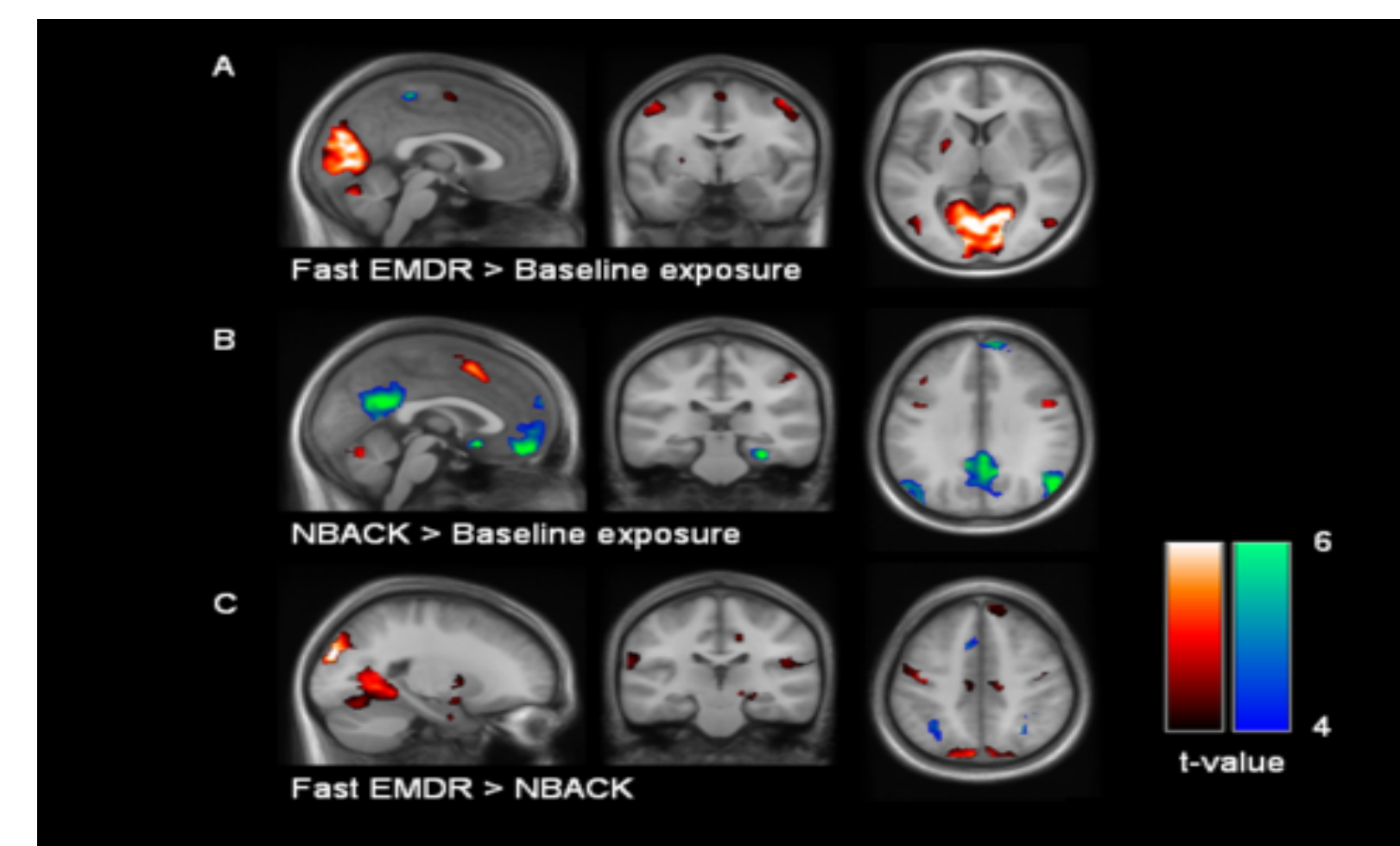
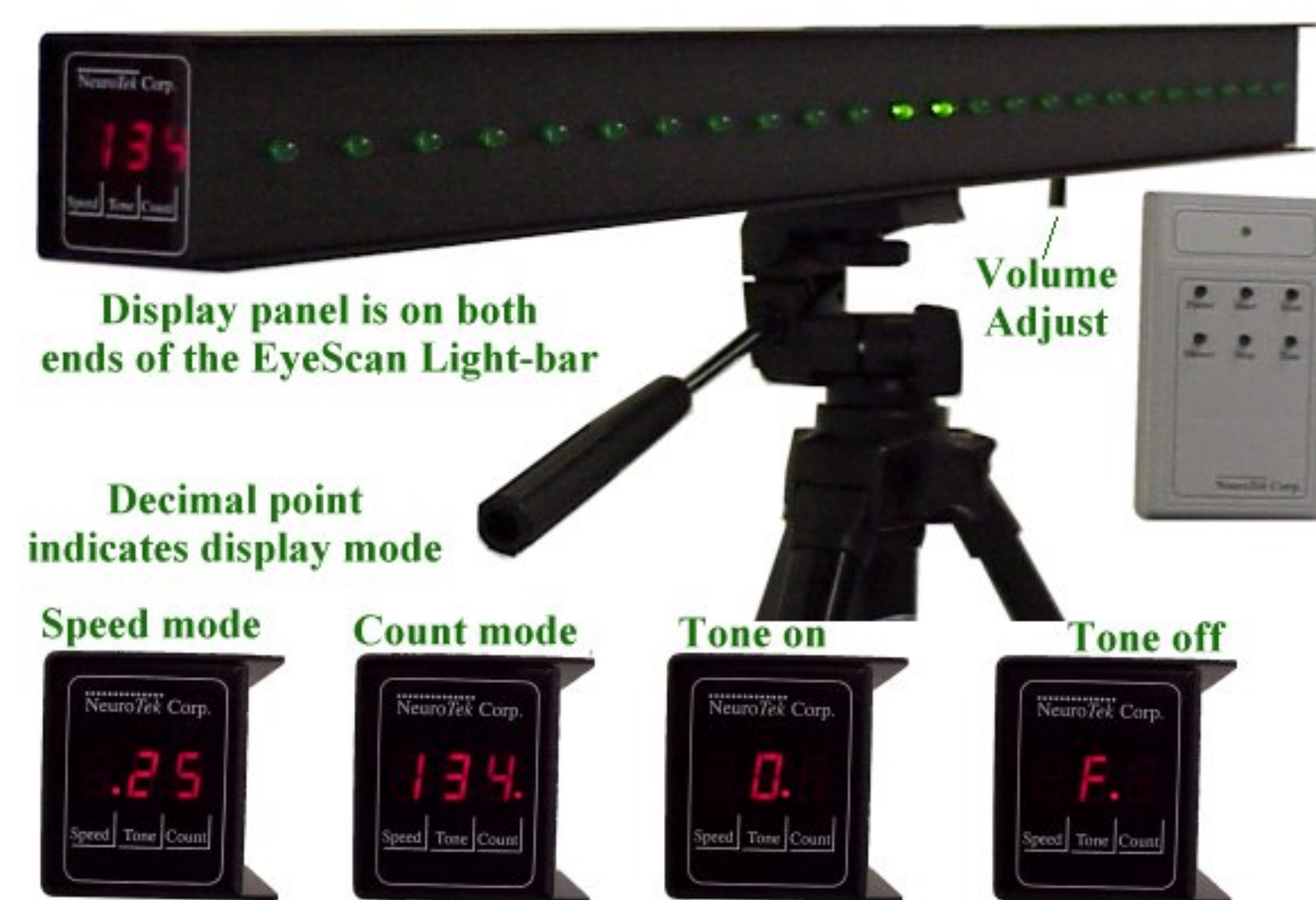
- Eight week study with a 6-month post-test.
- 88 participants were clinically diagnosed with PTSD.
- Each week 30-minute sessions were provided to each three conditions: EMDR, Fluoxetine, and placebo pill.

AT end of treatment EMDR patients had a 58% decrease in symptoms, compared to Fluoxetine with 35%. At 6-month follow up 57% of EMDR patients had a CAP score below 20 (asymptomatic), compared to zero Fluoxetine patients.

Desensitization?

PTSD patients have to recall their traumatic event while being exposed to the stimulus (Shapiro, 1999). The brain has limited working memory and by adding a bilateral stimulus it reduces **the intensity of the intrusive memories**. fMRI reveals that EMDR engages the amygdala, hippocampus, and autonomous nervous system while inhibiting the sympathetic nervous system (Gvozdanovic, et. Al., 2012).

Figure 2.



EMDR vs. TR-CBT (meta-analysis)

Seven studies from 1989 to 2005 compared the efficacy of EMDR to trauma focused Cognitive Behavioral Therapy (Seidler, & Wagner, 2006). Results did not suggests any one to be superior to the other. Both treatments showed statistically significant reductions in patients SUDS scale.

CONCLUSIONS

Summary and Implications

Post-Traumatic Stress Disorder is a serious illness that haunts many and disrupts daily functioning while it significantly decreases quality of life. More and more soldiers are being sent to war, and with the high rates of physical and sexual abuse, and natural disasters, PTSD will only increase. Overall, EMDR has helped many people, specifically veterans with PTSD to reprocess traumatic memories so they can be absolved without relapse. Research suggest that EMDR is an effective treatment option. In 2010, the American Psychological Association recognized EMDR, but unfortunately the Veterans Association does not support it.

Weakness of EMDR

- Can be distressful and unresolved memories may emerge.
- Research is unclear whether symptom reduction (SUDS) is a product of the bilateral stimulation or the psychotherapeutic component (installation phase).
- Research is also unclear whether EMDR's effect is authentic or a placebo effect.

Future Direction

- Research needs to tease apart the bilateral stimulation and psychotherapeutic component to test whether the bilateral stimulation plays a role in symptom reduction.

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ACKNOWLEDGMENTS

Thank you Dr. Templeton for your mentoring through this research process. Without your guidance this would not have been possible.