



US DEPARTMENT OF DEFENSE

BLAST INJURY RESEARCH PROGRAM COORDINATING OFFICE

Neurocognitive and Psychological Health Treatment Strategies

An Intensive Outpatient Program of Trauma Management Therapy for the Treatment of Posttraumatic Stress Disorder

Exposure therapy, which operates on long-established and fundamental principles of behavior therapy, offers hope for acute symptom alleviation, but may not address the severe social impairment in some individuals with posttraumatic stress disorder (PTSD; *Frueh, Turner, and Beidel 1995*). Thus, researchers at the University of Central Florida (Orlando, Florida) conducted a study to evaluate whether trauma management therapy (TMT), provided over a 17-week period, which combines individual virtual reality assisted exposure therapy with group social and emotional rehabilitation skills training, would offer a superior treatment than exposure therapy plus psychoeducational group therapy. Ninety-two (92) participants were randomized in this very efficacious randomized clinical trial (*Beidel, Frueh, Neer, Bowers, et al. 2017*). The researchers then tested whether TMT could be compressed into an intensive/compressed format (Intensive Outpatient Program [IOP]) (3 weeks) that is more amenable to the needs of active personnel. Researchers originally anticipated recruiting 60 for the program, but ended up treating 100 Veterans/active duty Service members because of the overwhelming demand. In addition to feasibility, the investigators established the efficacy of an IOP with clinically and statistically significant drops in Clinician-Administered PTSD Scale scores of more than 50 points and statistically significant decreases in anger, depression, guilt, and social isolation (*Beidel, Frueh, Neer, Bowers, et al. 2017, Beidel, Frueh, Neer, and Lejuez 2017, Beidel, Stout, et al. 2017, Neer et al. 2016*; Figure 1).

Finally, to better understand some of the underlying brain mechanisms in PTSD, the investigators developed a methodology to assess neurophysiological responses to traumatic smells and sounds and demonstrated that trauma-related sounds and smells were associated with distinct aspects of neurophysiological functioning under certain conditions (*Gramlich et al. 2017*). Thus, this study has demonstrated that TMT can provide a reliable and clinically significant change in PTSD symptoms, can be delivered in a condensed format, and developed a means for assessing the underlying predictors and mechanisms of treatment response in the brain for TMT.

An intensive format that provides clinically significant improvement is a major improvement upon existing PTSD therapies, allowing for a treatment that is more amenable to the needs of active duty personnel.

This study received funding from the Psychological Health/Traumatic Brain Injury Research Program, and is strategically aligned with the Military Operational Medicine Research Program. The award (W81XWH-11-2-0038) is managed by the Congressionally Directed Medical Research Programs.





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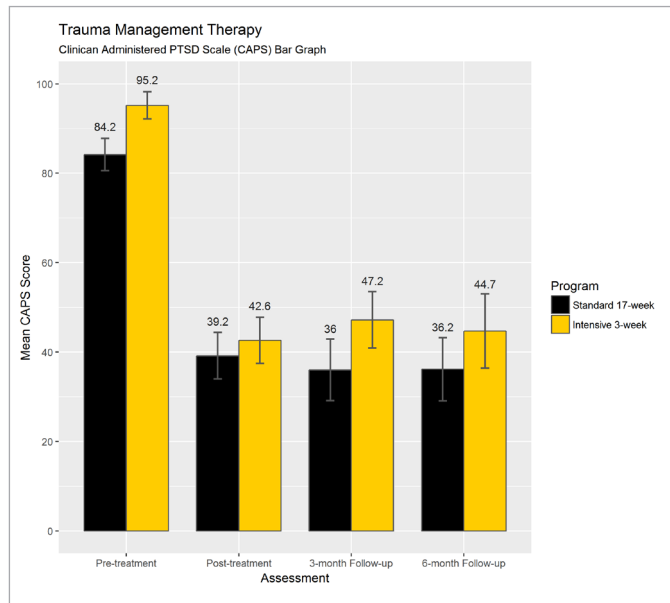


FIGURE 1: Clinician-Administered PTSD Scores for the 3 and 17-week Trauma Management Therapy (TMT) at pre-treatment, post-treatment and follow-up. (Figure used with permission from the authors)

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