



**The Effects of a Paddleboard Combination Therapy on Psychological and Physical Parameters in Men Suffering from PTSD**



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## Paddle Boarding Pilot Study Proposal

### **Introduction:**

Posttraumatic Disorder (PTSD) is a psychiatric disorder that generally occurs following the experience of a traumatic experience, most common cases being military veterans. Those who develop PTSD often have symptoms such as nightmares, flashbacks, difficulty sleeping, feelings of anger and detachment from society (1). PTSD is a serious concern to our military veterans and can have major implications on the quality of life when coming back from deployment.

Extensive research has been conducted with aims of alleviating these symptoms. The methods, which are most successful, are, trauma focused cognitive behavioral therapy (TFCBT), eye movement desensitization and reprocessing (EMDR), Stress management/relaxation (SM), and Non-trauma focused CBT group therapy (2). These measures were assessed for effectiveness through the severity of clinician rated traumatic stress symptoms, self-reported symptoms, anxiety symptoms, and adverse effects and dropouts. Trauma focused treatments have been shown to be more successful than non-trauma focused treatments. Of the trauma-focused treatments, TFCBT and EMDR are superior (4). TFCBT can be applied through any psychological treatment delivered individually that predominantly uses trauma focused, cognitive, behavioral or cognitive-behavioral techniques. TFCBT has also been effective in-group settings. “EMDR involves the PTSD sufferer focusing on a traumatic image, thought, emotion and a bodily sensation whilst receiving bilateral stimulation most commonly in the form of eye movements” (2). Although these two methods have been deemed effective, it still seems there is something missing in the rehabilitation process.

There are six dimensions of ideal wellness. The aforementioned forms of rehabilitation may cover emotional and intellectual wellness, but what seems to be neglected are major form of health coming from environmental, and physical stability (3). Ultimately the most effective form of rehabilitation will be one that encompasses all aspect of personal wellness, which is why a Paddleboard Combination Therapy (PCT) will help bridge the gap between mental and physical wellness. The Paddleboard Combination Therapy combines traditional PTSD therapy and all of the positive benefits while adding a facet all its own. Traditionally it will be applied in a group setting and follow a series of exercises and destinations while paddle boarding in a body of water. The social aspect with fellow peers will aid and dismiss feelings of detachment. As well as in conjunction with a relaxing atmosphere that is congruent with a beach setting. The mental and physical benefits from paddle boarding will be the final factor in a fully encompassing rehabilitation process. The goal of this pilot study is to receive preliminary data on the effectiveness of paddle boarding combined with psychological PTSD treatments in reducing symptoms, and increasing range of motion.

## **Methods**

### *Participants*

Fifteen men who have been diagnosed with PTSD will be recruited for this study. All participants will have a minimum of one-year military service back round. The participants will be placed into one of three conditions. Group one will participate in traditional PTSD treatment at the VA facility. Group two will partake in a series of paddleboard exercises once a week for 4-8 weeks. Group 3 will follow traditional PTSD therapy treatments, in conjunction with the paddle boarding treatment. All subjects will be free living and will be under the supervision of a Doctor of Physical Therapy, and his supporting staff.

### *Neural Cognitive component-*

Researchers will work with the VA hospital in implementing a mental stability/capability survey this survey is intended to acquire information to allow us to see progression in psychological components.

### *Range Of Motion-*

Measures of flexibility, range of motion and stability will be taken at weeks 0 and week 8.

### *Criteria:*

Males 18-45 with at least one year of prior service, suffering from posttraumatic stress disorder after returning back from deployment. Must be able to perform basic paddle boarding skills, as well as comply with the psychologist treatments.

## **Hypothesis**

We hypothesize that this combination technique that the combination will be superior to both the stand-alone physical component and the traditional PTSD treatment on measures of flexibility, Range of motion, and psychological parameters.

## Bibliography

1. <http://www.ptsd.ne.gov/what-is-ptsd.html>
- 2, Psychological treatment of post-traumatic stress disorder (PTSD) (Review)
3. <http://c.ymcdn.com/sites/www.nationalwellness.org/resource/resmgr/docs/sixdimensionfactsheet.pdf>
4. Taylor 2003 *{published data only}* Taylor S, Thordarson DS, Maxfield L, Fedoroff IC, Lovell K, Ogrodniczuk J. Comparative efficacy, speed, and adverse effects of three PTSD treatments: exposure therapy, EMDR, and relaxation