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TITLE: Evaluation of a Yoga Intervention for PTSD

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<b>13. SUPPLEMENTARY NOTES</b>					
<b>14. ABSTRACT</b>  Objective: This pilot study was designed to ascertain whether yoga is a feasible and effective intervention to reduce PTSD symptoms in service men and women with PTSD. Methods: Active-duty or veteran military service men and women were recruited through public advertising and VA patient populations. The yoga intervention was a 10-week, twice-weekly, 90-minute yoga intervention, with a 15-minute daily home practice. The primary outcome measure is the Clinician-Administered PTSD Scale (CAPS) at pre- and post-intervention. Results: The single armed trial cohorts of subjects (n = 10) have completed the intervention and the CAPS at baseline and post-treatment. Mean change was 18.2, indicating a statistically (t = 2.822; p = .019) and clinically significant reduction in PTSD symptoms with a 25% drop on CAPS scores. The group mean of CAPS scores at baseline was M = 70.40 (SD = 21.60), which fell in the "severe PTSD symptomatology" range. Post-intervention, mean CAPS score was M = 52.20 (SD = 24.10), which fell in the "moderate/PTSD threshold" range. Effect sizes fall into the range of existing treatments. Recruitment and treatment is continuing with a randomized controlled trial design using a wait-list control group. Conclusion: These data suggest that yoga is feasible and efficacious for PTSD treatment.					
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## Introduction

This report describes the progress on this project supported under both overlapping contracts, as per previous discussion, i.e. progress on grant W81XWH-08-2-0203 is also included.

## Body

### Key Research Accomplishments

#### Recruitment

As of September 29<sup>th</sup>, 2011 we have received 521 inquiries from potential participants. We have conducted 351 telephone screens, which resulted in the enrollment of 91 participants to the study who have all signed informed consent.

#### Protocol Execution

For the single-armed trial supported by the initial grant, we have run 12 subjects through the full intervention and have had 10 of these complete all outcome measures (including long term follow-up).

For the randomized-controlled trial, as of 9/29/11, across two cohorts we have run 10 subjects (4 intervention, 6 control) through the full intervention and all outcome measures (including long term follow-up). As of 9/29/11, we currently have 17 subjects in the process of completing the study (8 intervention subjects, 3 of whom were previously randomized to the control group in an earlier cohort; 9 control subjects). Subject recruitment, treatment and data analysis are ongoing.

The study has received \$19,000 in additional financial support from the Kripalu Center for Yoga and Health to cover the costs of study advertising and yoga instruction.

#### Progress Relevant to Statement of Work

All tasks within the Statement of Work have been executed later than anticipated. This was largely due to the fact that although the grant was initiated on 9/25/08, substantial effort on the project, and disbursement of grant funds, did not begin until March of 2009. Recruitment and study execution and treatments are continuing. It is unlikely that we will meet the recruitment goals in the original Statement of Work due to difficulties in recruiting in the Boston area.

### Reportable Outcomes

Statistically and clinically significant improvements have been shown in the primary outcome measure in the single-armed trial. The single armed trial cohorts of subjects ( $n = 10$ ) have completed the intervention and the CAPS at baseline and post-treatment. Mean change was 18.2, indicating a statistically ( $t = 2.822$ ;  $p = .019$ ) and clinically significant reduction in PTSD symptoms with a 25% drop on CAPS scores. The group mean of CAPS scores at baseline was  $M = 70.40$  ( $SD = 21.60$ ), which fell in the "severe PTSD symptomatology" range. Post-intervention, mean CAPS score was  $M = 52.20$  ( $SD = 24.10$ ), which fell in the "moderate/PTSD threshold" range. Effect sizes fall into the range of existing treatments.

### Conclusions

Our preliminary data from the single-armed trial suggest that yoga is feasible and efficacious for PTSD treatment. We anticipate that the same will hold true for the randomized controlled trial data.

### References

None

### Appendices

None