MANA PSYCHOLOGY™

OPTIMIZING RELAXATION RESPONSE IN

MILD PTSD WITH

ON-THE-GO MEDITATION GROUP THERAPY

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Abstract

This paper explores the optimization of relaxation response through the use of On-The-Go Meditation, as a Mana Psychology™ group therapy relaxation method for the treatment of mild PTSD. Established meditation practices have been scientifically proven to be highly effective in providing relief for those suffering from mild to severe PTSD as well as offering long-term personal and therapeutic benefits. Patients suffering from PTSD often do not have access to the needed scheduling, silence or solitude that is required to utilize current meditation practices. PTSD affects 6.8% of the average population (Kessler et al., 2005) and 10.1% to 30.9% of combat veterans (Gradus, 2014). On-The-Go Meditation is a novel approach in which meditation can be accomplished while simultaneously actively participating in all normal daily functions. Mana Psychology™ is the study of psychological personal empowerment and proposes that group therapy with Mana Gardening® O On-The-Go Meditation n-the-go meditation techniques may offer an easy to use alternative to current therapeutic programs. Comparison with established studies on the benefits of meditation, with before- and follow on-fMRI studies, epigenetic, and bio-chemical assays will provide further evaluation of the response and relaxation affect from On-The-Go Meditation as a treatment option for mild PTSD.

The Rise of PTSD

Diagnosed lifetime prevalent posttraumatic stress disorder (PTSD) in the general population is presently at 6.8% (Kessler et al., 2005). In combat veterans the prevalence is higher, ranging from 10.1% to 30.9% (Gradus, 2014). PTSD is interrupts day-to-day functioning including sleeplessness, disengagement from relationships with others, reckless behavior, and avoidance of public places (American Psychiatric Association, 2013). Numerous psychotherapies

have been shown to be effective (Institute of Medicine of the National Academies, 2012), but there seems to be limitations to current treatments, due to premature dropout and poor treatment response (Foa, Keane, Friedman, & Cohen, 2009).

Estimates of PTSD in the general population, suggest that only 49.9% are receiving treatment for the disorder (Wang et al., 2005). In the VA health care system many individuals do not seek or even refuse treatment. It is estimated that of 49,425 veterans with new PTSD diagnoses, only 9.5% attended nine or more psychotherapy sessions, in a VA setting (Seal et al., 2010). According to the PTSD United, it is estimated 24.4 million people have PTSD at any given time. That is equal to the total population of Texas and an estimated one out of every nine women develops PTSD, making them about twice as likely as men. Recognition of the significance of youth violence exposure has also led to recent

development of interventions designed specifically for children and adolescents at risk for PTSD (Carrion 2013). With the added refugee crisis and worldwide migration we will also be faced with the fact that some social groups do not adopt practices that we perceive to be healthy (Arronowitz, 2015 p 5). For many adapting to cultural changes and new cultural norms will be another stressful, complex problem. The annual cost to society of anxiety disorders is estimated to be significantly over $42.3 billion (PTSD United, 2017). In spite of all our efforts to find solutions to help people navigate PTSD there is still a need to identify therapeutic plans that offer real help. On-The-Go Meditation is worthy of the study not just because of the need, but because it fits out busy active lifestyles and may be an option that can be provided to large groups over a short period of time, which makes it fit easier into the current model of most therapy practices.

Group Therapy with On-The-Go Meditation

Mana Psychology™ methods use a novel On-The-Go Meditation process that uses some cognitive-based methods combined with mindfulness. Its goal is to offer instant relief from stress and positively change the way one feels. The methods seek to reduce drama, by guiding participants to use inner visualization to identify problems as small as possible and learn the skills to concisely identify a problem with the most-simple achievable solution. Fifty active duty service men and women will be randomly divided into groups of 10 and expected to attend 6 weekly sessions at 30 minutes each along with weekly reading assignments. Group Therapy with On-The-Go Meditation, proposes that exposure to Mana Gardening® techniques not only provide the same relaxation response as traditional forms of meditation, but also can be utilized while actively participating in all subsequent life activities.

On-The-Go Meditation offers an integrated therapeutic approach by combining a cognitive, psychodynamic and experiential approach with mindfulness. The participants are guided through the steps required to easily self-lead themselves in using On-The-Go Meditation. They are then challenged to do use this technique as often as they can throughout the next week and return for review and proceed with further guidance in utilizing this form of relaxation and inner awareness. During each 30-minute session group members are reminded to become cognoscente of relaxation moments.

Using a here-and-now, always-in-the-present approach, groups will be held to 10 people or less and participants will be instructed that they will never be asked to disclose any personal information nor the circumstances that brought them into this study. Instead they will be expected to try the techniques and return to ask simple questions and advance their On-The-Go Meditation skillsets. Medical, biochemical, epigenetic and psychological testing will be explained by the study

coordinator on intake assessment and will never be part of the focus or discussions in the group sessions. Participants will be instructed that testing is only to offer validation to whether or not On-The-Go Meditation displays a relaxation response for patients with mild PTSD. Participants will be told that they will be given the opportunity in a group setting to personally explore a novel approach to meditation that does not require any additional time or changes to their normal everyday lifestyle. They should be given reasonable hope that they may find this beneficial in their overall health and well-being. Aware and empowered, a person is more likely to be able to summon the actions that manifest reasonable hope (Kotze 2015).

 If at any time, anyone in the group displays signs of severe depression or stress, they will be allowed to remain in the group, but will be required to seek immediate qualified professional care and or intervention. Thus it is advised that the initial meeting be led by a facilitator with introduction of a licensed professional that may occasionally participate in the group for assessment purposes and to maintain an openness to further one-on-one care should it be needed by a participant. If the professional feels the group member has more than mild PTSD, they may be excluded from the group if professionally advised. Further sessions will offer brief reviews of Mana Psychology™ reading assignments and build on those skills though guidance on how in their own time they may use these new skills to explore individually-initiated role playing, exposure therapy and strengthening of their personal identity as these should be viewed as a rich source for drawing on positive assets and enhancing functioning in the face of stressors (Mallot 2015).

Principals of applying these techniques which are available through this On-The-Go Meditation process will be briefly introduced but will not be the main focus. By touching on these topics but not exploring them, the group member is free to explore on his/her own for a greater sense of empowerment. Having these options without feeding into the habit of spinning out emotionally, compounding the here-and-now with negative reflections upon past injustices, or abuses is addressed in the readings. The value of role-play as a useful tool for self-improvement can be explored independently to create a positive meaning, a new identity, or embrace pride in their current identity (Mallot 2015). Brief, concise guidance on the choice to utilize Mana Psychology™ visualization techniques to safely re-write or re-draw previously painful life images and memories may also offer a safe and personally-controlled form of exposure therapy. A number of treatments, many with an exposure component, have strong research support for PTSD symptom reduction (APA Presidential Task Force on Evidence-Based Practice, 2006). The Institute of Medicine of the National Academies (2012) strongly endorses and recognizes the extensive research support behind exposure therapies. However, as exposure therapies facilitate the confrontation of typically avoided memories, thoughts, and situations associated with the trauma, they can be complex and difficult to study.

The Validity of Meditation

Meditation can be conceptualized as a family of complex emotional and attentional regulatory training practices. Recently, the therapeutic use of meditation, including mindfulness-based techniques, has become increasingly important in the treatment of physiological and psychological conditions (Ludwig and Kabat-Zinn, 2008). Meditation has been proven to increase attention, calm emotions, and create positive cognitive and perceptual changes throughout multiple regions of the brain (Short 2010). The frontal/prefrontal regions are most frequently activated and may be related to increased attention although multiple regions of brain activation are associated with various meditation methods and cortical thickness structural differences seen in long-term meditators. (Do-Hyung, 2013). Subsequent studies have confirmed that focal reductions in self-referential cortical midline regions are measureable in novice participants and more marked and pervasive in those trained in meditative relaxation techniques.

In a recent Harvard University study, long-term meditators were found to have an increased amount of gray matter in the insula and sensory regions, the auditory and sensory cortex. These regions are all linked to paying attention so it stands to reason your senses would be enhanced. These meditators also had more gray matter in the frontal cortex, which is associated with working memory and executive decision making but perhaps the most profound findings is that such positive changes within the brain can be seen with only 8 weeks of meditation practice (Washington Post, 2015).

 In a study of 74 active-duty participants having had experienced multiple deployments and were seeking treatment for PTSD at Dwight David Eisenhower at the Army Medical Center Traumatic Brain Injury Clinic in Fort Gordon, Georgia, half of the service members voluntarily practiced Transcendental Meditation regularly in addition to their other therapy and the other half did not. After one month, 83.7% of the meditators had stabilized and reduced, or stopped their use of psychotropic drugs to treat their PTSD conditions. Unfortunately, 40.5% of participants who weren't meditating actually began taking higher dosages of medication and similar percentages were found in the following months and in a six-month follow up (Journal of Military Medicine, 2016). “Regular practice of Transcendental Meditation provides a habit of calming down and healing the brain.” (Psychology Today, 2016)

Nature Versus Nurture.

Scientists and psychologists face one fundamental problematic question. How much of behavior is genetically predetermined? It is the nature versus nurture debate and although there is no doubt that our environment can influence our health and wellbeing, there is vast discord among health professionals in explaining why physical and mental health varies widely even within family groups experiencing similar life paths. Epigenetics is a whole new arena of

biological science that demonstrates to us the influence of environmental factors

on the way that genetic DNA coding is expressed (KIYIMBA, 2016). Concisely put, epigenetics may offer us a pathway to identify when nature has taken precedence. The term literally means ‘on top of’ genetics. Epigenetic changes are modifications of DNA, which occur without any alteration of the underlying DNA sequence, and can control whether a gene is turned ‘on’ or ‘off’. Identification of ‘on’ genes and the outcomes associated with them may soon yield a beyond-the-horizon approach to all forms of health care. For our purposes it may allow us to identify those at a higher risk for PTSD as well as those who respond better to meditative therapies. Even without these off-shoots from such a study, testing for epigenetic similarities and differences between participants will further identify and aid in ruling out selecting like-like participants in future studies.

 The Science

Currently clinical interviews are the state of the art in PTSD diagnosis. This forces clinicians to rely on subjective reports of a patient’s own symptoms. Although the clinical history is a good start, PTSD diagnoses would also benefit if reliable hard science such as biomarkers, neuroimaging, psychophysiology, chemical assays and gene expression studies were utilized (Harvard, 2017). The result of this truth is that the study of any PTSD method of treatment, novel or not, deserves the due diligence found through scientific study. In analyzing the options to design such a study, it would require examining the influences using multivariable analysis of test results and establishing a registry of service members who have learned these techniques to evaluate long-term benefits and outcomes. Recognizing that this is a multi-variable, prospective study to be conducted on volunteers experiencing mild PTSD symptoms, the choice for fMRI imaging and epigenetic tests to establish baseline measures seemed like an accessible option with the least amount of intrusion. We would only need to then characterize determined changes within each study subject over a set post-training time period. A meta-analysis of the current published literature on the health benefits of meditation will be used as the baseline for comparison. Analysis of variance will be conducted to analyze the relationship between individuals practicing On-The-Go Meditation.

Previous research has revealed a neurobiological basis of the influence of oxytocin and vasopressin on human social behavior. Through non-invasive neuroimaging and its increasing presence in mainstream human research, the impact of oxytocin and vasopressin on neural activity and morphology related to social processes have made use of structural and functional magnetic resonance imaging (MRI and fMRI, respectively). Whereas structural MRI conveys morphological information (e.g., local gray matter volume), functional MRI (fMRI) provides regional signals representing an indirect measure of synaptic activity-by-activity dependent changes in local hemodynamics (Logothetis and Wandell, 2004). Specifically, the research highlighted in the current review utilizes “pharmacological fMRI” and “imaging genetics” to assess acute or chronic influences, respectively, of oxytocin and vasopressin on neural circuitry underlying social behaviors. Brain activation-level abnormalities have been shown to be persistent on fMRI despite normalization on behavioral (cognitive) measures (Chen et al., 2008), suggesting that fMRI may be more sensitive to the effects of PTSD than more traditional cognitive measures. Given the high level of sensitivity to mTBI (and other conditions), fMRI has been purported to show great promise as a clinical tool (Jantzen, 2010). Obtaining baseline fMRI images and sputum with a repeat of the fMRI at the end of study will allow post analysis and review against published data on formal meditation practices without subjecting the group members to intensive testing.

CONCLUSION

The main of objective of a proposed group therapy study on Mana Psychology™ On-The-Go Meditation techniques is to assess its value for stress reduction and to characterize the affect through state of the art testing for further examination of the inter-relationships by multivariable review of test results. We must find a way to incorporate the proven benefits of meditation in a useable format that fits into lives of individuals from young mothers to combat soldiers. This approach should be analyzed for its value as a self-guided, cost-effective, approach to meditation and stress reduction that can easily incorporated into any lifestyle, but even more importantly, because it takes us away from the burdensome complexities that surround pharmacological-based psychological health care. On-The-Go Meditation studies require relatively no infrastructure resources, and combine the expertise of behavioral health specialists and scientists to more effectively formalize strategies of preventative care and treatment management of patients that will continue to be exposed to PTSD risk factors. The assessments of

fMRI and epigenetics in this study will allow better understanding of some of the mechanisms involved in successfully treating and perhaps identify indicators, which correlate with traditional interventions to improve recovery. Most of us

lead lives that do not allow the level of scheduling, privacy and solitude required to successfully participate in current forms of meditative practices. Standard practices of meditation are not practical for most people who do not have the luxury of 20 minutes, twice per day, scheduled and secluded meditation time. Mana Psychology™ with the novel On-The-Go Meditation allows instant access to self-guided moments of relief while actively participating in the complexities of life from high stress to every day pressures.

References

American Psychiatric Association. (2013).Diagnostic and statistical manual of mental disorders (5th ed.). Arlington, VA: Author.

APA Presidential Task Force on Evidence-Based Practice. (2006).

Evidence-based practice in psychology. American Psychologist, 61,

271–285. http://dx.doi.org/10.1037/0003-066X.61.4.271

Carrion et al. **Reduced Hippocampal Activity in Youth with Posttraumatic Stress Symptoms: An fMRI Study**. *Journal of Pediatric Psychology*, 2013; DOI: [10.1093/jpepsy/jsp112](http://dx.doi.org/10.1093/jpepsy/jsp112)

Chen, J.K., Johnston, K.M., Collie, A., McCrory, P., Ptito,A. (2007). A validation of the post- concussion symptom scale in the assessment of complex concussion using cognitive testing and functional MRI. The Journal of Neurology, Neurosurgery and Psychiatry 78: 1231-1238.

Do-Hyung Kang, Hang Joon Jo, Wi Hoon Jung, Sun Hyung Kim, Ye-Ha Jung, Chi-Hoon Choi, Ul Soon Lee, Seung Chan An, Joon Hwan Jang, Jun Soo Kwon; The effect of meditation on brain structure: cortical thickness mapping and diffusion tensor imaging. *Soc Cogn Affect Neurosci* 2013; 8 (1): 27-33. doi: 10.1093/scan/nss056

Foa, E. B., Keane, T. M., Friedman, M. J., & Cohen, J. A. (2009).

Effective treatments for PTSD: Practice guidelines from the International Society

for Traumatic Stress Studies. New York, NY: Guilford Press.

Goodson, J., Helstrom, A., Halpern, J. M., Ferenschak, M. P., Gillihan,

S. J., & Powers, M. B. (2011). Treatment of posttraumatic stress disorder

in U.S. combat veterans: A meta-analytic review. Psychological Reports, 109, 573–599. http://dx.doi.org/10.2466/02.09.15.16.PR0.109.5.573-599

Gradus, J. L. (2014, January 14).Epidemiology of PTSD. Retrieved from

http://www.ptsd.va.gov/professional/PTSD-overview/epidemiological-

facts-ptsd.asp

<https://www.washingtonpost.com/news/inspired-life/wp/2015/05/26/harvard-neuroscientist-meditation-not-only-reduces-stress-it-literally-changes-your-brain/?postshare=3401454733236993&tid=ss_fb&utm_term=.5cb36efa2731>

Institute of Medicine of the National Academies. (2012).Treatment for

posttraumatic stress disorder in military and veteran populations: initial assessment. Committee on the Assessment of Ongoing Efforts in the

Treatment of Posttraumatic Stress Disorder, Board on the Health of

Select Populations. Washington, DC: National Academies Press.

 Jantzen, K. J. (2010). Functional Magnetic Resonance Imaging of Mild Traumatic Brain Injury. Journal of Head Trauma and Rehabilitation 25: 256-266.

Journal *Military Medicine* [Impact of Transcendental Meditation on Psychotropic Medication Use Among Active Duty Military Service Members With Anxiety and PTSD](http://publications.amsus.org/doi/full/10.7205/MILMED-D-14-00333),” was published in the January 2016 study,

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., &

Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM–IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry, 62, 593–602. <http://dx.doi.org> 10.1001/archpsyc.62.6.593

Logothetis NK, Wandell BA. Interpreting the BOLD signal. Annu Rev Physiol. 2004;66:735–769

Ludwig DS,Kabat-Zinn J. Mindfulness in medicine, The Journal of the American Medical Association, 2008, vol. 30011(pg. 13502)

KIYIMBA, N. (2016). DEVELOPMENTAL TRAUMA AND THE ROLE OF EPIGENETICS. *Healthcare Counselling & Psychotherapy Journal*, *16*(4), 18-21.

PTSD United. From online today <http://www.ptsdunited.org/ptsd-statistics-2/>

Psychology Today January 2016, <https://www.psychologytoday.com/blog/the-athletes-way/201601/meditation-reduces-post-traumatic-stress-disorder-symptoms> taken today.

Seal, K. H., Maguen, S., Cohen, B., Gima, K. S., Metzler, T. J., Ren, L.,. . . Marmar, C. R. (2010). VA mental health services utilization in Iraq and Afghanistan veterans in the first year of receiving new mental health diagnoses.

Journal of Traumatic Stress, 23, 5–16.

Short, Baron E., , Samet Kose, Qiwen Mu, et al., “Regional Brain Activation during Meditation Shows Time and Practice Effects: An Exploratory FMRI Study,” Evidence-Based Complementary and Alternative Medicine, vol. 7, no. 1, pp. 121-127, 2010. doi:10.1093/ecam/nem163

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. Archives of General Psychiatry, 62, 629–640. http://dx.doi.org/10.1001/archpsyc.62.6.629