

Mana Psychology™ Family Therapy for Military Personnel and their Dependents

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Abstract

Post-Traumatic Stress Disorder affects between 10.1% to 30.9% of combat veterans (Gradus, 2014). The struggles associated with Post Traumatic Stress Disorder affect not only military personnel but also their families. Military treatment facilities have prioritized PTSD care and treatment for soldiers and their dependents (ATP, 2016). With the Army Regulation of 1996, Military leaders have been called upon to address stress reduction for soldiers in the home and workforce. Even with increased awareness and funding, Military health care programs have long waiting periods between when a soldier or veteran is referred to residential treatment and when they are admitted to a program. Veteran behavioral health providers suggest that it would be beneficial if patients could engage in some kind of coping skills program prior to entry into such programs (Cook, 2017). With the 2016 Army Techniques Publication, there is a new emphasis on addressing the urgent need for military family-based therapy, and congressional research initiatives have awarded funding for methods that are cost-effective and more compatible with military life. It is well established that the ability of a family to thrive relies on the psychiatric and external stability of a safe and stable living situation (Cook, 2017). Mindfulness practices are not only proven to be effective in treating PTSD, but they are also recognized as intervention strategies that cultivate positive emotions particularly suited for preventing and treating problems rooted in negative emotions, such as anxiety, depression, aggression, and stress-related health problems (Fredrickson, 2000). Thus there is an urgent need for military families to learn coping methods that increase the stability of their family life prior to diagnosis and while waiting on referrals for treatment.

Cognitive-Based therapies and Mindfulness family therapy practices offer a wide variety of therapeutic techniques that are well established in experimental psychology through evidence-

based research. The effectiveness of CBT and Mindfulness practices in treating PTSD and in family therapy has yielded promising results. However, military life often lacks the ability to schedule, find privacy or solitude that is solace required for mindfulness-based practices. Mana Psychology offers a novel meditation on the go that allows self-guided moments of relief and relaxation from stress while actively participating in the complexities of everyday life and may prove to be a cost-effective option in caring for the families and military personnel suffering from the effects of PTSD.

The Rise and Prevalence of PTSD

Diagnosed lifetime prevalent posttraumatic stress disorder (PTSD) in the general population is presently at 6.8% (Kessler et al., 2005). PTSD United (2017) estimates that 24.4 million people have PTSD at any given time. An estimated one out of every nine women develops PTSD. In combat veterans, the prevalence percentage of PTSD ranges from 10.1% to 30.9% (Gradus, 2014). PTSD disrupts day-to-day functioning with symptoms such as 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 in treating PTSD (Institute of Medicine of the National Academies, 2012), but even with a diagnosis of severe PTSD veterans experience long wait times to receive treatment (Cook, 2017).

Estimates of PTSD in the general population, suggest that only 49.9% of those diagnosed with the disorder are receiving treatment (Wang et al., 2005). In the Veterans Health Administration (VA) health care system, many individuals do not seek or even refuse treatment (Seal et al., 2010). It has been estimated that out of 49,425 veterans with PTSD diagnoses, only 9.5% attended nine or more psychotherapy sessions, in a VA setting (Seal et al., 2010).

The annual societal cost of PTSD related anxiety disorders is estimated to be over \$42.3 billion (PTSD United, 2017). Despite the efforts that have been put into helping people with PTSD, there is still need to improve the efficiency of the current therapeutic plans. For military personnel, there is a fear that seeking help will be seen as a sign of weakness. Family-based mindfulness-based practices for military personnel and their dependents may offer preventative and pretreatment coping techniques without social stigmatization. Meditation practices have already been well established for the care and treatment of PTSD and provided to military families, the coping skills needed to face the complications that arise in families affected by mild to moderate PTSD and/or alleviate the stress for those family members who need further treatment for life inhibiting or severe PTSD.

The Validity of Meditation

Meditation can be conceptualized as a family of complex emotional and attention based regulatory training practices (Barnes, 2016). Recently, the therapeutic use of meditation, including mindfulness-based techniques, has become increasingly important in the treatment of physiological and psychological conditions (Ludwig & Kabat-Zinn, 2008). Research on meditation has shown that its practice can increase attention, calm emotional reactions, and induce positive cognitive and perceptual changes in multiple regions of the brain (Short, 2010). The frontal/prefrontal regions are most frequently activated during meditation, and this activation may be related to increased attention. Although, multiple other brain regions have also been associated with various meditation methods, changes in cortical thickness and structural differences in the brain have been found in long-term meditators (Do-Hyung et al., 2013). Subsequent studies have confirmed that focal reductions in self-referential cortical midline

regions are measurable in novice participants and that they are more marked and pervasive in those trained in meditative relaxation techniques.

In a recent Harvard 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 (Schulte, 2015). These regions are all linked to paying attention, so it stands to reason that 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. However, perhaps the most profound findings were that these changes within the brain could be seen within only eight weeks of meditation practice (Schulte, 2015).

In 2016, the efficiency of Transcendental meditation was studied on PTSD patients (Journal of Military Medicine, 2016). Participants were recruited at the Dwight David Eisenhower at the Army Medical Center Traumatic Brain Injury Clinic in Fort Gordon, Georgia. The 74 active-duty participants had experienced multiple deployments and were seeking treatment for PTSD. The Transcendental meditation was added to half of the participant's scheduled treatment and not the other half. 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 in the non-meditating sample actually increased their dosages of medication. These results persisted in the following months and at 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.” (Bergland, 2016). Mana Psychology and on the go Meditation are empowerment concept of from the Mana Gardening personal empowerment series and is based on a novel new approach to an ancient Hawaiian method of turning inward. With this method of always starting from within comes a simple way to release

stress and cope with problems through moments of self-guided meditative relief (Kamalani, 2017). Mana Gardening on the go meditation has been proposed for multiple federal funded military studies as it may be more suitable to the military lifestyle for its novel seconds of relief mediation methods and unique self-governed approach which may also prove to be cost-effective in that it can be taught to groups of families in a relatively short period of time.

Family Therapy with Meditation on the go

The Mana Gardening™ Meditation on the go offers an integrative therapeutic approach by combining integrated cognitive, psychodynamic and experiential approach, with a novel approach to mindfulness meditation (Mana, 2017). Its goal is to offer instant relief from stress and positively change the way one feels. The method seeks to reduce drama, by guiding participants to use inner visualization to identify problems as insignificant as possible and learn the skills to concisely identify a problem with the simplest achievable solution (Mana, 2017). In a recent proposed study, it was offered to 50 families of active duty service men and women. Families were randomly divided into groups of 4 families and expected to attend three weekly 45-minute group sessions followed by three individual 60-minutes family sessions. All members were given 20-minutes weekly reading assignments to read aloud, discuss and try as a family. Family Therapy with Meditation on the go proposes that the Mana Gardening™ techniques provide the same relaxation response as other traditional forms of meditation, but can also be utilized while busy with normal family needs and actively participating in all subsequent life activities.

In each session, the participants are guided through the steps required to use meditation on the go. They are challenged to use this technique as often as they can throughout the week, and return to briefly review and share their progress and or thoughts while using the method.

During each session, all family members regardless of age are reminded to recognize these mini relaxation moments through awareness of what moments of calm and relaxed feels like.

Further in-depth studies were also proposed using medical, biochemical, epigenetic and psychological testing on the 50 service members. Participants were instructed that testing is only to offer validation to whether Meditation on the go induces a relaxation response for patients that can be compared to the Harvard University Meditation study results. At recruitment, participants were instructed that they will personally explore a novel approach to meditation that does not require any additional time or changes to their normal, everyday lifestyle and can be practiced by the every member of the family that wishes to or is old enough to understand the guidance given to participating. Reasonable hope was given that the practice of this on the go mediation technique may be beneficial in providing relief for all forms of stress and anxiety and can positively affect 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 displays signs of severe depression or stress, they will be allowed to remain in the program but required to seek immediate qualified professional care and or intervention. Thus, the initial meeting was led by a facilitator with the introduction of a licensed professional that may occasionally participate in the family and group sessions for assessment purposes. This professional will be available for one on one care, should any participant need it. If at any time the professional feel that a family member needs individual care they may be excluded if professionally advised. The subsequent sessions will offer brief reviews of the Mana Gardening™ reading assignments. Participants will receive guidance on how they could use these skills to explore other mindfulness-based concepts such individually initiated role-playing, exposure therapy and strengthening their personal identity. Principals of other Mana Psychology

techniques may be briefly discussed, but will never be the focus. Being open to these topics, but not exploring them, family members are encouraged to explore them on their own. Mana Psychology promotes a greater sense of empowerment without feeding into the habit of emotional spinning out. Also addressed in the readings are ways to re-write negative reflections upon past injustices, or abuse, using an internal form of visual role-play (Kamalani, 2017) The benefits of role-play is a useful tool for self-improvement as it can be explored independently to create a positive meaning, a new identity, or embrace pride in your current identity (Mallot, 2015). Mana psychology utilizes Mana Gardening™ visualization techniques, to safely re-write or re-draw painful life images and memories may also offer a safe and personally controlled form of exposure therapy. Visualization tools have a strong scientific support for being able to reduce PTSD symptoms (APA Presidential Task Force on Evidence-Based Practice, 2006). The Institute of Medicine of the National Academies (2012) strongly endorsed and recognized the extensive research support behind exposure therapies.

Evidence-based Science

Scientist and Psychologists face one fundamental and problematic question; how much of behavior is genetically predetermined? Although there is no doubt that our environment can influence our health and well-being, there is vast discord among health professionals in explaining why physical and mental health varies widely, even within families experiencing similar life paths. Combining epigenetic studies with mindfulness practices may offer a new level of insight as to the questions around why the only person exposed to a specific group trauma experiences develops PTSD.

Epigenetics is a scientific method that demonstrates the influence of environmental factors on the way that genetic DNA coding is expressed (Kiyimba, 2016). The term literally

means ‘on top of’ genetics’ and, to be concise, epigenetics may offer us a pathway to identify when nature has taken precedence. 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 and beyond the horizon approach to all forms of Health Care. Epigenetic sputum testing military personnel participating in on the go mediation practices may allow us to identify those at a higher risk for PTSD, as well as those who respond better to meditative therapies.

Currently, clinical interviews are the state of art in PTSD diagnosis. Therefore, clinicians are forced to rely on subjective reports of their own symptoms. Although clinical history is a good start, PTSD diagnoses would also benefit from reliable hard science symptoms such as biomarkers, neuroimaging, psychophysiology, chemical assays and gene expression (Schulte, 2015). Every method of PTSD treatment, novel or not, deserves the diligence of a scientific study. Analyzing the options to design such a study requires 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. Therefore, a multi-variable, prospective study should be conducted on the results of these practices.

Using fMRI imaging and epigenetic tests to establish baseline measures parallels and adds to the Harvard University study with the least amount of intrusion. A Meta-Analysis of the current published literature on the health benefits of meditation will be used for comparison. Analysis of variance will be conducted to determine whether there is any relationship between practicing meditation on the go and reducing the stress experienced by military families exposed to the conditions that exacerbate PTSD. Likewise, previous research has revealed a neurobiological basis of the influence of oxytocin and vasopressin on human social behavior

through non-invasive neuroimaging. 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 & 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, Johnston, Collie, McCrory, & Ptito, 2007), suggesting that fMRI may be more sensitive to the effects of PTSD than more traditional cognitive measures. fMRI has been purported to show great promise as a clinical tool (Jantzen, 2010). Obtaining pre and post measures with fMRI images and sputum will allow analysis of the effectiveness of the therapy method and comparison against published data on formal meditation practices without subjecting the any of the family members to intensive testing.

Conclusion

The main objective of family therapy study using Mana Gardening™ Meditation on the go techniques is to assess its value for stress reduction. Assessing the validity of this method will be characterized by state of the art testing and further examination of the interrelationships by multivariable review of test results. The aim is to find a way to incorporate meditation in a way that fits into the lives of individuals from young military dependents to combat soldiers. This approach should be thoroughly analyzed for its efficacy as a self-guided, cost-effective,

approach to mediation and stress reduction that can be easily incorporated into any lifestyle. In a greater context, the Center for Deployment (2016) and military health system is trying to move health care away from the burdensome complexities that surround pharmacological based psychological healthcare. (Center Mediation on the go 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 epigenetic measures will increase understanding of some of the mechanisms involved in treating and perhaps identify indicators for PTSD, 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 participate in current forms of meditative practices successfully. Standard practices of meditation are not practical for most people who do not have the luxury of 20 min, twice a day, scheduled and secluded meditation time. Mana Gardening™ is a novel meditation on the go that allows instant access to self-guided moments of relief while actively participating in the complexities of life from high stress to everyday pressures.

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