



Points of Excellence

The Newsletter of the VISN 17 Center of Excellence for Research on Returning War Veterans

SPRING 2019

Vol. 5, Issue 1



Dr. Eric Meyer provides Acceptance & Commitment Therapy as part of the third phase of the Project SERVE study

The VA VISN 17 Center of Excellence for Research on Returning War Veterans is dedicated to conducting research that serves to improve the quality of life of our nation's Veterans and foster the wellbeing of their families.

Editor: Richard Seim, PhD

Co-Editor: Laura Zambrano-Vazquez, PhD

Photography: Lisa Boynton, Richard Seim

Content Authors: Lisa Boynton, Richard Seim, Laura Zambrano-Vazquez

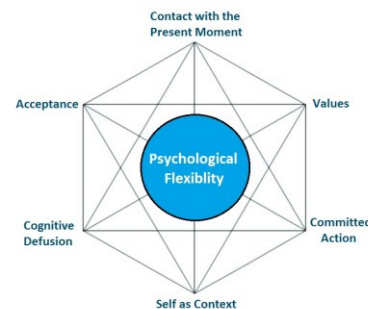
INSIDE THIS ISSUE

IMPACT Study	2
Development of Moral Injury	3
New Staff	4
Involving Loved Ones in Suicide Prevention	5
New Postdoctoral Fellows	6
Trauma and Inflammatory Responses	7
Kudos	7
Recent Articles	8

IMPACT Study Launches

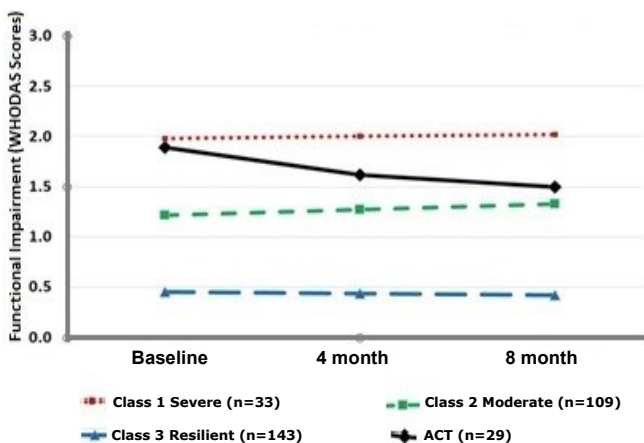
Dr. Eric Meyer, CoE Behavioral Science Core Investigator, and his team have begun data collection for a third phase of their longitudinal research program that now integrates a promising treatment component. For the past eight years, Project SERVE (Study Evaluating Returning Veterans Experiences) has been collecting data from Veterans on their readjustment experiences after returning from deployments as part of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND). This investigation has resulted in over 40 publications and 100 national and international conference presentations. Their research enhances our understanding of how and why different trajectories of reintegration occur and which factors can be targeted in treatment.

The new study phase, known as “IMPACT: Intervening on Modifiable Predictors using Acceptance and Commitment Therapy”, utilizes information about the predictive modifiable factors identified during earlier study phases. Because one of the most robust findings of Project SERVE suggests that low levels of psychological flexibility is a predictor of multiple negative functional outcomes, IMPACT uses a treatment designed to bolster psychological flexibility: Acceptance and Commitment Therapy (ACT).



The ACT approach to therapy incorporates mindfulness strategies along with values-based behavioral exercises

ACT is an empirically-supported form of behavior therapy that seeks to increase psychological flexibility and values-consistent behaviors through acceptance and mindfulness-based techniques. The specific adaptation of ACT being examined in the IMPACT study aims to help Veterans improve their daily functioning regardless of the particular mental and health problems with which they are struggling. “We know that posttraumatic stress is a huge piece of the puzzle,” Dr. Meyer says, “but it’s far from being the only piece.”



Functional Trajectories of Participants Treated in Dr. Meyer’s ACT Trial Benchmarked onto the Trajectories of Functioning Observed During the First 8 months of Project SERVE (Higher Scores = Greater Impairment)

The study is targeting the most impaired Veterans identified in their longitudinal study. The treatment seeks to reduce functional impairment associated with any combination of the most prevalent problems experienced by combat Veterans: PTSD, depression, chronic pain, traumatic brain injury, and alcohol use problems. Rather than focusing on symptom reduction, the ACT approach helps Veterans to take an active, acceptance-based stance in relation to experiencing unwanted thoughts, emotions, and physical sensations. Then, through values-based goal-setting, the Veteran is guided towards engaging in activities that are more personally meaningful to them, even when these unwanted internal experiences continue to occur. This approach allows participants to regain control over their choices and

IMPACT Study cont'd

actions, independent of their symptom level. IMPACT builds on previous research by Dr. Meyer which showed that the ACT model of treatment can effectively help Veterans suffering from co-occurring PTSD and alcohol use disorder.

In the same way that Project SERVE has identified trajectories of long-term functional reintegration in Veterans, IMPACT is seeking to identify a method of promoting the emergence of a “recovery trajectory”. Dr. Meyer explained that given the extensive amount of data collected through this project, IMPACT is in a pivotal position to identify this trajectory among veterans who have been struggling with long-term functional impairment and disability. In most studies, there is a brief assessment of functioning immediately before the start and after the completion of treatment with some additional follow-up assessment to track maintenance of changes. Although this design can help understand the effect of treatment on symptoms and functioning, it does not paint a clear picture of whether the level and pattern of functioning over prior years is characteristic of that immediately preceding and following treatment. Therefore, it would be difficult to establish if the gains observed in treatment are simply a return to their typical functioning or a true reflection of sustained change. IMPACT is in the rare position of having data available for as long as eight years prior to the start of treatment. “We have translated the knowledge gained from studying these veterans over the past decade into an intervention tailored to meet their needs”, Dr. Meyer explained. “We are excited about the potential of this unique study design to shed light on the ability of this treatment approach to promote broad-based functional recovery in this diagnostically complex sample”.

Different Paths Can Lead to Moral Injury Following Military Trauma



Dr. Sheila Frankfurt

Fear for one's life is considered a normal reaction to a traumatic event, nonetheless it is far from being the only common reaction observed in response to trauma. In a recent study, CoE Investigators, Drs. Sheila Frankfurt, Bryann DeBeer, and Eric Meyer, and their colleagues explored the effects of another typical reaction to trauma that has been largely understudied: moral injury.

Moral injury refers to a psychological harm resulting from either (1) acting, failing to prevent, or witnessing actions that violate an individual's deepest values and principles or from (2) betrayal by a trusted authority figure in a high stakes situation. These actions and events are called “morally injurious events.” When memories of these morally injurious events are incompatible with Veterans' own views of who they are and what they stand for, they may experience intense feelings of guilt, shame and rage. If this inner conflict is unresolved, it may lead to a moral injury syndrome characterized by depression, re-experiencing and avoidance trauma symptoms, substance abuse, spiritual/religious decline, and suicide.

Moral Injury cont'd

Although the typical focus of moral injury research are “perpetration-based” events, Dr. Frankfurt and colleagues’ study tested whether the definition of morally injurious events should include military sexual trauma (MST), as this may be experienced as a betrayal-based morally injurious event.

In their study, Dr. Frankfurt and colleagues sought to understand the pathways through which military traumas, like combat exposure and MST, ultimately lead to a moral injury syndrome, characterized by concomitant PTSD and depression. Analyzing data from over 300 post-9/11 veterans, the study found that whether traumatic events were appraised as betrayal- or perpetration-based, explained the presence of PTSD-depression symptoms. For instance, in MST, betrayal explained the association between traumatic events and PTSD-depression symptoms, while in combat exposure events, it was perpetration that accounted for this relationship. Additionally, Dr. Frankfurt and colleagues found some evidence suggesting that the self-focused experience of shame, but not the behavior-focused experience of guilt, further links combat exposure to PTSD-depression symptoms.

Overall the results suggest that moral injury can develop through different pathways following military traumas. Given that in recent years moral injury has been identified as a unique source of distress in Veterans, the results of this study are a promising early step in helping identify modifiable factors that can be used to develop targeted treatments to relieve the burden of moral injury.

Welcome Our New Staff



Christina Burns, B.S. is a Psychology Technician working in the Behavioral Science Core on the SERA Study. She began her time with the CoE in the Fall of 2017 as a member of the VA-CERP undergraduate program and later graduated from Tarleton State University with her degree in Psychology. In her free time, Ms. Burns volunteers with the Methodist Children's Home, a residential care facility for youth suffering from emotional issues.



Sudhiranjan Gupta, Ph.D. is the new Chief of our Biomarkers & Genetics Core. Prior to arriving at the CoE, Dr. Gupta worked in the Medical Physiology Department at Texas A&M University investigating how cardiac fibrosis and biomarkers are linked to heart failure. Dr. Gupta’s research expertise will contribute to the CoE’s mission of improving the lives of Veterans facing PTSD symptoms and those that have experienced TBI.



Jennifer Smith, A.S. is an MRI Technician working in the Neuroimaging Core, where she will be assisting with the NETS, TEMI, ROBI, and MAVEREX Studies. Prior to joining us at the CoE, Ms. Smith worked at the McLane Children’s Hospital, where she received extensive experience in neuroimaging. The ability to now work with Veterans living with the symptoms of TBI and PTSD was a big draw for her to come to the CoE.

Involving Loved Ones in Suicide Prevention



Support from a trusted friend or loved one may substantially help a Veteran cope with suicidal thoughts

With approximately 20 Veterans taking their own lives every day, suicide prevention is one of the top priorities of the U.S. Department of Veterans Affairs. Therefore, the VA has implemented numerous programs and emphasized empirically supported care, such as safety planning. In their research, Dr. Bryann DeBeer, a CoE investigator, and her colleagues examined whether Veterans and their significant others believe that having loved ones involved in the safety planning process would be beneficial and what issues should be considered.

Safety planning, the VA standard of care for individuals at high risk for suicide, is one of most widely used and supported strategies for suicide prevention. A mental health provider works collaboratively with Veterans to create a written and predetermined course of action that can be used in a future crisis by identifying appropriate coping strategies personalized to the Veteran's needs. The safety plan allows Veterans to identify warning signs or triggers, internal coping strategies, external sources of distraction, sources of social support, and mental health resources, such as the suicide prevention hotline, that can be contacted 24/7. Although a safety plans encourages Veterans to identify sources of social support, the current safety planning process does not directly recruit the help of Veterans' loved ones.



Dr. Bryann DeBeer

In their qualitative feasibility study, Dr. DeBeer and colleagues found that nearly 80% of Veterans reported that having a trustworthy friend, spouse/partner, family member, or fellow Veteran directly involved in their safety plan would have a positive impact on their efforts to cope with suicidal thoughts and help remind them that they are not alone. Despite the overwhelming positive support for this approach, Veterans also identified some concerns with involving their loved ones including possible communication problems and worries about being a burden. Overall, the results of the project provide important considerations to be made to further enhance the utility of safety planning.

Meet Our New Postdoctoral Fellows



Dr. Morgynn Haner has had longstanding passion and interest in the etiology and treatment of psychological disorders. Driven to make an impact on the lives of those struggling with psychological disorders, Dr.

Haner received a Ph.D. in Counseling Psychology from the University of Texas at Austin after completing an internship at the Vanderbilt University/Nashville VA Consortium. Her research interests focus on investigating the emotion regulation processes that contribute to and maintain posttraumatic stress disorder. She is particularly interested in how these processes can be identified and targeted through neurological- and biological-based treatment approaches, such as transcranial magnetic stimulation (TMS). Dr. Haner was drawn to pursue a fellowship at the CoE because of our integration of neuroscientific approaches to the study returning combat Veterans. Through her fellowship, she plans to merge her expertise in emotion regulation with an ongoing TMS study. She will be presenting some of her work at a symposium in the International Conference for Psychological Science in Paris.



Dr. A. Solomon Kurz received his Ph.D. in Clinical Psychology from the University of Mississippi following a pre-doctoral internship at the Medical College of Georgia at Augusta University/Charlie Norwood Veteran

Affairs Medical Center. His research interests are in Acceptance and Commitment Therapy (ACT), mindfulness meditation, intensive longitudinal designs, idiographic methods, and applied statistics. During graduate school, he worked under the mentorship of Dr. Kelly G. Wilson, a central figure in ACT, and he developed a strong proficiency in this approach. Dr. Kurz was drawn to the CoE because of how closely his own research interests aligned with the new phase of Dr. Eric Meyer's work. Since beginning his fellowship in September, Dr. Kurz has submitted several manuscripts for publication, worked on developing ideas for grant proposals, and has provided care to our Veterans as a study therapist on the IMPACT project. Dr. Kurz hopes that the fellowship will continue to prepare him for a research career by providing him with more experience in treatment development and statistical analyses.

Fall Conference Season



In November, several CoE investigators had the opportunity to travel across the country to present their research findings at different conferences, including the Society for Neuroscience, the International Society for Traumatic Stress Studies, and the Association for Behavioral and Cognitive Therapies. Representing a wide array of projects, the work of Drs. Evan Gordon, Geoffrey May, Adam McGuire (*pictured*), Eric Meyer, Carey Pulverman, Richard Seim, and Yvette Szabo was well-received, bringing attention to the research and educational activities of our Center.

The Role of Lifetime Trauma in Inflammatory Responses



Dr. Yvette Szabo

While traumatic stress can have a detrimental effect on one's mental health, it may also lead to changes in one's physical health. In a recent study, CoE postdoctoral fellow, Dr. Yvette Szabo, investigated

how exposure to high levels of stress may affect the inflammatory processes in the body.

Inflammation is a biological process through which the body combats infection and promotes healing from injury. However, chronic inflammation due to frequent or prolonged stress has been found to be deleterious to one's physical and mental functioning. The body's inflammatory processes are regulated by cytokines, proteins which can either increase inflammation (e.g., interleukin-1B) or decrease it (e.g., interleukin-10). Although the relation between emotional stress and cytokine levels has been well-established, few studies have looked at this association in response to acute stress, which can be a helpful model to understand responses to daily stressors.

In their study, Dr. Szabo and colleagues tested whether greater lifetime exposure to trauma is associated with changes in cytokine levels in response to a stress-induction task. Their data showed that cumulative stress and decreases in positive emotions were associated with higher post-stress pro-inflammatory cytokines as well as an elevated pro- vs. anti-inflammatory cytokine ratio. These findings suggest that lifetime exposure to traumatic events may contribute to subsequent stress responses.

Furthermore, emotional changes appear to be directly related to greater salivary cytokine responses. By identifying how trauma leads to physical health consequences, researchers like Dr. Szabo can integrate this knowledge into developing targeted trauma-focused interventions.

Kudos

- Doctoral student, **Joshua Camins**, working under the mentorship of Dr. Bryann DeBeer, was selected for the 2019 Society for Military Psychology Leadership Program designed to inspire and develop the future leaders in military psychology.
- Postdoctoral fellow, **Dr. Adam McGuire**, has been awarded a SPIRE Award to fund his research on moral elevation.
- Business Core staff members, **Ruth Ann Mitchell** and **April Salinas**, have been accepted to the VA LEAD Program of the Central Texas Veterans Health Care System.
- **Dr. Richard Seim**, Chief of the Education and Dissemination Core, has been accepted to the Leadership VA (LVA) program which is nationally recognized for its ability to produce high-performing leaders who are ready to take on the challenges and issues facing VA.

Recent CoE Publications

Here is a sample of some of the recent articles published by our researchers:

Garcia, H., **Benzer, J. K.**, Haro, E., & Finley, E. (in press). Occupational Burnout among PTSD Specialty Clinic Providers in the Veterans Health Administration: Perceptions of Bureaucratic and Political Oversight. *Mental Health & Prevention*.

McGuire, A. P., Erickson, T. M., Quach, C. M., & Willey, B. (in press). Gratitude for better or worse: Differential predictors and affective outcomes of state gratitude in positive and negative contexts. *Journal of Positive Psychology and Wellbeing*.

Oslin, D. W., Hoff, R., **Mignogna, J.**, & Resnick, S. G. (in press). Evaluation of Provider Attitudes and Experience with Measurement Based Mental Health Care in the Veterans Administration Implementation Project. *Psychiatric Services*.

Peterson, A. L., Foa, E. B., Blount, T. H., McLean, C. P., Shah, D. V., Young-McCaughan, S., Litz, B. T., Schobitz, R. P., Castillo, D. T., Rentz, T. O., Yarvis, J. S., Dondanville, K. A., Fina, B. A., Hall-Clark, B. N., Brown, L. A., **DeBeer, B. B.**, Jacoby, V. M., Hancock, A. K., Williamson, D. E., Evans, W. R., **Synett, S.**, Straud, C., Hansen, H. R., **Meyer, E. C.**, Javors, M. A., Sharrieff, A. F. M., Lara-Ruiz, J., Koch, L. M., Roache, J. D., Mintz, J., & Keane, T. M.; for the Consortium to Alleviate PTSD. (in press). Intensive prolonged exposure therapy for combat-related posttraumatic stress disorder: Design and methodology of a randomized clinical trial. *Contemporary Clinical Trials*.

VISN 17

Center of Excellence for Research on Returning War Veterans

Doris Miller Dept. of Veterans Affairs Medical Center
4800 Memorial Drive (151C)
Waco, TX 76711

Visit us at online at
www.mirecc.va.gov/visn17/

