



Points of Excellence

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New brief computer-based intervention developed by Dr. Creech and colleagues seeks to help female Veterans meet all their healthcare needs

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

Editor: Laura Zambrano-Vazquez

Photography: Laura Zambrano-Vazquez,
Richard Seim

Content Authors: Jennifer Bakan, Abigail
Herschbach, Daisy Lopez, Rachel Mason,
Kathryn Roe, Laura Sumrall, Laura
Zambrano-Vazquez

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Novel Intervention to Address Women Veterans' Healthcare Needs

By Kathryn Roe & Laura Zambrano-Vazquez

In collaboration with researchers at Brown University and funded by the Department of Defense, Dr. Suzannah Creech and her team have completed data collection for a randomized controlled trial testing a novel computer-based intervention to help women Veterans with a history of sexual trauma. It is estimated that over half of the women Veterans receiving care at the VA have experienced sexual trauma, which is strongly associated with health concerns like hazardous drinking, intimate partner violence (IPV), and posttraumatic stress disorder (PTSD).



Recognizing the unique healthcare needs of women Veterans and the importance of early identification of those at high risk, Safe and Healthy Experiences (SHE) was designed to provide individual assessment, feedback, and referrals for women with lifetime sexual trauma.

SHE is a brief computer-based intervention that identifies and helps female Veterans of a vulnerable population that may be missed during routine healthcare screenings. It also targets co-occurring health concerns associated with sexual trauma such as alcohol misuse, IPV, and PTSD. Given the sensitive nature of these struggles, Dr. Creech and her team believed that the computerized approach of SHE might help women Veterans feel more comfortable reporting health risks rather than in an in-person interview. As a theory-driven intervention, SHE sought to help women Veterans through three brief intervention modules on each of these health risks (i.e., alcohol misuse, IPV, and PTSD) using informational videos, a personal safety plan, goal setting, and a summary with handout materials. Additionally, SHE is based on motivational interviewing (MI), a technique that has successfully elicited behavior changes in men and women. MI helps the patient become aware of the steps to promote their own well-being. As such, MI may be ideal for reducing health risks in women with histories of sexual trauma by promoting self-efficacy and focusing on identifying women's strengths and successes.

To test this promising intervention, Dr. Creech and her team recruited women Veterans in the Central Texas Veterans Healthcare System (CTVHCS). Veterans completed an initial screening followed by a computerized intervention at baseline. The women were then invited to complete follow-up assessments two and four months after the intervention. The first part of the study – the open trial – included 20 female Veterans with a history of sexual trauma and associated health risks. Preliminary results showed that women reported high satisfaction with the intervention and had reduced hazardous alcohol use, IPV, and PTSD by the four-month follow-up. Women were able to complete the assessments and intervention in the expected amount of time and without disrupting routine clinical care. Taken together, these findings suggest the SHE intervention may reduce health risks like alcohol misuse, IPV, and PTSD that are associated with sexual trauma and address barriers to care for both patients and providers.

Dr. Creech and her team concluded this randomized control trial last fall and results are currently under review at an academic journal. This exciting work is contributing to the VA's efforts to adequately respond to women Veterans, one of the fastest-growing populations among Veterans, with the hope to eventually integrate the SHE intervention into the VA healthcare network, especially in a primary care setting.

Helping Civilians Understand Veteran and Military Culture

By Laura Sumrall

Being placed in squads with team leaders, hearing reveille calls, and doing push-ups are part of day-to-day military life, but also part of an immersive educational military life experience for 150 medical and mental health providers. During this training, which was held at UT Austin in September, attendees discussed how the local community can support servicemembers, Veterans, and their families transitioning to post-military life.

The Veteran Cultural Competence (VCC) Training Program is facilitated by the Transitioning Servicemember/Veteran And Suicide Prevention Center (TASC) Team where military customs, norms, and ideals are presented to highlight the differences and similarities of military and civilian culture. Throughout the day, Veterans led discussions and shared personal anecdotes to connect with the participants and create a sense of community between Veterans and civilians. At the end of the day, there were dramatic readings of excerpts from Greek Tragedies by actors from the Theater of War.

Some attendees took their training further to become sponsors to servicemembers as part of the Expiration of Term of Service (ETS) Sponsorship Program. The ETS Sponsorship Program centers on a personal relationship between the servicemember, who is leaving the military, and the trained and certified Sponsor to help navigate the struggles that emerge in this transitioning period, like housing, employment, or even connecting to healthcare.

Currently being implemented in Texas with plans to expand to other states, the ETS Sponsorship Program connects servicemembers to relevant and applicable programs and organizations. The program works closely with the VA and



community partners to make a difference in the reintegration of servicemembers and their families.

For more information on becoming a sponsor, go to <https://etssponsorship.com/>.

Meet Our VA Regional Community Coordinator

By Daisy Lopez



Leah Smith is a Licensed Clinical Social Worker joining our new program, the ETS Sponsorship Program, to help servicemembers who are transitioning out of the military. As the first VA

Regional Community Coordinator (VRCC), she is working to create active relationships with Veteran-serving community agencies and VHA partners in order to connect transitioning servicemembers with VHA care and other needed services. With over 9 years of service with the US Air Force as a mental health technician and experience as a VA PACT Social Worker, Leah has excelled in providing intervention and case management skills to keep Veterans safe and connected to VHA care.

Early Access to Mental Health Careers for a Historically Black University

By Laura Zambrano-Vazquez



This summer, the CoE partnered with Prairie View A&M University (PVAMU) to welcome the inaugural class of the VA Mental Health Undergraduate Research Institute. For two weeks, bright PVAMU seniors, Areon Bradford and Janiya Cherry, were immersed in a quality mental health research and professional development experience that offered research, clinical, and administrative rotations through the CoE and the CTVHCS. During the program, these undergraduates, who are striving to become future health professionals, shadowed mental health providers and observed psychotherapy services for Veterans through different clinics. They also toured medical facilities across the CTVHCS, shadowing physicians in different services and observing a pacemaker replacement surgery. Interns also completed research rotations with the Neurosciences, Behavioral Sciences, and Biomarkers & Genetics labs, learning about repetitive transcranial magnetic stimulation, immunoassay processing, and using magnetic resonance imaging to scan their own brains.

Through these rotations, providers also discussed their own career paths and shared the challenges and obstacles they overcame. Dr. Wendell Jones, VISN 17 Director, and CTVHCS leaders met with Areon and Janiya to further support and encourage them to become future leaders in our field. Currently, our interns are working with Dr. Yvette Szabo, CoE investigator and clinical psychologist, as a mentor who is guiding them through the research process and providing personalized support in navigating graduate school applications. The CoE is committed to developing high quality clinical providers and research professionals by training the next generation of scientist-practitioners to meet patient care needs within VA and the nation. There is no doubt that Janiya and Areon are well on their way to achieve that.



Identifying Biomarkers for Alcohol Use in Combat Veterans

By Abigail Herschbach

Veterans are at a higher risk for developing alcohol use disorders compared to civilians. Due to the high prevalence among Veterans, the VA endorses the use of pharmacological treatments to lessen withdrawal symptoms along with behavioral therapies to reduce patterns that contribute to alcohol abuse. Despite best efforts in treatment, many Veterans continue to struggle with substance use. CoE investigators, Drs. Szabo, Guleria, Nelson, and Zambrano-Vazquez, and colleagues sought to inform existing theory and treatment by improving our understanding of the biological mechanisms of alcohol abuse that can be at play among Veterans.

Stress, defined as a psychological or physical occurrence that feels uncontrollable or threatening, is associated with alcohol use disorders. When experiencing high stress, some individuals turn to alcohol as a coping mechanism, which may lead to the development of alcohol use disorders. During times of stress, our bodies engage in a cascade of hormonal and biological responses that help us respond to the situation. Cortisol, a common stress hormone, is triggered by the hypothalamic pituitary adrenal (HPA) axis during times of stress. Given the high stress that Veterans experience during combat and readjustment to civilian lives, researchers have begun to explore how prolonged stress may contribute to substance use on a biological level. Dr. Szabo and colleagues investigated this relationship through a literature review regarding how cortisol can serve as an indicator of vulnerability to alcohol use disorders among Veterans.



Dr. Szabo and colleagues highlighted how one theory of alcohol use disorders involves the release of excess cortisol from the HPA axis during stress. This theory proposes that when an individual's cortisol levels are elevated, the consumption of alcohol leads to increased positive feelings, such as calmness and energy, which diminish negative feelings when combined with alcohol's effects and lead to increased consumption of alcohol. Over time, this can become problematic because tolerance increases and the feedback loop that tells the body that the stressor is over becomes dysregulated. This

relationship is of particular importance to Veterans who may use alcohol to numb emotions, reduce arousal, and self-medicate sleeping problems. Given the implication of the role of cortisol in relation to alcohol use disorders, addressing cortisol levels and HPA dysregulation may help to alleviate alcohol use and the tendency to relapse. Better understanding characteristics of the Veterans' experience and studying the role of cortisol may help design targeted interventions.

Kudos

- **Dr. Justin Benzer's** project "Evaluation of a National VA Organizational Structure Redesign" received a QUERI Global Merit Award.
- **Dr. Sheila Frankfurt** was awarded funding for a Career Development Award to develop an intervention for Moral Injury.
- **Dr. Crystal Lantrip's** "Transcranial Magnetic Stimulation Augmented Written Exposure Therapy for PTSD in Veterans" was funded through a Career Development Award.
- **Drs. Suzannah Creech and Carey Pulverman** are the recipients of the South Central MIRECC 2020 Excellence in Educational Scholarship Award for their outstanding efforts in education of Sexual Health after Military Sexual Trauma.

Meet Our Postdoctoral Fellows

By Jennifer Bakan & Laura Zambrano-Vazquez



Dr. Tara Austin changed her career trajectory after discovering psychology during her master's program in music. She completed a Ph.D. in Clinical Psychology at Brigham Young University, where her research interests evolved from stress to neurobiological research. Her research focuses on assessing brain injuries and treatment interventions to improve functioning and quality of life in Veterans with brain injuries. According to Dr. Austin, “many Veterans [are] affected by cognitive injuries, and the treatments we design can help them achieve their goals by improving both... cognitive and emotional functioning.” As a fellow in the CoE’s Neuroimaging Core under the supervision of Dr. Lantrip, Dr. Austin is investigating an innovative intervention for Veterans experiencing cognitive concerns despite formal neuropsychological tests suggesting normative functioning. Their intervention targets emotional concerns common in this population to improve their subjective cognitive status. Dr. Austin hopes her fellowship will bring her closer to her goal of becoming a researcher and neuropsychologist investigating and implementing neuropsychological assessment and intervention research.



Dr. Alison Krauss completed her Ph.D. in Clinical Psychology at Southern Methodist University after a predoctoral internship at the Michael E. DeBakey VA Medical Center. She is passionate about understanding how interpersonal violence emerges and ways to prevent violence. “Unfortunately, aggression is a concern for many Veterans, especially those who have experienced trauma, making it difficult to find or sustain employment, maintain meaningful social relationships, engage in recreational activities, or even access necessary healthcare,” Dr. Krauss explains. She is currently involved in several projects under the supervision of Dr. Frankfurt, including the Transition Service Member/Veteran Sponsor Initiative Program Evaluation and a clinical trial of Adaptive Disclosure, a therapy for Veterans with moral injury and PTSD. She is also collaborating on a project examining intimate partner violence during the COVID-19 pandemic. She plans to submit a Career Development Award, hoping her fellowship will be another step in launching a VA research career investigating interpersonal violence and aggression to help Veterans in the reintegration process and improve their overall well-being.



Dr. Rahel Pearson received her Ph.D. in Clinical Psychology from UT Austin, helping her pursue her goals of conducting complex and innovative research that could have a real-world impact by improving the identification and treatment of mental illness. She was drawn to the CoE because of its unique environment where behavioral and biological scientists collaborate to investigate Veteran mental health across multiple levels of analysis with the goal of advancing prevention and intervention science for Veterans. Currently, she is a graduate psychologist on Dr. Creech’s study investigating a novel parenting intervention for Veterans with PTSD. Dr. Pearson is also working on further developing her own research program using existing Veteran data. Her research focuses on understanding how genes, environmental stressors, and their interaction contribute to the development of depression. She hopes that her “research will advance our understanding of the etiology of depression and, most importantly, will help identify targets for prevention and intervention.” She hopes her research and active collaborations with other VA investigators will serve to improve the quality Veteran mental health care.

Graduating Postdoctoral Fellows

By Jennifer Bakan & Laura Zambrano-Vazquez



Dr. Austen Anderson has received an appointment as an Assistant Professor in the School of Psychology at the University of Southern Mississippi. He is a researcher, teacher, and clinician focused on investigating how lifestyle behaviors (e.g., diet, nature, exercise, substance use, social interaction) impact mental health and can be integrated into psychological treatment. During his fellowship at the CoE, he received funding to develop a self-help and provider-delivered manual for a behavioral intervention that aims to improve the quantity and quality of time that Veterans spend in nature, which can enhance their overall well-being. Additionally, his work resulted in four peer-reviewed publications and several trainings to CTVHCS providers highlighting the benefits of spending time in nature for self-care. Consistent with the VA's Whole Health initiative, Dr. Anderson's work emphasizes how lifestyle behaviors are modifiable. He believes they can be a path through which we may understand what "it takes/means to live well for individuals, families, and communities."



Dr. A. Solomon Kurz is a clinical research psychologist and statistics consultant with the CoE's Behavioral Science Core. During his fellowship, his work resulted in four research papers and several books on applied statistics, some of which have been translated into different languages. His statistics expertise was also showcased in a series of statistics-oriented podcasts. Currently, he assists with several larger VA projects, including the ETS Sponsorship Program and a program evaluation project to reduce disruptive interactions between Veterans and VA service providers. Dr. Kurz's work during his fellowship at the CoE prepared him for these larger scale projects. For instance, he served Veterans through clinical services and as a member of a therapy trial research team as a fellow. Through these experiences, he "learned how to help clinical researchers improve their studies by using contemporary data analysis techniques." He is excited to continue building relationships with other researchers by offering statistics and research design consultation.

The Role of Emotion in Treating PTSD and Depression

By Rachel Mason

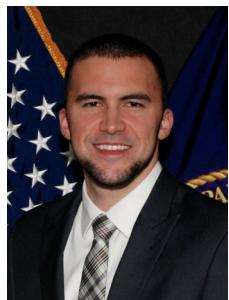
Fireworks are a beloved American tradition dating back to the first Independence Day celebration in 1777. Yet, many Veterans who most deserve to celebrate our nation sit out the pyrotechnics in exchange for a quiet night at home. Recent research by CoE investigators, Dr. McGuire, Dr. Frankfurt, and colleagues, helps explain why this may be the case for some Veterans with PTSD and how it is relevant to mental health treatment.



Strong negative emotions such as anger, disgust, fear, guilt, and shame are common symptoms associated with PTSD. Trauma cues, or reminders of trauma, often trigger these emotions - like a firework display that sparks memories of mortars in Iraq. The strong negative emotions caused by a trauma cue are known as a trauma-cued emotions. Unfortunately, some Veterans impulsively turn to substance use

The Role of Emotion in Treatment of PTSD and Depression cont'd

to cope with the distress caused by these emotions, leading to high rates of comorbid PTSD and substance use disorders (SUD). Given the strong connection and consequences of these trauma-cued emotions, it is crucial to understand how existing treatments can help Veterans cope with them.



Dr. Adam McGuire

Dr. McGuire and colleagues investigated this by exploring how residential therapy for Veterans with comorbid PTSD and SUD impacted trauma-cued emotions and whether changes to trauma-cued emotions were associated with changes in PTSD symptoms. Their study measured Veterans' trauma-cued negative emotions, impulsivity, PTSD, and depression symptoms before and after six weeks of intense cognitive processing therapy. Veterans answered questions about their experiences and emotions. The treatment was largely successful in improving PTSD symptoms, with some success in reducing specific trauma-cued emotions. Notably, through their novel exploratory analysis, results showed that reductions in trauma-cued emotions mitigated symptoms of PTSD, symptoms of depression, and impulsivity. This supports that helping Veterans cope with trauma-cued emotions may provide them with tools to avoid substance abuse impulses. Dr. McGuire and colleagues' research highlights the importance of trauma-cued emotions in PTSD and SUD treatment. Veterans who struggle with explosive noises could use tips from this treatment to cope with strong emotions. While Independence Day may never be the same for some Veterans, this line of work can help inform treatment so that our Veterans can continue to improve the quality of their lives.

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

