

Research Facilitation Department Project Descriptions	NCCOSC Role	Main Investigator(s)/ Project Lead	NCCOSC POC
Projects in Progress			
<p>SSRI & Neuropsychological Functioning Title: <i>Effects of Antidepressants on Neuropsychological Function Related to Combat Performance (NMCSD.2009.0021)</i> Prospective study comparing neuropsychological functioning of individuals treated with antidepressants to a control group treated with psychotherapy only. It is anticipated that this study will provide data that would help support or refute the current policy restricting service members taking SSRIs from carrying firearms.</p>	Study Design IRB Approval Data Collection & Analysis Dissemination of Results	LCDR Kristine Glass, MD (NMCSD)	Massoud Nikkhoy, MPH
<p>Attention Retraining for PTSD Patients Title: <i>Attention Retraining for Post-traumatic Stress Patients (NMCSD.2009.0143)</i> Individuals with PTSD may show an attention bias to threat-relevant information. The aim of this study is to determine whether people with PTSD using an attention modification training program show a decrease in attention bias to threat and a decrease in PTSD symptoms. This is an augment to standard treatment for PTSD.</p>	Study Design IRB Approval Data Collection & Analysis Dissemination of Results	Nader Amir, PhD (SDSU) Laretta Ziajko, MD (NMCSD)	Vasudha Ram, MPH
<p>Marine Resilience Study Title: <i>A Prospective Study of the Psychological, Social, and Biological Markers of Risk and Resilience for Operational Stress in Marines (NHRC.2007.0012)</i> This study involves collecting a variety of social, mental and physical information about Marine infantry battalions prior to being scheduled for deployment to a combat zone, at one week upon return from deployment, at three months and at five to six months later. Interviews, questionnaires, eye-blink tests, medical record reviews and blood draws for testing stress hormones, nicotine, caffeine, cardiac function and gene expression analysis are being conducted.</p>	Data Collection and Analysis Dissemination of Results	Dewleen Baker, MD (VA San Diego) William Nash, MD (Retired CAPT/Consultant) Brett Litz, PhD (Boston University, VA Boston)	Jennifer Webb-Murphy, PhD

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<p>Virtual Reality Treatment of PTSD Title: <i>A Head-to-Head Comparison of Virtual Reality Treatment for Post-traumatic Stress Disorder (NMCSO.2009.0029)</i> Study comparing Virtual Reality Exposure Therapy (VRET) to Augmented Exposure Therapy (AET). Randomized, head-to-head study in which 300 patients will be recruited, with the goal of treating 40 patients with VRET and 40 patients with AET (control). The same techniques, measures and controls will be used that previous NMCSO/NHCP research projects have already put in place to develop VRET for PTSD.</p>	IRB Approval Data Collection & Analysis Dissemination of Results	Rob McLay, MD, PhD (NMCSO) Jennifer Webb-Murphy, PhD (NCCOSC)	Bonnie Nebeker
<p>C5 Rehabilitation Patient Registry (CARF) Clinical registry and evaluation of self-assessment (WHOQOL) and consensus measures (Mayo Portland survey) used for rehabilitation accreditation for the C5 program. Assessments are gathered to monitor the treatment progress of rehabilitation patients and the overall effectiveness of the program.</p>	Survey Design Data Management & Analysis Program Evaluation	CDR Wendy Stone (NMCSO)	Bonnie Nebeker
<p>3/5 Marines Intervention Program Evaluation Program evaluation to determine if new one-on-one screening of Marines upon return from deployment conducted by mental health providers is effective and beneficial. NCCOSC developed satisfaction surveys for both the Marines and providers, collected data from these surveys and analyzed the data. NCCOSC also received data from the screenings (MHA data) and has compared this to data from the PDHA collected on this group of Marines to evaluate the MHA screenings.</p>	Survey Design Data Management & Analysis Program Evaluation	CAPT Scott Johnston, PhD (NCCOSC) Jennifer Webb-Murphy, PhD (NCCOSC)	Kim Schmitz, MS
<p>SRTS Title: <i>Stress Resilience Training System (NMCSO.2012.0032)</i> NCCOSC is evaluating the effectiveness of the Stress Resilience Training System (SRTS) program through a randomized controlled trial with select Navy and Marine Corps commands. SRTS is a Defense Advanced Research Projects Agency-funded, iPad-based program designed to help service members overcome the negative effects of stress and build resilience. The program is self-paced and uses a variety of e-learning techniques, such as instructional videos, biofeedback and interactive games. The program measures and teaches the user to control his or her heart rate variability while performing tasks in progressively more challenging situations.</p>	Study Design IRB Approval Data Collection & Analysis Dissemination of Results	CAPT Scott Johnston, PhD (NCCOSC) Theodore Morrison, PhD, MPH (NCCOSC) Don Chartrand (Ease Interactive) Gershon Weltman, PhD (Perceptronics)	Massoud Nikkhoy, MPH

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<p>Psychological Health Pathways Research Registry Title: <i>Psychological Health Pathways (NMCSO.2010.0127)</i> A retrospective study analyzing clinical self-report data collected from the Psychological Health Pathways (PHP) program at NMCSO and NHCP. The program collects clinical data as part of routine standard care to better assess patients seeking mental health services and to evaluate the effectiveness of treatment. Data include demographic and deployment details, as well as responses to validated measures of post-traumatic stress disorder (PTSD), depression, sleep, combat exposure and functioning. Information is collected at the initial intake and at 10-week intervals during treatment.</p>	<p>Study Design IRB Approval Data Management & Analysis Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC) Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Susan Fesperman, MPH</p>
<p>Coherence Training (HeartMath) Title: <i>Coherence Training for Military Personnel (NMCSO.2011.0130)</i> The first phase of the project investigated the feasibility and acceptability of a heart rate variability and coherence-training device, called the emWave, to reduce occupational stress-related symptoms in detainee operations guards deployed as part of OIF. The second phase is a controlled study comparing the effectiveness of the emWave device and the Coherence Advantage Program versus Progressive Muscle Relaxation as interventions for stress-reduction among students at the intensive Independent Duty Corpsman training program at NMCSO.</p>	<p>(Phase I) Data Management & Analysis Program Evaluation (Phase II) Study Design IRB Approval Data Collection & Analysis Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC) Theodore Morrison, PhD, MPH (NCCOSC) Rollin McCraty, PhD (HeartMath Research Center)</p>	<p>Steven Gerard, BA</p>
<p>Navy Psychologist Survey NCCOSC is collaborating with CAPT David Jones at Navy Medicine East to analyze data and disseminate findings from the biannual Navy Psychologist Survey. The survey seeks information on concerns within the community, including interest in continuing education topics, deployment experiences, workload/job satisfaction, professional priorities, duty under instruction interests, motivational factors for DoN service, and perceptions about why psychologists leave the Navy. NCCOSC will assist in revising and administering the next version of the survey.</p>	<p>Study Design Data Collection & Analysis Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC) Eileen Delaney, PhD (NCCOSC)</p>	<p>Vasudha Ram, MPH</p>

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Projects in Development			
<p>Combat Attachment Study</p> <p>The aim of this study is to gain insight into a phenomenon recently termed "combat attachment." The preliminary definition of combat attachment is a deliberate or habitual re-experiencing of combat-related activities in order to obtain a "rush" (e.g., physiological arousal with rapid heart rate) and pleasurable emotional state in which the amount/frequency of time is significant. Combat veterans will complete self-report inventories and undergo semi-structured interviews that assess combat attachment behaviors and their impact. Information from this study will be used to guide identification and treatment of impairment that may be associated with combat attachment.</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Collection & Analysis</p> <p>Dissemination of Results</p>	<p>Marjorie Campbell, PhD (NHCP)</p> <p>Eileen Delaney, PhD (NCCOSC)</p>	<p>Steven Gerard, BA</p>
<p>HEAL-M (Healthy Experiences After Loss - Military) Title: <i>Using Findings from a Grief Intervention for a Military Clinical Care Program</i></p> <p>A Web-based program for service members who have experienced a loss is being explored for development. The program will be adapted, in part, from an existing Web-based intervention for grief (HEAL). NCCOSC will develop and conduct a program evaluation.</p>	<p>Program Development</p> <p>Program Evaluation</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p> <p>Eileen Delaney, PhD (NCCOSC)</p> <p>Brett Litz, PhD (Boston University, VA Boston)</p>	<p>Elizabeth Vishnyak, MA</p>
<p>Stress and Hardiness Factors in SERE Instructors</p> <p>NCCOSC is planning an exploratory study of the occupational effects on Survival, Evasion, Resistance and Escape (SERE) instructors. The study will be longitudinal, with baseline and follow-up assessments. Study goals include identification of occupational stressors associated with being a SERE instructor, risk and hardiness factors and targets for modification.</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Collection & Analysis</p> <p>Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p>	<p>David Hampton, MA</p>

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<p>Patient Satisfaction and Video-Teleconferencing (NHLM.2011.068)</p> <p>The objective of this retrospective study is to determine whether active-duty military personnel receiving psychiatric care through video-teleconferencing (VTC) were satisfied with this alternative method of treatment. High patient satisfaction may support the increased use of VTC psychiatry care in the military. VTC is a favorable treatment alternative for this population due to the frequent geographic mobility of military medical providers and the remote location of some service members.</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Analysis</p>	<p>LT Christopher Schultheiss, DO, MBA (Naval Hospital Lemoore)</p>	<p>Eileen Delaney, PhD</p>
<p>Moral Injury Title: <i>Moral Injury Focus Groups (NMCSO.2011.0125)</i></p> <p>Focus groups will be held with USMC patients, USMC non-patient infantry, Navy chaplains and Navy and civilian providers at Camp Pendleton and NMCSO to gain insight into attitudes and beliefs related to the concept of moral injury and individual items that comprise the Moral Injury Event Scale.</p>	<p>Project Design</p> <p>IRB Protocol</p> <p>Data Collection & Analysis</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p> <p>Jennifer Webb-Murphy, PhD (NCCOSC)</p> <p>Theodore Morrison, PhD, MPH (NCCOSC)</p> <p>Amy Amidon, PhD (NMCSO)</p> <p>LT George Loeffler, MD (NMCSO)</p>	<p>Eileen Delaney, PhD</p>

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<p>SPICE Title: <i>Synthetic Cannabinoid Agonists and PTSD at an Active-Duty Residential Substance Abuse Treatment Center</i></p> <p>Description: This is a case-control, retrospective chart review that will compare records of active-duty service members who were positive on urine drug testing for Spice use with those who did not test positive at a military substance abuse treatment facility. Analyses will examine Post-traumatic Stress Disorder (PTSD) scores before and after treatment, as well as depression and anxiety scores before and after treatment. Other variables of interest include history of non-substance psychiatric diagnoses, history of psychiatric hospitalization, history of combat deployment, combat or trauma exposure, history of blast exposure, and whether the substance abuse program was completed. The characterization of the Spice withdrawal syndrome and relationships between common co-occurring substance disorders will also be explored.</p>	<p>IRB approval</p> <p>Data Collection</p> <p>Data Analysis</p> <p>Dissemination of Results</p>	<p>LT George Loeffler, MD (NMCSD)</p>	<p>Eileen Delaney, PhD</p>
<p>POLYPHARMACY Title: <i>Polypharmacy and Holistic Health Program</i></p> <p>Description: This project examines the change in clinical practice at Naval Hospital Camp Pendleton (NHCP) after the Holistic Health Program (HHP) was implemented into patient care. Specifically, a medical records review of medications prescribed to patients with PTSD will be compared before and after the HHP began in July 2011. These findings will provide information about the clinical impact of the HHP on patient care at NHCP.</p>	<p>IRB approval</p> <p>Data Collection</p> <p>Data Analysis</p> <p>Dissemination of Results</p>	<p>Dr. Nahed Bahlawan (NHCP)</p>	<p>Eileen Delaney, PhD</p>
<p>Manuscript and Conference Presentation</p>			
<p>Validation of ANAM Emotional Stroop Test in a PTSD Sample</p> <p>Individuals with PTSD have longer reaction times when presented with emotionally charged words versus neutral words. Automated Neuropsychological Assessment Metrics (ANAM) data (N=100) collected from a previous Virtual Reality study, as well as the current VR study, are being analyzed to validate the effect of emotional stroop in PTSD patients.</p>	<p>Data Analysis</p> <p>Dissemination of Results</p>	<p>Robert McLay, MD, PhD (NMCSD)</p> <p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Vasudha Ram, MPH</p>

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<p>Stress and Urology Symptoms Title: <i>Effects of Stress on Urinary Symptoms (NMCS.D.2010.0075)</i></p> <p>A prospective survey conducted with Marine recruits across three time points during their basic training at MCRD. The study collected data on urologic symptoms, perceived stress and social support to evaluate the effect of stress on overactive bladder (OAB) symptoms, such as frequency and intensity of urination. A second study in design will examine the impact of PTSD, depression and anxiety on OAB and sexual function.</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Collection & Analysis</p> <p>Dissemination of Results</p>	<p>LCDR Chong Choe, MD (NMCS.D)</p> <p>LCDR Michael Santomauro, MD (NMCS.D)</p> <p>LCDR Emily Cole, MD (NMCS.D)</p>	<p>Elizabeth Vishnyak, MA</p>
<p>GTMO: Military Detention Operational Prevention for Stress Title: <i>Military Detention Operational Prevention for Stress (MD-OPS) (NMCS.D.2010.0050)</i></p> <p>Study evaluating the psychological health and stress levels of prison guards at Guantanamo Bay. Questionnaires used include the Perceived Stress Scale (PSS), Patient Health Questionnaire (PHQ-9), PTSD Checklist (PCL) and the Response to Stress Experiences Scale (RSES), Beliefs about mental health and a substance abuse survey are included.</p>	<p>Survey Design</p> <p>IRB Approval</p> <p>Data Management & Analysis</p> <p>Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p>	<p>Stephanie Raducha, BA</p>
<p>Pain Medicine Center Registry Title: <i>Pain Medical Center Database Registry (NMCS.D.2009.0112)</i></p> <p>This involves a proposal to build a registry and analyze retrospective data collected as part of the Pain Medicine Center intake process. The registry will include demographic data, a Visual Analogue Scale (VAS), the Post-Traumatic Stress Disorder Checklist Military (PCL-M), the Sheehan Disability Scale and the Personal Health Questionnaire Depression Scale (PHQ-9). The data collected will be used to evaluate the relationship of common psychological health symptoms and pain for service members presenting to the Pain Medicine Center at NMCS.D.</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Management & Analysis</p> <p>Dissemination of Results</p>	<p>LCDR Steven Hanling, MD (NMCS.D)</p> <p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Stephanie Raducha, BA</p>

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<p>Virtual Reality Medical Center Title: <i>Demonstrating the Efficacy of Scenario-Based Virtual Reality Tools for Treatment of Acute PTSD in Non-Combat Arms Personnel (NMCSD.2005.0005)</i> Evaluation of the effectiveness of virtual reality exposure therapy to treat active- duty service members with combat-related PTSD.</p>	<p>Data Management & Analysis Dissemination of Results</p>	<p>Rob McLay, MD, PhD (NMCSD) CAPT Scott Johnston, PhD (NCCOSC) Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Bonnie Nebeker</p>
<p>Special Projects</p>			
<p>Combat & Operational Stress Research Quarterly Publication to inform clinicians and leadership of the most recent research and scientific advances in the field of combat and operational stress. Available in print and on the NCCOSC website.</p>	<p>Literature Review</p>	<p>Research Facilitation Department (NCCOSC)</p>	<p>Kimberly Schmitz, MS</p>
<p>Development of White Papers for NCCOSC Development and distribution of white papers on a variety of topics, including resilience, sleep, alternative treatments for PTSD, physical health and PTSD, effective treatments for PTSD (e.g., Cognitive Processing Therapy, Prolonged Exposure, EMDR, Virtual Reality), women and operational stress, anger and PTSD, malingering, and substance abuse and operational stress.</p>	<p>Literature Review</p>	<p>Research Facilitation Department (NCCOSC)</p>	<p>Jennifer Webb-Murphy, PhD</p>

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Highlighted Completed Projects			
<p>Theater Mental Health Encounters Database (TMHED) Title: <i>GWOT Theater Mental Health Encounters, Acute Stress Disorder, and Post-Deployment Outcomes (NHRC.2008.0035)</i></p> <p>Study to examine GWOT Theater Mental Health Encounter Data (TMHED) collected January 2006-January 2007.</p> <p>Publications in process 1) describe combat and psychological trauma exposure, stress symptoms, mental status, traumatic brain injuries, social history and treatment plans; 2) determine whether in-theater acute stress disorder diagnosis predicts PTSD as documented in post-deployment records, and 3) assess whether TMHED predict use of medical services post-deployment and career/performance outcomes, such as early attrition and disciplinary actions taken against the service member.</p>	<p>Data Management & Analysis</p> <p>Dissemination of Results</p>	<p>CAPT Paul Hammer, MD (DCoE)</p> <p>LCDR Wayne Boucher, PsyD, ABPP, (7th Marines)</p> <p>Jerry Larson, PhD; Mike Galarneau, MS; Terry Conway, PhD (NHRC)</p>	<p>Kimberly Schmitz, MS</p>
<p>Barriers to Military Mental Health Care Title: <i>Mental Health & Resilience: Perceptions about Psychotherapy, Medication and Barriers to Care in the U.S. Military</i></p> <p>Study explores the gap between soldiers' high rates of psychiatric symptoms, the acknowledgement of need, and the low frequency of mental healthcare use among veterans and active duty who served in the military during Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) in order to 1) tailor treatment programs for soldiers "at-risk" for treatment avoidance, resistance or non-compliance; 2) incorporate soldier treatment preferences and beliefs into treatment planning; and 3) identify pre-existing resilience factors (e.g., psychological resilience, unit support).</p>	<p>Data Analysis</p>	<p>Steve Southwick, MD; Deane Aikins, PhD (Yale University, National Center for PTSD)</p> <p>Chris Johnson, PhD (NHRC)</p> <p>MAJ Paul Morrissey, MD; Todd Benham, PhD (Fort Drum, NY)</p>	<p>Stephanie Raducha, BA</p>
<p>Music Therapy Program Evaluation</p> <p>Project to evaluate the effectiveness of a music therapy program, provided through the Health and Wellness Center, to assist with reducing symptoms of combat and operational-related psychological health symptoms, such as PTSD.</p>	<p>Survey Design</p> <p>Data Management & Analysis</p> <p>Program Evaluation</p>	<p>Helen Metzger (Department Head of Health and Wellness Center)</p>	<p>Elizabeth Vishnyak, MA</p>

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<p>Intensive Outpatient Group Therapy Program Evaluation</p> <p>Analysis of previously collected data from Navy and Marine substance abuse clinics to evaluate symptom changes in patients in the program. Data were collected at multiple time points and include four outcome measures: the Beck Depression Inventory (BDI), Beck Anxiety Inventory (BAI), 45-item Outcome Questionnaire and PTSD Checklist (PCL).</p>	<p>Data Analysis</p> <p>Data Summary</p>	<p>CDR Catherine MacDonald, NP (NHCP)</p>	<p>Elizabeth Vishnyak, MA</p>
<p>Law Enforcement Policies</p> <p>Literature search and review to better understand the hiring policies of employers with regard to pre-existing mental conditions, such as PTSD. A survey of 12 law enforcement agencies, such as the Los Angeles Police Department, the New York Police Department and the Federal Bureau of Investigation, was conducted to provide information regarding the likelihood of a combat veteran with a previous PTSD diagnosis obtaining a position within an agency. Results of the investigation were made available using various media.</p>	<p>Literature Review</p> <p>Data Collection</p> <p>Data Summary</p>	<p>CAPT Paul Hammer, MD (DCoE)</p> <p>Kara Browning, MPH</p>	<p>Jennifer Webb-Murphy, PhD</p>
<p>Clinician Burnout</p> <p>Title: <i>Burnout and Beliefs about Treatment among Military Mental Health Clinicians (NMCS.D.2009.0078)</i></p> <p>Study to assess rates of burnout and treatment beliefs among military mental health providers. Emotional exhaustion, depersonalization and personal accomplishment among mental health clinicians (N=100) at Naval Medical Center San Diego and Naval Hospital Camp Pendleton were measured using the Maslach Burnout Inventory.</p>	<p>Survey Design</p> <p>IRB Approval</p> <p>Data Collection & Analysis</p> <p>Dissemination of Results</p>	<p>CAPT John Rothacker, MA (Tricare Management Activity – Pacific Region)</p> <p>Kara Browning, MPH</p>	<p>Jennifer Webb-Murphy, PhD</p>
<p>Resilience Scale Development</p> <p>Title: <i>The Response to Stressful Experiences Scale (RSES): A Measure of Psychological Resilience</i></p> <p>Anonymous data using cross-sectional design from (N = 992) military participants were collected from two separate military units. Resilience scale items were created by drawing broadly from research in the areas of optimism, personality, religion and spirituality, psychobiology, emotion regulation, social modeling, fear-conditioning, cognitive flexibility and coping. Items were created to address how a given factor is manifest in psychologically resilient people. The self-report scale assesses the <i>process</i> of being resilient, namely the thoughts, behaviors and feelings that promote healthy adaptation to intense life stressors.</p>	<p>Scale Development</p> <p>Manuscript Preparation</p>	<p>Chris Johnson, PhD (NHRC)</p>	<p>Jennifer Webb-Murphy, PhD</p>

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Journal Impact Factor List This involved development of a comprehensive reference list of psychological journals, the 2008 impact factor and a brief description of each journal's focus and target audience.	Manual Preparation	Amela Ahmetovic, BA	Eileen Delaney, PhD
Combat Trauma Reference Library The goal was to develop a comprehensive reference list of scientific journal articles and reports from which research staff can search for relevant literature on combat trauma, PTSD, traumatic brain injury, insomnia, resilience, etc.	Ongoing	NCCOSC Staff	Kimberly Schmitz, MS