

Research Facilitation Department Project Descriptions	NCCOSC Staff Site	NCCOSC Role	Main Investigator(s)	NCCOSC POC
<b>Study Data Collection in Progress</b>				
<p><b>SSRI &amp; Neuropsychological Functioning</b>  <b>Title:</b> <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>	NMCS D	Study Design IRB Approval Data Collection & Analysis Dissemination of Results	LT Heather Kurera, DO (NMCSD)	Massoud Nikkhoy, MPH (NCCOSC)
<p><b>Attention Retraining for PTSD Patients</b>  <b>Title:</b> <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>	NMCS D Camp Pendleton	Study Design IRB Approval Data Collection & Analysis Dissemination of Results	Nader Amir, PhD (SDSU) Laretta Ziajko, MD (NMCSD)	Vasudha Ram, MPH (NCCOSC)
<p><b>Marine Resilience Study</b>  <b>Title:</b> <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>	NMCS D Camp Pendleton	Data Collection	Dewleen Baker, MD (VA San Diego) William Nash, MD (Retired CAPT/Consultant) Brett Litz, PhD (Boston University, VA Boston) Jerry Larson, PhD (NHRC)	Jennifer Webb-Murphy, PhD (NCCOSC)

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<p><b>Virtual Reality Treatment of PTSD</b></p> <p><b>Title:</b> <i>A Head-to-Head Comparison of Virtual Reality Treatment for Post-traumatic Stress Disorder (NMCSO.2009.0029)</i></p> <p>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>	<p>NMCSO</p> <p>Camp Pendleton</p>	<p>IRB Approval</p> <p>Data Collection &amp; Analysis</p> <p>Dissemination of Results</p>	<p>Rob McLay, MD, PhD (NMCSO)</p> <p>CAPT Scott Johnston, PhD; Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>
<p><b>C5 Rehabilitation Patient Registry (CARF)</b></p> <p>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>	<p>NMCSO</p>	<p>Survey Design</p> <p>Data Management &amp; Analysis</p> <p>Program Evaluation</p>	<p>CAPT Dorothy Shveima (NMCSO)</p>	<p>Bonnie Nebeker (NCCOSC)</p>
<p><b>C5 Power Program Evaluation</b></p> <p>Pilot project testing the efficacy of the C5 Power program. This program uses a computer-based cognitive rehabilitation program and a TBI rehabilitation curriculum to restore or improve the cognitive skills (memory, attention, language and executive dysfunction) of service members with mild traumatic brain injury. Plans are being developed to conduct a controlled study.</p>	<p>NMCSO</p>	<p>Data Management &amp; Analysis</p> <p>Program Evaluation</p>	<p>Steve Pluth, PhD (NMCSO)</p>	<p>Amber Poling, MS (NCCOSC)</p>
<p><b>Projects in Development</b></p>				
<p><b>Pain Medicine Center Registry</b></p> <p><b>Title:</b> <i>Pain Medical Center Database Registry (NMCSO.2009.0112)</i></p> <p>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 NMCSO.</p>	<p>NMCSO</p>	<p>Study Design</p> <p>IRB Approval</p> <p>Data Management &amp; Analysis</p> <p>Dissemination of Results</p>	<p>LCDR Steven Hanling, MD (NMCSO)</p> <p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Stephanie Raducha, BA (NCCOSC)</p>

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<p><b>Psychological Health Pathways Registry</b>  <b>Title:</b> <i>Psychological Health Pathways (NMCS.D.2010.0127)</i>            Proposal to create a registry from the Psychological Health Pathways (PHP) retrospective data to better understand and evaluate the symptoms and treatment of patients receiving mental health care at NMCS.D and NHCP. In addition to demographic data, assessments used in PHP include measures of sleep, anxiety, post-traumatic stress disorder and depression. Additional surveys assess deployment-related experiences, blast injuries and resilience. Assessments are re-administered at 10-week intervals.</p>	<p>NMCS.D Camp Pendleton</p>	<p>Study Design IRB Approval Data Management &amp; Analysis Dissemination of Results</p>	<p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Susan Fesperman, MPH (NCCOSC)</p>
<p><b>Heart Rate Variability and Detainee Operations (HeartMath)</b>            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 will be a controlled study to examine the use of the emWave device as an intervention for stress-related symptoms.</p>	<p>NMCS.D</p>	<p>(Phase I) Data Management &amp; Analysis Program Evaluation (Phase II) Study Design IRB Approval Data Collection &amp; Analysis Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p>	<p>Steven Gerard, BA (NCCOSC)</p>
<p><b>C5 PTSD IOP Retrospective Study</b>            A retrospective study to analyze clinical data collected by the C5 PTSD Intensive Outpatient Program (IOP). As part of the program patients, composed of wounded warriors, complete the PTSD Checklist – Military Version (PCL-M) and the Brief Symptom Inventory (BSI) before entering the program and at completion. As well, patients complete the PCL-M weekly while in the program. The data will be used determine effectiveness of the program.</p>	<p>NMCS.D</p>	<p>Study Design IRB Approval Data Analysis Dissemination of Results</p>	<p>Nancy Kim, PhD (C5)</p>	<p>Susan Fesperman, MPH (NCCOSC)</p>

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<p><b>Music Therapy Program Evaluation</b>            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>	NMCS D	Survey Design  Data Management & Analysis  Program Evaluation	Helen Metzger (Department Head of Health and Wellness Center)	Elizabeth Abou, MA, (NCCOSC)
<b>Manuscript and Conference Presentation</b>				
<p><b>Stress and Urology Symptoms</b>  <b>Title:</b> <i>Effects of Stress on Urinary Symptoms (NMCS D.2010.0075)</i>            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>	NMCS D  Camp Pendleton	Study Design  IRB Approval  Data Collection & Analysis  Dissemination of Results	LCDR Chong Choe, MD; LCDR Michael Santomauro, MD; LCDR Emily Cole, MD (NMCS D)	Elizabeth Abou, MA (NCCOSC)
<p><b>Theater Mental Health Encounters Database (TMHED)</b>  <b>Title:</b> <i>GWOT Theater Mental Health Encounters, Acute Stress Disorder, and Post-Deployment Outcomes (NHRC.2008.0035)</i>            Study to examine GWOT Theater Mental Health Encounter Data (TMHED) collected between January 2006 and January 2007.             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>	NMCS D  Camp Pendleton	Data Management & Analysis  Dissemination of Results	CAPT Paul Hammer, MD (DCoE)  LCDR Wayne Boucher, PsyD, ABPP, (7th Marines)  Jerry Larson, PhD; Mike Galarnau, MS; Terry Conway, PhD (NHRC)	Kimberly Schmitz, MS (NCCOSC)

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<p><b>GTMO: Military Detention Operational Prevention for Stress</b></p> <p><b>Title:</b> <i>Military Detention Operational Prevention for Stress (MD-OPS) (NMCSD.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), Response to Stress Experiences Scale (RSES), Beliefs about Mental Health and a substance abuse survey.</p>	<p>NMCSD</p>	<p>Survey Design</p> <p>IRB Approval</p> <p>Data Management &amp; Analysis</p> <p>Dissemination of Results</p>	<p>CAPT Scott Johnston, PhD (NCCOSC)</p>	<p>Stephanie Raducha, BA (NCCOSC)</p>
<p><b>Virtual Reality Medical Center</b></p> <p><b>Title:</b> <i>Demonstrating the Efficacy of Scenario-Based Virtual Reality Tools for Treatment of Acute PTSD in Non-Combat Arms Personnel (NMCSD.2005.0005)</i></p> <p>Evaluation of the effectiveness of virtual reality exposure therapy to treat active-duty service members with combat-related PTSD.</p>	<p>NMCSD</p>	<p>Data Management &amp; Analysis</p> <p>Dissemination of Results</p>	<p>Rob McLay, MD, PhD (NMCSD)</p> <p>CAPT Scott Johnston, PhD; Jennifer Webb-Murphy, PhD (NCCOSC)</p>	<p>Amber Poling, MA (NCCOSC)</p>
<p><b>Special Projects</b></p>				
<p><b>Combat &amp; Operational Stress Research Quarterly</b></p> <p>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, electronically and on the NCCOSC website.</p>	<p>NMCSD</p>	<p>Literature Review</p> <p>Data Summary</p>	<p>Research Facilitation Department (NCCOSC)</p>	<p>Kimberly Schmitz, MS (NCCOSC)</p>
<p><b>Development of White Papers for NCCOSC</b></p> <p>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>NMCSD</p> <p>Camp Pendleton</p>	<p>Literature Review</p> <p>Data Summary</p>	<p>Research Facilitation Department (NCCOSC)</p>	<p>Jennifer Webb-Murphy, PhD (NCCOSC)</p>

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<b>Completed Projects</b>				
<p><b>Barriers to Military Mental Health Care</b></p> <p><b>Title:</b> <i>Mental Health &amp; 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 usage 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>	NMCS D	Data Analysis	Steve Southwick, MD; Deane Aikins, PhD (Yale University, National Center for PTSD)  Chris Johnson, PhD (NHRC)  MAJ Paul Morrissey, MD; Todd Benham, PhD (Fort Drum, NY)	Stephanie Raducha, BA (NCCOSC)
<p><b>Intensive Outpatient Group Therapy Program Evaluation</b></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>	Camp Pendleton	Data Analysis  Data Summary	CDR Catherine MacDonald, NP (NHCP)	Elizabeth Abou, MA (NCCOSC)
<p><b>Law Enforcement Policies</b></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, will be 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>	NMCS D	Literature Review  Data Collection  Data Summary	CAPT Paul Hammer, MD (DCoE)	Jennifer Webb-Murphy, PhD (NCCOSC)
<p><b>Clinician Burnout</b></p> <p><b>Title:</b> <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>	NMCS D	Survey Design  IRB Approval  Data Collection & Analysis  Dissemination of Results	CAPT John Rothacker, MA (Tricare Management Activity –Pacific Region)	Jennifer Webb-Murphy, PhD (NCCOSC)

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<p><b>Combat Stress Casualty Reduction: Pre-Deployment Stress Inoculation (PRESIT)</b></p> <p><b>Title:</b> <i>Combat Stress Casualty Reduction: Development and Testing of a Pre-deployment Stress Inoculation Training Program</i></p> <p>Study included Stress Inoculation Training (SIT) with a multimedia stressor environment. Active-duty Marines (N=60) with imminent deployment to combat operations undergoing pre-deployment training exercises will be enrolled and randomized to receive one of two training methods: 1) PRESIT intervention group, and 2) Marines who will receive the current best-practice (CBP) training. Data were collected among selected Marine Corps units to assess program acceptability, skills proficiencies and effectiveness.</p>	NMCS D	IRB Approval	CDR Bryan Schumacher, MD (Camp Pendleton)  Laurel Hourani, PhD, MPH; Jim Spira, PhD, MPH (Research Triangle Institute)	Massoud Nikkhoy, MPH (NCCOSC)
<p><b>Resilience Scale Development</b></p> <p><b>Title:</b> <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>	NMCS D	Scale Development  Manuscript Preparation	Chris Johnson, PhD (NHRC)	Jennifer Webb-Murphy, PhD (NCCOSC)
<p><b>Adaptive Disclosure</b></p> <p>Purpose: Development of a manual to support a treatment protocol</p> <p>Treatment Protocol: Treatment sessions are designed to facilitate more complete processing of a traumatic event and to help Marines be more receptive to adaptive interpretations of the trauma. By using exposure, the therapist helps promote an emotionally intense engagement with painful experiences that will facilitate cognitive processing of new, more adaptive constructions of the experience.</p>	NMCS D  Camp Pendleton	Manual Preparation	LCDR Ruchira Densert, MD (Camp Pendleton)  Brett Litz, PhD (Boston University)  Ariel Lang, PhD, MPH (UCSD)	Jennifer Webb-Murphy, PhD (NCCOSC)

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<b>Journal Impact Factor List</b> Developed a comprehensive reference list of psychological journals, the 2008 impact factor and a brief description of each journal's focus and target audience.	Camp Pendleton	Manual Preparation	Amela Ahmetovic, BA (NCCOSC)	Amela Ahmetovic, BA (NCCOSC)
<b>Combat Trauma Reference Library</b> 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.	NMCS Camp Pendleton	Ongoing	All NCCOSC Staff	Kimberly Schmitz, MS (NCCOSC)