

Combat Stress Casualty Reduction

DEVELOPMENT AND IMPLEMENTATION OF A PREDEPLOYMENT STRESS INOCULATION TRAINING PROGRAM



RTI International has been conducting research with the military for nearly three decades. We have significant familiarity working in military settings, a strong understanding of military culture, and a keen awareness of the physical and psychological issues faced by military personnel. RTI is currently conducting military studies that are critical to promoting both the physical and mental health of active duty military personnel.

Protecting and promoting the mental health of military personnel can be as crucial for their readiness as protecting their physical health. Extensive research data are being collected and analyzed from surveys of combat troops, and clinical studies are under way to determine effective treatments for personnel diagnosed with post-traumatic stress disorder (PTSD). In contrast, relatively little is known about predeployment training and how it can prepare deploying personnel to cope with deployment or combat-related stressors and exposure to traumatic events.

RTI is conducting research focused on providing predeployment training to active duty personnel at risk for negative mental health outcomes due to combat and operational stress. We have developed and implemented a predeployment stress inoculation training (PRESIT) program that prepares military personnel for deployment by exposing them to stressful environments, while simultaneously teaching coping skills and strategies that promote resiliency to stress. This program emphasizes the importance of primary prevention for stress-related psychological disorders like PTSD. It is based on scientific studies suggesting that a reduction

of psychological arousal shortly after trauma exposure may prevent or reduce the likelihood of developing psychological distress, including PTSD. Methods to reduce arousal levels, such as relaxation training and stress management techniques, play an important role in reducing the risk of combat stress casualties. Therefore, the development of coping skills and resiliency in the face of stressful situations prior to deployment may ease the potentially negative psychological effects of combat and operational stress and specifically reduce the likelihood of developing PTSD.

Areas of Expertise

Developed by a team of researchers with expertise in epidemiology, psychology, biomedical engineering, and advanced computer simulation technology, RTI's PRESIT program offers unique capabilities to develop and optimize mental health prevention programs for military personnel. Our experts designed the training specifically to reduce the negative psychological effects of traumatic exposure during combat and operational stressors. It exposes active duty military to a virtual, simulated combat environment while training them to reduce their



arousal levels and manage stress. PRESIT presents a widely generalizable and readily usable predeployment tool for promoting mental health in all branches of the military.

RTI has offices worldwide, many located within close proximity to military training facilities. RTI's headquarters are located in Research Triangle Park, North Carolina, within a few hours of Ft. Bragg and Camp Lejeune. We have established excellent working relationships with several military training facilities, and we hold a Memorandum of Understanding with Ft. Bragg. In addition to our ready access to military facilities, RTI is flanked by three of the leading universities in North Carolina with which we collaborate: University of North Carolina–Chapel Hill, Duke University, and North Carolina State University.

Project Highlights

Combat Stress Casualty Reduction: Development of a Predeployment Stress Inoculation Training Program (2008–present)

This project was funded by the U.S. Army (USAMRMC) to design and develop a predeployment stress inoculation training program to reduce stress levels in response to simulated combat exposure and to determine the degree to which physiological stress responsivity measures are associated with the program. The three main tasks include the development of combat and operational stress educational materials, skills acquisition modules, and a multimedia stressor environment that simulates combat exposure. Completion of these tasks will lead to the development of an empirically supported, state-of-the-art

mental health prevention program that will train combatants to control their cognitive and somatic arousal during a laboratory exposure. Ultimately, it will allow them to practice in a field exercise and then refine their training in a post-field practice laboratory exposure.

Combat Stress Casualty Reduction: Development and Testing of a Predeployment Stress Inoculation Training Program (2008–present)

Funded by the Office of Naval Research, this project is currently implementing and evaluating a novel stress inoculation training paradigm that provides predeploying military personnel with specific tools to help prevent or mitigate combat stress casualties. The PRESIT program has undergone pilot testing on Marine Corps units in Camp Pendleton, California. In the next phase of this study, we will train military personnel at Camp Lejeune in the PRESIT program prior to deployment and follow them after return from active duty. The program's focus is to develop and refine resilience-building preventive measures that contribute to easing the negative psychological effects of combat and operational stress.

More Information

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