

# Combat Exposure and Suicide Risk in Two Samples of Military Personnel

**PUBLICATION:** *Journal of Clinical Psychology* (2013); 69(1), 64-77.

**PUBLICATION TYPE:** Peer-Reviewed Journal Article

**KEYWORDS:** Suicide, suicidal ideation, military, combat, interpersonal-psychological theory

### RESEARCH HIGHLIGHTS:

- In the U.S. military, suicide is the second leading cause of death, and rising suicide rates among military personnel have reached an all-time high since combat operations began in Afghanistan and Iraq. In this study, researchers focused on the relationship between suicide risk and combat exposure among veterans receiving and not receiving mental health care.
- While combat exposure was not found to be related to suicide risk in either group, combat exposure was associated with increased post-traumatic stress disorder (PTSD) and depression, which in turn were related to suicide risk. Combat may increase veterans' vulnerability to suicide risk through these other factors.
- In the non-clinical sample of veterans, depression was directly associated with suicide risk; however, in the clinical sample, depression and suicide risk were only related indirectly through burdensomeness and belongingness.

**AUTHORS:** Craig J. Bryan, PsyD, ABPP; Ann Marie Hernandez, Ph.D.; Sybil Allison, M.A.; Tracy Clemans, PsyD.

### ABSTRACT:

**Objective:** In light of increased suicidal behaviors among military personnel and veterans since the initiation of combat operations in Afghanistan and Iraq, questions have been raised about the potential causal role of combat. The objective of the current study was to identify any direct or indirect effects of combat exposure on suicide risk through depression symptom severity, posttraumatic stress disorder (PTSD) symptom severity, thwarted belongingness, perceived burdensomeness, and fearlessness about death, consistent with the interpersonal-psychological theory of suicide (Joiner, 2005). **Method:** Structural equation modeling was utilized with two separate samples of deployed military personnel, 1 nonclinical ( $n = 348$ ; 89.7% male, mean age = 24.50) and 1 clinical ( $n = 219$ ; 91.8% male, mean age = 27.88), to test the effects of combat exposure on suicide risk. **Results:** Greater combat exposure was directly associated with fearlessness about death and PTSD symptom severity in both samples, but failed to show either a direct or indirect effect on suicide risk. PTSD symptom severity was strongly associated with depression symptom severity, which in turn was related to suicide risk directly (in the nonclinical sample) or indirectly through low belongingness and perceived burdensomeness (in the clinical sample). **Conclusions:** In both samples of deployed active duty military personnel, combat exposure was either unrelated to suicide risk or was too distally related to have a measurable effect. Results do not support the interpersonal-psychological theory's hypothesis that combat exposure should be indirectly related to suicide risk through acquired fearlessness of death."

## Implications

### FOR PRACTICE

Researchers investigated the link between combat exposure and suicide in veterans who served in Afghanistan and Iraq, finding suicide risk to be related to depression, PTSD, thwarted belongingness and perceived burdensomeness in both clinical and non-clinical samples of veterans. The non-clinical participants reported an average level of direct combat that was less than half the combat exposure reported by the clinical sample. Direct combat exposure was related to having PTSD, which in turn has been found to be related to an increased risk for suicide due to an increased risk for depression and feelings of thwarted belongingness. Since combat exposure was found to have neither a direct or an indirect relationship with suicide risk, but depression, PTSD, thwarted belongingness and perceived burdensomeness were found to be related to increased suicide risk, it is imperative these key correlates of suicide be monitored in returning soldiers. An increased fearlessness of death, as acquired through combat experiences, was not related to an increased risk for suicide. Family members, spouses, doctors and mental health professionals should work together to closely monitor veterans for any signs of depression or PTSD, as well as feelings of burdensomeness or a lack of belonging. Since these findings were consistent in both clinical and non-clinical samples of veterans, those veterans not receiving mental health treatment also need to be monitored for these symptoms by community and family members. Community-based programs should be made available for all families, spouses and other community members who will be in contact with a returning veteran to help train them in dealing with issues of suicide and depression.

### FOR POLICY

Policies addressing suicide risk and monitoring mental health status in veterans would be particularly beneficial for the military community. In order to best serve the military population, discharged soldiers should be screened for thwarted belongingness, perceived burdensomeness and PTSD using the Interpersonal Needs Questionnaire and the military version of the PTSD Checklist, the scales used in this study. New policies should also focus on establishing standards for mental health professionals in their treatment of military personnel and veterans. Mental health professionals should have an in-depth understanding of the relationship between risk factors and suicide, and should be required to meet with veterans prior to or upon their return from service to assess risk factors. The Veterans Health Administration (VHA) should also encourage or require post-9/11 veterans to make use of the five years of free mental health care provided by the VA by being screened regularly for suicide risk factors, regardless of their level of combat exposure.

### FOR FUTURE RESEARCH

Future research should replicate this study with a larger, more diverse sample, including veterans from multiple service eras and more women veterans, to determine whether there are additional, gender-specific risk factors. Longitudinal studies could also examine whether depression, PTSD, thwarted belongingness and perceived burdensomeness is correlated with increases in suicide risk over time. Longitudinal studies can also be used to investigate the importance of context in the relationship between combat and suicide risk. In this study, combat was not found to have an indirect or direct relationship to suicide risk; however, other studies have found a relationship. This may be due to differences in the time at which data was collected, as this study is the only one in which data was collected while service members were deployed to a combat zone in Iraq. While service members are deployed, combat is normal; after returning home, both social context and one's experience of these events can change, altering the relationship between combat and suicide risk. Researchers should include these longitudinal comparisons in future studies, examining whether changes in the relationship between suicide risk and combat vary depending on service members' views of combat and time after deployment, and how these changes are impacted by belongingness and integration. As previous research has identified alcohol and substance abuse as factors contributing to increased suicide risk, the combination of combat experience with these factors should be examined in future studies as well. Finally, future studies should use mental health professionals to evaluate the mental health and symptoms of both clinical and non-clinical veterans objectively in order to reduce response bias from self-reporting.

### AUTHOR INFORMATION

**Craig J. Bryan, PsyD, ABPP**

National Center for Veterans Studies  
University of Utah  
craig.bryan@utah.edu

**Ann Marie Hernandez, Ph.D.**

University of Texas Health Science Center  
at San Antonio

**Sybil Allison, M.A.**

University of Texas Health Science Center  
at San Antonio

**Tracy Clemans, PsyD**

University of Texas Health Science Center  
at San Antonio