

# Putting Research to Work for Military Families



**Focus:**  
Multiple  
Branches

## The Psychological Costs of War: Military Combat and Mental Health

Cesur, R., Sabia, J. J., & Tekin, E. (2013). The psychological costs of war: Military combat and mental health. *Journal of Health Economics*, 32(1), 51-65. doi:10.1016/j.jhealeco.2012.09.001

**SUMMARY:** Differences in the likelihood of posttraumatic stress disorder (PTSD), depression, and suicidal ideation were compared in three different groups: Service members on Active Duty exclusively in the United States, Service members on Active Duty outside the United States in noncombat zones, and Service members on Active Duty outside the United States in combat zones. Findings indicate that Service members are most at risk for PTSD if they have been deployed in combat zones for over 12 months and if they have experience with enemy firefight or civilian casualties.

### KEY FINDINGS:

- Service members deployed in a combat zone are 616% more likely to have PTSD than Service members deployed to noncombat zones overseas.
- Those who have experienced enemy firefight have a 155% increase in likelihood of reporting suicidal thoughts, a 56% higher likelihood of reporting depressed affect, and a 141% higher likelihood of developing PTSD.
- Service members with a longer deployment are more likely to experience PTSD; those who served more than 12 months in a combat zone have a 102% higher likelihood of having PTSD compared to those whose service was one to six months in length.
- Service members who have been deployed to a combat zone have worse mental health outcomes than non-deployed Service members, non-Active Duty non-deployed Service members, and civilian control groups.

### IMPLICATIONS FOR PROGRAMS:

Programs could:

- Consider assessing exposure to enemy firefight and deployment length as they may be potential risk factors for developing PTSD, depression, or suicidal ideation for returning Service members
- Develop lists of referrals that are responsive to Service members' specific needs and experiences during each stage of the deployment cycle
- Offer workshops during reintegration to help families and Service members adjust to the Service member's return, especially when the deployment has included combat exposure

### IMPLICATIONS FOR POLICIES:

Policies could:

- Encourage the development and continuation of programs that can promote resilience in Service members, their partners, and children
- Continue to support programs that address the unique challenges faced by deployed parents
- Recommend training for community providers to educate them about unique factors that contribute to mental strain for Service members

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## METHODS

- Pre-existing data were used from the first four waves (1994-2008) of the National Longitudinal Study of Adolescent Health; wave 1 occurred while participants were adolescents, and wave 4 occurred in early adulthood (wave 4 age range, 24-33 years).
- Questionnaires asked about demographic information, as well as information about military service. For those with deployment experience, questionnaires asked about frequency of engaging in enemy firefight, killing or injuring others, being wounded or injured, and witnessing the death or wounding of others.
- All participants were given questionnaires about their mental health in three areas at all four time points: suicide ideation, PTSD, and depressive affect.

## PARTICIPANTS

- A total of 15,569 people completed surveys, which consisted of 14,589 civilians and 1,080 military.
- Participants were predominantly White (70%), followed by Black (23.0%), Latino (16%), and other race (7%). Racial break-down for the military-only sample was comparable.
- The full sample contained 47% males, compared to 79% of the military-only sample.
- Six percent of the sample (n = 916) reported serving on Active Duty in the military. Of these, 47% (n = 429) report having been deployed in a combat zone and 45% (n = 416) report having engaged in enemy firefight.

## LIMITATIONS

- PTSD was assessed as a single-item indicator in which participants were asked if they had ever been diagnosed with PTSD. This may not capture participants who are experiencing symptoms of PTSD, but haven't been diagnosed.
- The high correlation between length of deployment and frequency of experience with enemy firefight makes it difficult to determine which factor is driving the association with poor mental health outcomes.
- The data gathered were cross-sectional and causation among the variables cannot be determined.

## AVENUES FOR FUTURE RESEARCH

Future research could:

- Measure differences in mental health due to deployment length and experience with enemy firefight to distinguish which has more adverse effects
- Examine differences in mental health across the different branches of the military to try to replicate the findings
- Replicate the study and conduct analyses to explore if there are cultural factors that impact PTSD among Service members

## ASSESSING RESEARCH THAT WORKS



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