

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Trajectories of Trauma Symptoms and Resilience in Deployed US Military Service Members: Prospective Cohort Study

Bonanno, G. A., Mancini, A. D., Horton, J. L., Powell, T. M., LeardMann, C. A., Boyko, E. J., ... Smith T. (2012). Trajectories of trauma symptoms and resilience in deployed US military service members: Prospective cohort study. *British Journal of Psychiatry*, 200(4), 317-323. doi:10.1192/bjp.bp.111.096552

SUMMARY: Within the larger Millennium Cohort Study (MCS), this longitudinal study sampled nearly 8,000 deployed Service members from all branches of the military. Researchers investigated trajectories of posttraumatic stress disorder (PTSD) symptoms among Service members prior to and after deployment to Iraq and Afghanistan. Results suggest that the trajectories of PTSD symptoms were very similar for Service members with one or multiple deployments, and that the most common category by far was the stable “low symptoms of PTSD over time.”

KEY FINDINGS:

- The two cohorts (one deployment vs. multiple deployments) were remarkably similar in most trajectories of PTSD symptoms: low symptoms over time (83% vs. 85%), moderate symptoms decreasing over time (8% vs. 9%), and high symptoms over time (2% for both cohorts, but symptoms actually improved for the multiple deployers).
- Service members with one deployment (7%) were more likely than those with multiple deployments (5%) to have PTSD symptoms that were initially low but increased over time.
- For the single deployers, those in the stable low PTSD symptom group had better initial physical health, less combat experience (except for moderate-improving group) or were more likely to be heavy drinkers (except for the chronic worsening group) compared to those in the other patterns of symptom groups.
- For the multiple deployers, those in the stable low PTSD group had less combat experience and were less likely to be smokers (except for the chronic worsening group) compared to the other patterns of symptom groups.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Use curricula based on psychological resiliency, such as battlemind training, to help support Service members and improve their well-being and resilience
- Employ evidence-based classes and workshops to help prevent or improve PTSD symptoms among Service members experiencing deployment and those already experiencing some PTSD symptoms at pre-deployment
- 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:

- Continue to support screening for PTSD and other mental health concerns among Service members
- Recommend integrating mental health education into existing service delivery systems for military families
- Recommend education of professionals (e.g. child caregivers, mental health, and education professionals) on the possible effects of parents’ emotion regulation and parenting during deployment and post-deployment

This product is the result of a partnership funded by the Department of Defense between the Office of Military Community and Family Policy and the USDA’s National Institute of Food and Agriculture through a grant/cooperative agreement with The University of Minnesota.



Putting Research to Work for Military Families



METHODS

- Previously deployed Service members who completed all three questionnaires of the Millennium Cohort Study were examined as two separate subpopulations based on single deployment versus multiple deployment in support of operations in Iraq and Afghanistan between 2001 and 2008.
- Self-reported symptoms of PTSD were obtained prior to deployment and at two follow-ups (three years apart).
- Data were examined for longitudinal trajectories using statistical analyses.

PARTICIPANTS

- The study sample included 7,787 U.S. Military Service members who were mostly male (80%). The two subpopulations included Service members who deployed once (n= 3,393) or multiple times (n= 4,394).
- Average age of the participants was 35 years (SD = 8.5 years); the sample consisted of 74% enlisted personnel and 26% officers.
- All service branches were represented in sample: 46% Army, 35% Air Force, 15% Navy/Coast Guard, and 5% Marines Corps.
- The following was the racial/ethnic composition of the sample: 73% White, 10% Black, and 17% other.

LIMITATIONS

- This article only examined one aspect of mental/behavioral health (PTSD symptoms) and uses only one measure of this outcome; other findings may be evident if additional behavioral health outcomes were included.
- PTSD symptoms were measured using self-report; participants may be reporting in ways that are socially desirable, and this data may be less precise than had standardized assessments been used.
- Other variables beside deployment history likely contribute to the trajectory of PTSD symptoms (e.g., family support, use of programs, use of mental health services), and these variables were not included in the models.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Examine which factors can shape the trajectories of PTSD symptoms experienced by Service members or how to increase psychological resiliency
- Investigate which sources of psychosocial support and services available to military personnel may buffer the onset and effects of PTSD symptoms
- Consider the role culture and gender have in the findings and subsequent interventions based on these findings

ASSESSING RESEARCH THAT WORKS



For more information about the Assessing Research that Works rating scale visit:
<https://reachmilitaryfamilies.umn.edu/content/assessing-research-that-works>