

Putting Research to Work for Military Families



Focus:
Multiple
Branches

Gender Differences in the Effects of Deployment-Related Stressors and Pre-Deployment Risk Factors on the Development of PTSD Symptoms in National Guard Soldiers Deployed to Iraq and Afghanistan

Polusny, M. A., Kumpula, M. J., Meis, L. A., Erbes, C. R., Arbisi, P. A., Murdoch, M., ... Johnson, A. K. (2014). Gender differences in the effects of deployment-related stressors and pre-deployment risk factors on the development of PTSD symptoms in National Guard soldiers deployed to Iraq and Afghanistan. *Journal of Psychiatric Research*, 49, 1-9. doi:10.1016/j.jpsychires.2013.09.016

SUMMARY: U.S. National Guard Soldiers deployed to Iraq and Afghanistan completed measures of potential risk/protective factors and posttraumatic stress disorder (PTSD) symptoms one month before and 2-3 months after deployment. Researchers assessed the influence of combat-related stressors and pre-deployment risk and protective factors on risk of developing PTSD symptoms following deployment by gender. Women reported more severe PTSD symptoms and higher rates of probable PTSD compared to men.

KEY FINDINGS:

- Women had higher post-deployment PTSD symptoms and higher rates of probable PTSD compared to men.
- This gender difference remained after controlling for exposure to deployment stressors as well as other risk and protective factors (e.g., social support).
- Women reported greater exposure to sexual stressors during deployment; however the interaction between sexual stressors and gender was not significant, suggesting that men and women may have similar reactions to sexual stressors.
- For women, prior interpersonal victimization history was a strong risk factor that predicted greater post-deployment PTSD symptoms; however, it did not predict greater PTSD symptoms for men.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Offer classes for military families with information on signs and symptoms of PTSD
- Incorporate modules in their family programs specifically for female Service members, addressing the aftermath of sexual stressors during deployment
- Develop support programs for women who had experienced prior interpersonal victimization

IMPLICATIONS FOR POLICIES:

Policies could:

- Recommend screening Service members prior to deployment regarding both mental health indices and other risk and protective factors (e.g., social support)
- Continue to support programs that offer services for treatment of pre-deployment mental health vulnerabilities in Service members with identified risk factors
- Recommend consideration of Service members' pre-existing risk factors when making decisions about deployments and work assignments

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.



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METHODS

- Data for this study were collected as part of a larger, longitudinal study of post-deployment health; recruitment procedures and rates were not specified in this paper.
- One month prior to deployment to Iraq or Afghanistan, National Guard Soldiers from two Brigade Combat Teams completed questionnaires assessing PTSD symptoms, measures of risk, and resilience factors.
- Two to three months following return from deployment, Soldiers were surveyed again via mail about PTSD symptoms and exposure to deployment-related stressors.
- Seventy percent of those who participated in the initial survey also participated in the follow-up survey.

PARTICIPANTS

- One thousand one hundred and forty-three National Guard Soldiers participated in the initial survey (89% male), and 801 participated in the follow-up survey (89% male).
- The average age of female participants was 27.2 years (SD = 8.1), and the majority were White (94%).
- Male participants had an average age of 31.0 years (SD = 9.1), and the majority were White (94%).

LIMITATIONS

- The sample was largely White and male, and these findings may not apply to other groups of Soldiers.
- Although the number of women was representative of gender distribution in the National Guard, the sample size was too small to conduct all the desired analyses about women.
- All data were self-reported instead of using a preferred clinical interview which could influence the results.

AVENUES FOR FUTURE RESEARCH

Future research could:

- Include measures of personality factors to test their associations with gender and the risk of PTSD postdeployment
- Over-sample women in order to obtain a sufficient number of participants to examine three-way interactions
- Explore how the military can reduce sexual stressors during deployment for female Service members

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