

Putting Research to Work for Military Families



Focus:
Army

What Pre-Deployment and Early Post-Deployment Factors Predict Health Function after Combat Deployment?: A Prospective Longitudinal Study of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) Soldiers

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SUMMARY: Service members' health may be affected by deployment and combat experience. To examine this, scores on measures of Soldiers' mental and physical health were compared from pre-deployment to immediately post-deployment. Findings indicate that deployment was associated with a general lowering in health status, both physically and mentally.

KEY FINDINGS:

- Physical and mental health functioning immediately after deployment was significantly lower than pre-deployment levels.
- Poorer mental health post-deployment was associated with the following pre-deployment variables: younger age, low levels of social support, PTSD symptoms, more physical symptoms, and poor mental health.
- Poorer physical health post-deployment was associated with the following pre-deployment variables: older age, poorer physical health, lower blood pressure reactivity, greater severity of physical symptoms, and incurring injuries during deployment.

IMPLICATIONS FOR PROGRAMS:

Programs could:

- Develop classes to teach military families about the importance of relying on others and asking for help, highlighting ways that military families can support one another
- Include curriculum that encourages Service members to actively seek out social support, especially upon return from deployment
- Disseminate information regarding possible symptoms of mental and physical health problems Service members may face after deployment and where individuals and families can find help for those problems

IMPLICATIONS FOR POLICIES:

Policies could:

- Continue to support morale, welfare, and recreation programs which are aimed at building social support for Service members
- Continue to support programs that address the unique challenges faced by deployed parents
- Recommend education for service providers around the possible effects of deployment on Service members' families

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METHODS

- This longitudinal study included data collection at two time points: Phase 1 (pre-deployment, 2005-2008) and Phase 2 (immediately after return, 2007-2009).
- Soldiers deploying to Iraq and Afghanistan were given questionnaires about their physical and mental functioning (assessed with the Veteran's Rand-36) in addition to basic demographic information, and physiological measures (blood pressure reactivity to stressful situations and body mass index).
- Key psychosocial measures included: negative emotionality, the extent to which an individual is absorbed in his own thoughts, stressful life events, social desirability, social support, severity of physical symptoms (measured as number of symptoms and extent to which they impact daily functioning), and coping style (active versus avoidant).
- Post-deployment-related measures included: deployment experiences (assessed with Deployment Risk and Resilience Aftermath of Battle subscale), unit cohesion, PTSD symptomology, and physical symptoms.

PARTICIPANTS

- Seven hundred ninety members of the Army National Guard (72%), Reserve (26%), and Active Duty personnel (1%) completed questionnaires in Phase 1.
- The majority of participants were male (90%) and White (77%), with a mean age of 28 years (SD = 8.3 years, range = 18-57 years).
- Among the participants, the Phase 2 completion rate was 53% (n = 422).

LIMITATIONS

- There was no non-deployed "control" group, so comparative analyses are not possible.
- This study had a high rate of attrition from Phase 1 to Phase 2, making it difficult to determine whether Phase 2 data can be generalized.
- Measurement error may have been introduced as a result of using different styles of data collection (e.g., phone surveys, paper surveys, and computer surveys were all used).

AVENUES FOR FUTURE RESEARCH

Future research could:

- Include a non-deployed comparison group to allow for comparisons between the deployed and non-deployed participants across time
- Replicate the study and incorporate additional physiological measures for stress reactivity
- Explore the extent to which health behaviors (e.g., smoking, diet, etc.) impact Service members' health outcomes

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