



## Factors Associated with Posttraumatic Stress among Peacekeeping Soldiers

Dirkzwager, A. J. E., Bramsen, I., Van Der Ploeg, H. M. (2005). Factors associated with posttraumatic stress among peacekeeping soldiers. *Anxiety, Stress, and Coping*, 18, 37-51. doi:10.1080/10615800412336418.



3,481 Dutch Veterans of the Royal Netherlands Military Service who had participated in international peacekeeping operations from 1975-1996 were included in this study. Researchers examined the relationship between positive and negative consequences of peacekeeping operations, PTSD prevalence rates, help-seeking behaviors, and factors associated with PTSD symptoms. Veterans who felt more powerless and threatened during deployment, who thought they had no control over the situation, or who thought that the mission had become meaningless reported more current PTSD symptoms.

### Key Findings:

- There was an overall PTSD rate of 6% among the Veterans.
- There was a positive relationship between the number of war zone stressors during deployment and current PTSD symptoms.
- Veterans who felt more powerless and threatened during deployment, who thought they had no control over the situation, or who thought that the mission had become meaningless reported more current PTSD symptoms.
- 12% of the Veterans contacted a health professional during deployment; 15% of those met criteria for PTSD.
- Many of these Veterans reported positive experiences: 80% said the peacekeeping mission broadened their horizons, 70% looked at the deployment with a good feeling, and more than half said it increased their self-confidence.

### Implications for Programs:

- Programs could develop classes for Service members and their families about risk factors for PTSD and methods to combat those risk factors.
- Programs could develop modules for Service members that emphasize the value, meaning, and contributions that they make in serving their country, thereby attempting to foster pride in one's service.

### Implications for Policies:

- Policies could recommend funding for professional development for program staff regarding the impact of PTSD on Service members and their families.
- Policies could support ongoing assessment and monitoring of Service members who experienced high levels of deployment stressors; policies could fund the development of specialized programs to meet their needs.

### Avenues for Future Research:

- Future studies could track Service members before, during, and after deployment to gain a better understanding of the causal nature of these relationships.
- This study could be replicated with the U.S. military to determine whether these findings generalize.

## Background Information

### Methodology:

- A questionnaire was sent to Veterans of the Royal Netherlands Military Service who had participated in international peacekeeping operations from 1975-1996.
- Veterans were asked questions about demographics and military service, help-seeking behavior, exposure to traumatic war zone situations, appraisal of deployment, positive and negative experiences, and PTSD.
- Chi-square tests and analyses of variance examined differences between peacekeeping operations in outcomes. Regression analyses examined the impact of variables on PTSD symptoms.

### Participants:

- 3,481 Dutch Veterans participated (98% male).
- Mean age=31 (SD=9.00), 59% married or cohabitating.
- 44% "middle" and 39% "lower" education.
- Peacekeeping operations: 39% former Yugoslavia, 25% Lebanon (1979-86), 9% Cambodia (1992-94), 27% other.
- Mean length of serving abroad = 5.60 months (SD=2.60), 92% first deployment, mean time since deployment =6.10 years (SD=5.40).

### Limitations:

- This was a retrospective study that used self-report measures; results may be biased and causal conclusions cannot be made.
- This sample consisted of Veterans from the Netherlands and may not be generalizable to U.S. Military personnel.
- Only 27% of the variance in PTSD was explained, indicating that other, unmeasured variables affect PTSD.
- Many of the measures were self-constructed and did not have reliability and validity information available.
- Outcomes were limited to PTSD, and other mental health outcomes may have been important to measure as well.

## Assessing Research that Works

Research Design and Sample					Quality Rating:
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	★★★★★
The design of the study (e.g., research plan, sample, recruitment) used to address the research question was....	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Research Methods					Quality Rating:
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	★★★★★
The research methods (e.g., measurement, analysis) used to answer the research question were...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Limitations					Quality Rating:
	Excellent Minor Limitations (★★★★)	Appropriate Few Limitations (★★★)	Limited Several Limitations (★★)	Questionable Many/Severe Limitations (★)	★★★★★
The limitations of this study are...	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Implications					Quality Rating:
	Excellent (★★★★)	Appropriate (★★★)	Limited (★★)	Questionable (★)	N/A
The implications of this research to programs, policies and the field, stated by the authors, are...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Not applicable because authors do not discuss implications					
Overall Quality Rating					★★★★★