



# Research Report

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U.S. Army Medical Research Unit-Europe, Walter Reed Army Institute of Research # 26  
U.S. Army Medical Research and Materiel Command  
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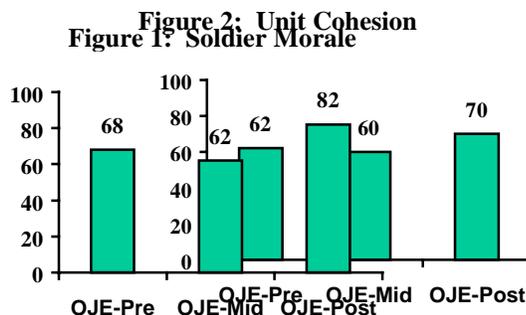
## The Impact of Deployment Length on Soldier Morale, Cohesion, and Mental Health

### SOLDIER MORALE AND UNIT COHESION

**Background.** The U.S. Army Medical Research Unit-Europe, a Special Foreign Activity of the Walter Reed Army Institute of Research, conducted a longitudinal human dimension assessment of soldiers and units deployed for Operation Joint Endeavor (OJE). Soldiers in the study were assigned to the U.S. Army, Europe, and 7th Army (USAREUR), and the study was unique in that it was the first longitudinal study of USAREUR soldiers conducted during a major military deployment. Soldiers were surveyed at three different time periods. Soldier morale and unit cohesion were assessed 1 to 3 months prior to the deployment, during the deployment (after 6 months in the Bosnia theater), and approximately one month after the soldiers returned to Germany. The results below are based on the responses of over 6,000 soldiers.

**Morale.** Prior to deploying to Bosnia, soldier morale was modest, with 68% of the soldiers rating their morale as moderate or high. During OJE, personal morale declined slightly, with 62% of the soldiers reporting their morale as moderate or high. After returning to Germany, soldier morale increased dramatically, with 82% of the soldiers rating their morale as moderate to high (Figure 1).

**Cohesion.** Unlike soldier morale, which declined during the deployment, unit cohesion did not significantly change from its pre-deployment levels (62% of the soldiers rated unit cohesion as moderate to high prior to deployment and 60% of the soldiers rated unit cohesion as moderate to high during the deployment). Unit cohesion, however, did improve after the soldiers returned to Germany, with 70% of the soldiers evaluating unit cohesion from moderate to high (Figure 2).

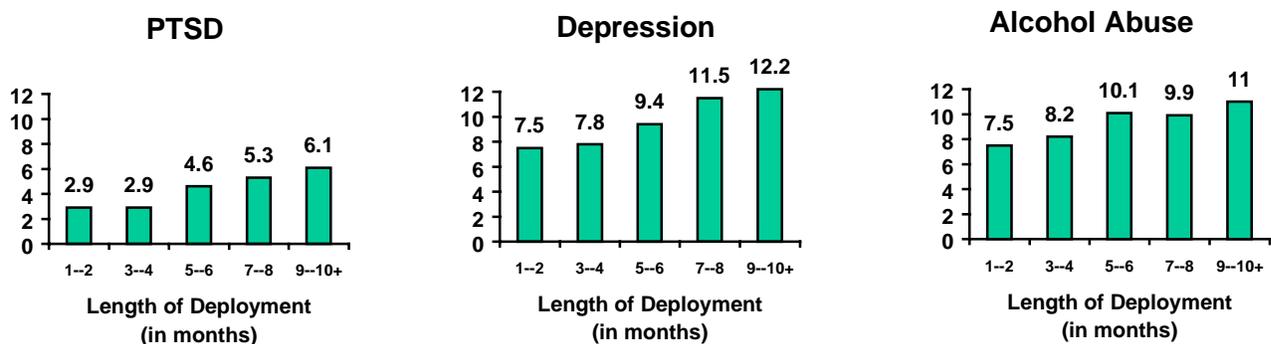


## MENTAL HEALTH

**Background.** During OJE/OJG, all military personnel deployed to the Bosnia area of operations for more than 30 days were required to complete a mental health screen as part of the Joint Medical Surveillance Program. This screen assessed post-traumatic stress disorder (PTSD), depression, and potential alcohol abuse. Over 46,000 military personnel have completed the mental health screen. It is important to note that these scales were used only to assess psychological symptoms and were not used as a clinical diagnostic instrument.

**PTSD, Depression and Alcohol Abuse.** Deployment length was predictive of higher psychological distress rates on all three scales (see Figure 3), with the first increase occurring after 5-6 months' deployment. These psychological distress indicators continued to increase up to 10 months' deployment.

Figure 3. Soldier Mental Health



## DISCUSSION AND IMPLICATIONS

Soldiers' mental health, personal morale, and perception of unit cohesion all change as a function of deployment. The present data indicate that all of these changes occur approximately after being deployed for 5-6 months, with changes in the mental health status occurring as early as 3-4 months after deployment. Thus, these findings support the setting of the tour length in Bosnia at 4 to 6 months.

Importantly, these results also demonstrate that the psychological health, morale, and unit cohesion of soldiers can be directly measured and quantified, thereby providing a useful framework for future development of psychosocial measures of soldier dimensions. These measures can be incorporated into the Army's Warfighter Physiological Status Monitoring System.

**References:** Castro, C. A., & Adler, A. B. (1997). *Joint Medical Surveillance in Bosnia: Psychological Screening Report V FEB 96-DEC 97*, U.S. Army Medical Research Unit-Europe. Castro, C. A., & Huffman, A. (1998). *Operation Joint Endeavor (OJE): Lessons Learned for Improving Psychological Readiness*, U.S. Army Medical Research Unit-Europe. For more information contact MAJ Carl A. Castro, Commander, USAMRU-E, DSN: 371-2626/2007. The DTIC number for this research report is **ADA 365 394**.