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Operation Desert Shield/Storm:
Army Reservists in need of financial support?

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Federal Republic of Germany

Based on a survey conducted on Army reserve personnel who were deployed stateside or overseas during Operation Desert Shield/Storm (ODS/S), the purpose of this study is to obtain guidelines for how to improve social services for reservist soldiers and their dependents or significant others in times of crisis or war.

Questions to be answered were: Are there significant differences between certain groups of respondents as depicted by their life-style patterns and how they perceived and coped with stressors due to ODS/S. If so, what would be recommended for optimizing support to individuals who really need it.

Stressors due to crisis, disasters, or war are seemingly unlimited; financial resources to smooth stress peaks are definitely limited. So there is a strong need to focus on those individuals who are really suffering from the impact of stressors and need intervention and others who could more or less be left on their own after a first encounter with social workers or mental health care providers. Typically reservists are exposed to their civilian dominated social demands as well as to the pressure induced by duties in their military environment when activated. So the acquisition, evaluation, and interpretation of the data must reflect these two dimensions which may lead to a different approach to mental health care intervention as in comparison to active military professionals. The question is which information about the individuals could be regarded as most helpful to separate critical cases from others. To obtain relevant information for this purpose involves quantitative and qualitative analysis of the survey data.

Method

Subjects The sample consisted of 213 Army Reserve personnel who were called to active duty in support of the Persian Gulf Conflict. The soldiers belonged to two units: 105 to the 5501st USAH, St. Paul, Minnesota, and 108 to the 145th MEDSOM, Texarkana, Texas. All personnel served either in Saudi Arabia or the United States. When they were inactivated, both groups outprocessed at Fort Sam Houston, Texas, where the survey was administered in group sessions in April and May 1991. The questionnaire was purely voluntary and strictly anonymous.

Procedure The survey consisted of 62 close-ended questions; scales were dichotomous or Likert type scales. The questions were related to 244 variables. These variables were grouped into a descriptive, categorical portion, a portion representing stress-perception and stress-symptoms, and a portion reflecting stress-coping strategies or skills. The first group served as "independent", the remaining two as dependent variables in the statistical designs.

The first group of variables was used for a set of descriptors or properties of respondents which could reveal - according to their qualities - different relations between them and the dependent variables and hence contribute to classifying individuals with respect to their stress tolerance or proneness.

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These variables and categories were:

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<thead>
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<th>Category</th>
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<td>Age groups</td>
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<tr>
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<tr>
<td>Single Parent</td>
<td>Yes/ No</td>
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Quantitative analysis of data included nonparametrics and ANOVA or MANOVA procedures when appropriate. Qualitative analysis of data was performed on the basis of descriptive statistics and profile comparisons for extreme groups.

Results

The 213 respondents ranged in age from 19 to 58 and averaged 31.8 years in age. Thirty-two percent (N=69) were female and 68% (N=144) were male. Roughly half (55%) were married or remarried and a considerable portion (42%) hold college or advanced college degrees. The sample consisted of 155 (73%) enlisted personnel and 58 (27%) officers. These soldiers had been in the military from 1 to 28 years with an average of 9.17 years. Duration on active duty due to the Persian Gulf Conflict ranged from 2 to 62 weeks, average is 19 weeks. Half (53%) performed their duty in Saudi Arabia, while the other half remained in the United States. Forty-one percent suffered financial losses, no change in their financial situation was incurred by 19%, and 40% stated financial gain.

Overall, the self rated health level with respect to somatic manifestations after active duty was not regarded as problematic by the majority (90%) of the respondents. Differences between respondents with respect to all of the grouping variable properties (see above) and the self rated health level were not significant. All respondents except two - regardless of their experienced health problems - reported good/very good military job performance during their deployment. Similarly the extent of perceived stress level (low vs. high) did not show significant influence on job performance ratings, neither did the high scorers on symptoms listing vs. low scorers show significant differences.

The range of the soldier's extent of perceived stressors was 4.40, minimum 2.20, maximum 6.6, mean 4.31, median and mode 4.00, variance 0.63, and standard deviation 0.79.

One-way ANOVAs performed on the soldier's extent of perceived stressors testing for differences between the factor levels of the descriptor variables produced significant main effects for age groups, gender, marital status, pay level, education, years of service in the military, finances, children, number of children in school, single parent.
Duration and location of deployment, number of children, and employment of spouse showed no significant relations.

Higher order MANOVAs (up to 3-way) showed significant relations between soldier's extent of perceived stressors and age groups and finances. Significant interactions were found for marital status by finances and for age groups by finances.

Questions for presence or absence of specific stress related symptoms (yes or no) were most often answered "no". Frequency counts showed for 6 of the 12 symptoms a relatively higher importance to the respondents. These were in rank order (number of "yes" out of 213): sleep pattern disturbances (100), changes in energy level (71), nervousness (67), anxiety (55), and weight losses or gains (54).

Correlation between soldier's extent of perceived stressors and stress related symptoms ratings was nearly zero and negative. Substantial relations between soldier's extent of perceived stressors and self ratings on coping skills could not be found either.

Discussion

The soldiers rated themselves far more often positive than negative with respect to their overall health, their stress tolerance, and stress symptoms frequency. They were only moderately affected by stressors, at least in their self-perception (see T. Hammelman, 1991). So one should be careful not to over interpret the results.

In this study the strongest influence on soldier's extent of perceived stressors was due to the financial strain imposed by ODS/S. Membership in age groups and educational level influenced the soldier's response to previous stressors, whereas factors such as location and duration of service during ODS/S as well as the total number of children the soldier had custody of did not.

The results support the following conclusion: problematic cases among mobilized reservists should mostly be expected if the individual could be subsumed in one of the following profiles:

1) Age up to 25, financial loss, married, lower educational level (and female)
2) Age 26 to 35, financial loss, married
3) Age 36 to 45, financial loss, married, (and male)
4) Age 46 and older, financial loss and higher educational level, married.
5) Financial loss, 3 children or more in school.

In these cases, a more in-depth exploration is recommended in order to determine the most effective support. About 41% would need some kind of financial support.

For further research, stress indicators other than only self ratings are strongly recommended as well as predeployment base-line stress levels and direct measures of stress effects in the soldier's families.
References


Footnotes

The author wishes to thank Tracie L. Hammelman, M.S.W. who designed the questionnaire, collected the data, and gave permission to use the data for further analysis.

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