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TITLE: Gender Role Stress, Mental Health Risk Factors and Mental Health Sequela in Deployed Versus Non-Deployed and Pilot-Rated Versus Non-Rated Active Duty Women Versus Men

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FOREWORD

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INTRODUCTION

PURPOSE

The Gender Role Stress, Mental Health Risk Factors and Mental Health Sequela in Deployed Versus Non-Deployed and Pilot-Rated Versus Non-Rated Active Duty Women Versus Men (GRAMH) study attempted to meet three of the general research needs in military women's health.

First, the study treated major factors affecting the **health and work performance** of military women by examining the impact of deployment and flight status on gender-role stress and mental health symptoms. The study further addressed this research need by creating an **epidemiological study** of negative life events experienced by active duty women and the effects of these events on their mental health.

Second, **psychological and physical health** issues that result from integrating women into a hierarchical male environment were addressed by assessing gender-role stress and its impact on health. This gives us a better understanding of how military demands affect that which is uniquely important to women: **female gender-role stress**. By using male comparison groups, the study delineated the specific impact of women and men working in close quarters within a predominately male environment. The comparison group allowed insight into how military women's coping styles differ from those of military men, and how these differences related to mission readiness and health.

Third, the study dealt with **health promotion and disease prevention** for military women by creating an epidemiological study of mental health symptoms and risk factors in various environments, deployment history, and flying status. This facet of the study gives the DoD information for determining the types of preventive efforts that are most needed for various risk factors.

In summary, this project examined several research needs indicated by the Defense Women's Health Research Program. Furthermore, the project addressed mental health issues that are, based on a review of past inpatient records, especially prevalent among military women. It offers more data to answer questions of paramount importance to the ability of military women to perform their mission responsibilities.

BACKGROUND

In an era of cost containment and a changeover to managed medical care via TRICARE, there is a strong emphasis on using prevention to constrain the staggering costs of treating mental health disorders in the military. A review of the active duty Air Force (ADAF) inpatient database for 1990-1994 indicated that five of the ten leading contributors to hospital bed days were alcohol dependency (33,872 days), adjustment reaction (11,572 days), affective psychosis (8,694 days), neurotic disorders (4,183 days) and non-dependent drug abuse (3,956 days). This review also found that, for admission

rates per 100,000 active duty members, alcohol dependence (266/100,000) and adjustment reaction (202/100,000) were in the ten leading hospitalization diagnoses.

Further examination of the inpatient database indicated significant differences by gender in admission rates for various diagnoses. For example, women invariably had higher hospitalization rates for adjustment disorder (400.8 hospitalizations) than men (167.6per 100,000) during the years reviewed. A similar pattern was seen in hospitalization rates for neurotic disorders in 1990: 107 hospitalizations per 100,000 for women, and 39 for men. Furthermore, for 1990-1994, there was a noticeable gender difference for affective psychosis admissions: 115 hospitalizations per 100,00 population for women, and 42 for men. Inpatient treatment for alcohol dependence was the only mental health diagnosis where the admission rate for men (281 per 100,000) was significantly higher than the rate for women (162.2 per 100,000).

Although gender differences in psychiatric admissions for the general civilian population are not uncommon, the great gender disparity in rates for an active duty population is concerning for several reasons and raises a few questions. Since no research known to the author has indicated that these mental health diagnoses are genetically sex-linked, environmental, social, individual, or cultural variables must explain the varying rates of admission.

Several environmental possibilities specific to the military might account for these differences: being deployed, being separated from family members, exposure to noxious chemical, etc. But, women deploy with men and work side by side on the same jobs. Therefore, exposure to these environmental factors does not seem to differ by gender. Furthermore, as overall deployment rates for the entire military (men and women) have greatly increased in the past five years, they may have significant effects on men's and women's mental health and their ability to cope with these stresses.

Social factors, such as a sense of social support, the number of family members, and membership in local organizations, have been found to be beneficial to mental health (Holahan, Moos, Holahan, and Brennan, 1995; Thoits, 1986). Men and women use social support differently, which generally explains some of the gender difference, but usually in a bias for women. This means that, in the civilian population, women tend to use social supports more effectively than men. Given the high rates of admission for active duty women, perhaps there is either a lack of social supports for military women, or they do not to use the same social supports they would use in the civilian world. Since deployments tend to further deplete one's social supports, perhaps deployed women use social support even less as a protection against mental disorders.

Individual variables, specifically various coping strategies, have been found to impact mental health. Coping strategies can either be protective, such as exercising and talking to a friend, or deleterious, such as isolation and alcohol consumption (Lazarus, 1981; Lazarus and Folkman, 1984; Scherck, 1992). Studies have found that men and women differ in which coping strategies they use, and when they use them. Perhaps within military environments, the differences in using coping skills are greater by gender. Further, these differences may be enhanced during deployment situations. A second individual factor, gender-role stress, may also be part of the observed high rates for certain mental health disorders among women. Perhaps some aspects of the military environment place women at risk for gender-role stress, such as being part of a

predominantly male deployment, or being a female pilot in a predominantly male aviator population. Eisler and colleagues (1988) found significant physiological and health impacts from perceived threats to male gender role. Eisler also found similar results for threats to a woman's gender role, and created a single instrument to assess such stress for both.

Finally, policy decisions may have resulted in the differential rates of psychiatric admission. But, a review of diagnostic policies and practices **has not found** that the diagnostic schema used by military clinicians is biased against women. Therefore, the most likely areas to study for causes would be social and individual variables, and how they differ by gender and by assignment type (deployed versus non-deployed, and pilots versus non-pilots).

Recent studies have examined the interaction between recent life events (such as deployments) and an individual's coping strategies. Mitchell, Cronkite, and Moos (1983) found that emotion-focused coping increased emotional distress, while problem-focused coping decreased emotional distress. Vitalian and colleagues (1987) indicated that problem-focused coping had a decreased relationship to subsequent depression, while wishful thinking was positively associated with depressive symptoms. Nakano (1991) found that using differing coping strategies had a differential impact on mental health symptoms after significant life stressors. For example, he found that using problem-solving skills and seeking social support moderated the effects of negative life events, while wishful thinking and negative self-talk increased their impact. Although he did not find gender differences in his data, the study offers a tried and tested method for testing our hypotheses.

TECHNICAL OBJECTIVES

The GRAMH study met the following technical objectives:

1. Via the Ways of Coping survey, assess the coping skills used by active duty women and men in deployment versus non-deployment assignments, and pilot versus non-pilot assignments.
2. Via the Mental Health Inventory, assess the mental health symptomology experienced by active duty women and men in deployment versus non-deployment assignments, and pilot versus non-pilot assignments.
3. Via the Recent Life Events Checklist-Revised, assess the number and types of negative life events experienced by active duty women and men in deployment versus non-deployment assignments, and pilot versus non-pilot assignments.
4. Via the Gender Role Stress Scale, assess the impact of deployment versus non-deployment, and pilot versus non-pilot assignment on gender-role stress for active duty women versus men.
5. Combine the datasets obtained by these four surveys and examine them for the epidemiology of:
 - a. experienced mental health symptomology, by gender, by assignment type;
 - b. experienced negative life events, by gender, by assignment type;
 - c. coping skills used, by gender, by assignment type; and
 - d. gender-role stress, by gender, by assignment type.

METHODS

DATA SOURCE

Based on the objectives of this study, two data files were obtained from Air Force Military Personnel Center (HQ AFMPC). The first file contained demographic and deployment information for ADAF members deployed in the previous eighteen months. The second file contained overall Air Force personnel demographic information, as well as the addresses needed to mail surveys. The deployment file was matched with the personnel file to distinguish which ADAF members had been deployed in the previous eighteen months. Personnel who had been in Air Force less than a year at the time of the study were excluded. (Note: The original goal was to obtain samples from the Army, Navy, and Air Force. Due to administrative requirements of one service and another service's decision not to participate, we could obtain only an Air Force sample.)

SAMPLING

The merged file of deployment and personnel was stratified by deployment history (yes or no) and gender. Power analysis estimated the sample size required for each of the four groups (2 deployment history x 2 gender). Due to the small number of deployed ADAF females, a census (100% sampling) was conducted of this group to obtain sufficient samples. Simple random sampling was then performed within each of the remaining three groups. A total of 8,214 ADAF members was chosen for the sample.

Independent of overall study data, pilot study data were extracted from the personnel file. Of the 15,463 pilot/astronaut personnel qualified for this study, only 321 were females. Therefore, a census (100%) was conducted for them, and simple random sampling was performed for males. A total of 1,321 pilots was chosen for the sample.

MAILINGS

Once the lists of personnel and their addresses were generated, a package was mailed that included:

- a letter describing the project and asking for cooperation,
- the GRAMH Survey (see Appendix A), and
- a stamped and addressed return envelope.

GRAMH SURVEY

The GRAMH survey combined the following five tools.

Part A: The Mental Health Inventory (MHI) (Veit and Ware, 1983)

The Rand Corporation designed the MHI as a population-based tool to assess psychological distress and well-being. This 38-item survey has demonstrated reasonable test/retest reliability coefficients (0.64; Veit and Ware, 1983). Internal consistency estimates range from 0.83 to 0.92 for the five scales, and 0.96 for the overall score (Veit and Ware, 1983). The questionnaire is self-administered, items refer to mental health during the past month, and most response scales have six options. The MHI offers five scale scores (anxiety, depression, behavioral/emotional control, general positive affect, and emotional ties) and an overall score, referred to as the Mental Health Index.

Part B: The Schedule of Recent Experiences-Revised for Military (adapted from Holmes and Rahe, 1967)

The Schedule of Recent Experiences has been used in several studies to indicate a subsequent risk of significant health change. The instrument is self-administered; the subject simply indicates which life events occurred to him or her over the past year. Each life event is given a weighted value, depending on its health impact. For example, a spouse's death is given a value of 100, retirement is 39, and Christmas is 13. The checklist is scored by adding the weighted values for responses and comparing the score to validated norms. The norms are: 150 to 199 = mild, 200 to 299 = moderate, and 300 or more = major. The GRAMH study used a revised version that incorporated life events specific to the military environment, such as dishonorable discharge, cross-training, and withdrawal of a security clearance.

Part C: The Ways of Coping Checklist Revised (WCCR) (Folkman and Lazarus, 1980, 1985; Folkman et al, 1986)

The WCCR is a 67-item, self-report survey that asks a subject to check the coping strategies he or she used in a specific incident. The Schedule of Recent Experiences (GRAMH Part B) is often used to identify which events to use for the WCCR. The subject's WCCR responses are grouped into eight factors that indicate his or her coping style. The factors are: 1) confrontation (aggressive efforts to alter the situation, sometimes with emotional hostility and involving some risk taking), 2) self-control (attempting to regulate one's feelings and actions), 3) seeking social support (seeking others for informational or emotional support, or action), 4) accepting responsibility (accepting and possibly apologizing for one's own role in creating the situation), 5) escape/avoidance (wishful thinking and behavior, as taken to escape or avoid the situation), 6) distancing (attempting to detach oneself cognitively and emotionally from the situation, or attempting to minimize the situation), 7) planful problem solving (purposeful analytical or problem-focused efforts to alter the situation), and 8) positive reappraisal (attempting to obtain positive meaning or personal growth from the situation, possibly through spirituality).

Part D: The Gender Role Stress Scale (GRSS) (Eisler and Skidmore, 1995)

The Gender Role Stress Scale is a self-report survey that consists of a 40-item masculine sub-scale and a 30-item feminine sub-scale. These are scored separately, as two primary factors: masculine gender-role stress and feminine gender-role stress. The GRSS further defines masculine gender-role stress (MGRS) as that experienced from five these factors: physical inadequacy, lack of emotional expressiveness, subordination to women, intellectual inferiority, and performance failure. It further defines feminine gender role stress (FGRS) as that experienced from these five factors: emotional detachment, physical unattractiveness, victimization, unassertiveness, and failed nurturing.

Part E: The SF-36 Health Survey (SF-36) (Ware et al, 1993)

The SF-36 contains 36 items that measure physical and mental functioning, role limitations due to physical problems, bodily pain, general health, vitality (energy / fatigue), social functioning, role limitations due to emotional problems, and mental health (psychological distress and psychological well-being).

Scoring

The items on each scale in Parts A, C, D, and E are shown in Appendix B. The weighting factors and categories of scores used in Part B are listed in Appendix C. A description of scale scoring follows for each part of the GRAMH survey.

Part A: Mental Health Inventory

Part A consisted of five summated rating mental-health scales: 1) anxiety, 2) depression, 3) behavior/emotional control, 4) positive affect, and 5) emotional ties. Each scale is a group of items. An overall score was created for each scale by summing responses for that scale. Scores for "behavioral/emotional control" and "positive affect" were reversed before the overall score was created, so that a higher value indicated better mental health for all items and scales. A mental health index was created by summing over the scores of all five scales.

Part B: Schedule of Recent Experiences

Part B consisted of 53 items regarding recent life events. A weighting factor was given to each item before the summated score was created. The weighting factors ranged from 12 to 100. The greater the impact an event had on health, the higher its weighting factor was. The last four items (50 through 53) were specifically added for military use. Therefore, the summated score for the risk of significant health change was created from only the first 49 items.

Part C: Ways of Coping Checklist Revised

Part C included 67 items adopted from the WCCR. An eight-factor solution, which resulted from previous multiple-factor analyses of sample data, was the basis for the coping scales. There are two methods for scoring the WCCR: raw and relative. Deciding which set of scores to use depends on the information desired.

In both scoring methods, individuals respond to each item on a four-point Likert scale, indicating the frequency each strategy is used. Raw scoring is the sum of the subject's responses to the items on a given scale. This method provides a summary of the extent to which each type of coping was used in a particular encounter. Relative scores describe the contribution of each coping scale relative to all of the scales combined.

Part D: Gender Role Stress Scale

Part D of the survey contains items for gender-role stress scales. The GRSS consists of 40-item masculine (MGRS) and 39-item feminine (FGRS) gender-role stress sub-scales, which should be scored separately. In addition, the MGRS and FGRS each have five factors that may be scored separately, or added together to produce total MGRS and total FGRS scores for each subject. All items are structured so that subjects may rate each on a six-point, Likert-type scale that ranges from "not stressful" (0) to "extremely stressful" (5).

Part E: SF-36 Health Survey

Part E of the survey used items adopted from the SF-36 Health Survey. The SF-36 contains 36 measures of physical and mental functioning, role limitations due to physical problems, bodily pain, general health, vitality (energy/fatigue), social functioning, role limitations due to emotional problems, and mental health (psychological distress and psychological well-being). Eight multiple-item summary scales and a one-item measure of self-reported change in health are scored from these 36 items. Reverse scoring is required for seven items, so that a higher item value indicates better health for all SF-36 items and scales.

There are two methods for scoring SF-36 scale: raw and transformed. The raw score is calculated by summing across the items in a scale. A transformed scale score is computed by subtracting the lowest possible scale score from the actual raw scale score, dividing the result by the possible scale score range, and then multiplying by 100. The transformed scale score can be interpreted as a percentage of the highest possible score, and can be compared with norms from the Medical Outcomes Study and other published data.

RESPONSE RATES AND DEMOGRAPHICS

The overall and group response rates were very high. Table 1 shows the response rates by group. Deployed members responded at a higher rate than those who were not deployed. This may be due to increased publicity about deployment impacts on health,

making this group more willing to fill out a health-related survey. Overall, the survey response rates were 40% for the general population and 41% for the pilots. Tables 2 through 4 depict the breakdown of key demographic variables for those we attempted to sample and for those who responded. The demographics of those who completed and returned surveys mirror those we attempted to sample. Therefore, we feel this study obtained representative samples of deployed and non-deployed men and women, for both pilots and non-pilots.

IMPUTATION

Missing data occurred when respondents did not answer all items. Many statistical procedures cannot be immediately used if values are missing. Methods that do allow for missing values are often difficult to use. Therefore, a common imputation method, called "substitution of the mean," was applied to the data before scale scoring and statistical analysis. To apply this method, two issues needed resolution: 1) the minimum number of items in a scale that must be answered in order to score it, and 2) the numeric value that will be substituted for missing data. In this study, a scale score was calculated if a respondent answered at least 50% of the items. A person-specific estimate was used to impute numeric values for items that were missing in a scale. For example, if a respondent answered three of five items for a given scale, the mean value of those three items substituted for the missing values of the other two. On the other hand, if a respondent only answered two out of five items in a scale (less than 50%), then no imputation was performed and the scale score was set to be missing.

STATISTICAL METHOD

Continuous data were analyzed using two-way analysis of variance (ANOVA), with two between-groups factors: gender and deployment. The significance of interaction effect between the two factors was determined before any main effect (gender or deployment) was examined. Pearson Chi-Square test was performed for categorical data. A 0.05 significance level was used in all comparisons.

RESULTS

Results are presented, by survey part, for the overall sample and for the aviator sample. Comparisons are discussed in this order:

1. By deployment-history
2. Gender differences, regardless of deployment history
3. Deployment history, by gender
4. Gender differences, by deployment history

OVERALL SAMPLE

Mental Health Inventory

Deployment History

Table 5 depicts the scores for each MHI scale for the whole sample, comparing those who were deployed in the 18 months previous to the study, to those who were not. The study found significant differences on both positive affect and depression ($p < .05$ and $p < .01$, respectively), suggesting the deployed group had poorer mental health, as measured by these sub-scales. Interestingly, those who were deployed had scores indicating better adjustment ($p < .01$) on the sub-scale assessing behavioral/emotional control. The overall mental health index indicated those who were deployed had significantly poorer mental health functioning, compared to those who did not deploy in the 18 months previous to the study ($p < .01$).

Gender Differences

Table 6 shows the gender differences for each MHI sub-scale by gender for the whole sample. Sub-scale scores indicated that men reported better mental health function in the areas of anxiety ($p < .01$), depression ($p < .01$), and emotional ties ($p < .05$) than women. On the sub-scale measuring behavioral/emotional control, women reported better health than men ($p < .05$). The gender difference on the overall MHI was significant, with women reporting more distress than men ($p < .01$).

Deployment History By Gender

Table 7 shows the MHI sub-scale scores for deployment history within each gender. There was a significant difference for positive affect within the sample of men, indicating that those who were deployed scored poorer on this sub-scale than men who were not deployed ($p < .01$). There was also a significant difference on the overall mental health index indicating men who deployed reported poorer overall mental health ($p < .05$). Women who were deployed reported poorer mental health on the sub-scales measuring anxiety ($p < .01$), depression ($p < .01$), positive affect ($p < .01$), and overall mental health ($p < .01$) than women who were not deployed. Women who were deployed reported significantly better mental health on the sub-scales of behavioral/emotional control ($p < .01$) and emotional ties ($p < .05$) than women who were not deployed.

Gender Differences By Deployment History

Table 8 details the sub-scale scores on the MHI for gender, by deployment history. Women deployed in the 18 months previous to the study reported poorer mental health than men, as measured by the anxiety ($p < .01$), depression ($p < .01$), and positive affect ($p < .05$) sub-scales, and overall mental health index ($p < .01$). In contrast, women who were deployed reported better behavioral/emotional control than men who were deployed ($p < .01$). Among those who were not deployed in the 18 months previous to the study, men reported better mental health on the anxiety ($p < .01$), depression ($p < .01$),

and emotional ties ($p < .01$) sub-scales, and on the overall mental health index ($p < .01$). There were no sub-scales indicating that women who were not deployed had better mental health than men who were not deployed.

Recent Life Events Checklist

Deployment History

Table 9 depicts the total score for the Recent Life Events Checklist. For the sample, as a whole, those who were deployed in the 18 months previous to the study obtained a significantly higher score than those who were not deployed ($p < .05$). Table 10 shows the percent of those who fell into the low-, mild/moderate-, and major-risk categories, based on their scores on this scale.

Gender Differences

Table 11 shows the total score for the Recent Life Events Checklist by gender. Women obtained a significantly higher score when compared to men ($p < .01$). Table 12 shows the percent by gender of those who fell into the low-, mild/moderate-, and major-risk categories. Women were significantly more likely to obtain scores in the higher health-risk categories ($p < .01$).

Deployment History by Gender

Table 13 details the total score for the Recent Life Events Checklist by deployment history, within gender. Men who were deployed obtained a significantly higher score than men who were not deployed ($p < .05$). There was a similar significant finding for women ($p < .05$). Table 14 shows the percent in the low-, mild/moderate-, and major-risk categories.

Gender Differences by Deployment History

Table 15 depicts the total score for the Recent Life Events Checklist by gender, within deployment history. Regardless of deployment history, women obtained significantly higher scores on this checklist ($p < .05$). Table 16 shows the percent in the low-, mild/moderate-, and major-risk categories. Regardless of deployment history, women were more likely to obtain scores in the higher health-risk categories ($p < .01$).

Ways of Coping Checklist

Deployment History

Table 17 shows relative scores (percent of time used) obtained from the Ways of Coping Checklist questions. Those surveyed who indicated they were deployed in the 18 months previous to the study significantly used confrontive coping more than those who did not deploy ($p < .05$). Conversely, those who deployed reported using the coping skill of seeking social support less than those who did not deploy ($p < .01$). There were no other significant differences for this comparison.

Gender Differences

Table 18 details the relative scores for each coping strategy by gender. Men in the general AF population reported using the strategies of distancing ($p<.01$), self-control ($p<.01$), and planful problem solving ($p<.01$) more than the women in the sample. On the other hand, women reported using the strategies of seeking social support ($p<.01$), escape-avoidance ($p<.01$), and positive reappraisal ($p<.01$) more than the men in the general sample.

Deployment History by Gender

Table 19 shows the relative scores for the percent of time each coping strategy was used by deployment history, within gender. For the men surveyed, the only difference between those deployed and those not deployed was the use of seeking social support. Deployed men reported using this strategy less than men not deployed ($p<.05$). Among the women surveyed, those who were deployed reported using escape avoidance more than their non-deployed counterparts ($p<.01$). On the other hand, deployed women reported using seeking social support ($p<.01$) and planful problem solving ($p<.01$) strategies less than those not deployed.

Gender Differences by Deployment History

Table 20 shows the relative scores for the percent of time each coping strategy was used by gender, within deployment history. For those on deployment, men reported using self-controlling ($p<.01$) and planful problem solving strategies ($p<.01$) more than deployed women. On the other hand, deployed women reported using the strategies of seeking social support ($p<.01$) and escape-avoidance ($p<.01$) more than the deployed men in the sample. For those men and women not on deployment, the findings for the use of self-control, seeking social support, escape-avoidance, and planful problem solving were similar to the deployed men and women (all $p<.01$). The only difference for those not deployed was the non-deployed women reported using the coping strategy of distancing less compared to the non-deployed men ($p<.01$).

Gender Role Stress Scale

Deployment History

Table 21 shows the scores on the Gender Role Stress Scale for deployed versus non-deployed samples. The deployed sample scored significantly lower on the scales measuring stress related to intellectual inferiority ($p<.05$), emotional detachment ($p<.01$), physical unattractiveness ($p<.01$), victimization ($p<.01$), unassertiveness ($p<.01$), and failed nurturance ($p<.01$), as well as the overall female gender-role stress scale score ($p<.01$).

Gender Differences

Table 22 indicates the scores on the Gender Role Stress Scale for male versus female samples. The male sample scored significantly higher on the scales measuring stress related to physical inadequacy ($p<.01$), emotional inexpressiveness ($p<.05$), and subordination to women ($p<.01$), and the overall male gender-role stress scale ($p<.01$).

than women in the sample. Women in the sample scored significantly higher than the men in the sample on the sub-scales assessing stress related to performance failure ($p < .05$), emotional detachment ($p < .01$), physical unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .01$), and failed nurturance ($p < .01$), and the overall female gender-role stress scale score ($p < .01$).

Deployment History by Gender

Table 23 depicts the scores on the Gender Role Stress Scale by deployment history, within gender. For men in the sample, those who were deployed scored lower than the men not deployed on the sub-scales measuring stress associated with emotional inexpressiveness ($p < .05$), emotional detachment ($p < .01$), victimization ($p < .05$), and unassertiveness ($p < .05$), and lower on the overall female gender-role stress scale ($p < .05$). For women in the sample, those on deployment scored lower than those not on deployment only on the scale assessing stress related to failed nurturance ($p < .05$).

Gender Differences by Deployment History

Table 24 shows the scores on the Gender Role Stress Scale by gender, within deployment history. For those on deployment, the men in the sample scored significantly higher than women on the scale assessing stress from physical inadequacy ($p > .01$) and subordination to women ($p < .01$). The women on deployment scored higher than the men on deployment on the scale assessing stress from emotional detachment ($p < .01$), physical unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .01$), and failed nurturance ($p < .01$), as well as the overall female gender-role stress sub-scale ($p < .01$). For those not on deployment, men scored significantly higher than women on the scales assessing stress from physical inadequacy ($p < .01$), emotional inexpressiveness ($p < .01$), and subordination to women ($p < .01$), as well as the overall male gender-role stress scale ($p < .01$). Non-deployed women scored higher than non-deployed men on the sub-scale assessing stress from emotional detachment ($p < .01$), physical unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .01$), and failed nurturance ($p < .01$), as well as the overall female gender-role stress scale ($p < .01$).

SF-36

Deployment History

Table 25 depicts sub-scale transformed scores on the SF-36 for the deployed and the non-deployed samples. The only significant difference was on the scale assessing perceived mental health: those on deployment scored significantly lower than those not on deployment ($p < .01$).

Gender Differences

Table 26 indicates the sub-scale transformed scores on the SF-36 for male versus female samples. The men scored higher than the women on the sub-scales that measured perceived physical functioning ($p < .05$), physical role limitations ($p < .01$), emotional role limitations ($p < .01$), social functioning ($p < .01$), and vitality ($p < .01$).

Deployment History by Gender

Table 27 shows the sub-scale transformed scores on the SF-36 by deployment history, within gender. There were no observed differences between deployed and non-deployed men on any of the sub-scales. Deployed women had significantly poorer reported health compared to non-deployed women, as measured on physical role limitations ($p < .05$), emotional role limitations ($p < .05$), social functioning ($p < .01$) and mental health ($p < .01$)

Gender Differences by Deployment History

Table 28 depicts the sub-scale transformed scores on the SF-36 by gender, within deployment history. Among those who were deployed, women reported significantly poorer health than men on physical role limitation ($p < .01$), emotional role limitation ($p < .01$), social functioning ($p < .01$), mental health ($p < .01$), and vitality ($p < .01$). Deployed men did not report significantly poorer health than deployed women on any SF-36 sub-scale. For those not deployed, women reported poorer health than men on emotional role limitation ($p < .05$), social functioning ($p < .01$), and vitality ($p < .01$). Non-deployed men did not report significantly poorer health than non-deployed women on any SF-36 sub-scale.

PILOTS

Mental Health Inventory

Deployment History

Table 29 depicts the scores for each scale on the MHI for the pilot sample, comparing those who were deployed in the 18 months previous to the study, to those who were not deployed. The study found significant differences for both positive affect and depression ($p < .05$ and $p < .05$, respectively), suggesting the deployed pilots had poorer mental health, as measured by these sub-scales. Interestingly, on the sub-scale assessing behavioral/emotional control, those pilots who were deployed had scores indicating better functioning ($p < .01$) than the non-deployed pilots. The overall mental health index indicated deployed pilots had significantly poorer mental health functioning than pilots who did not deploy ($p < .05$).

Gender Differences

Table 30 shows the differences for each sub-scale of the MHI by gender for the pilot sample. Sub-scale scores indicated male pilots reported better mental health function in the areas of anxiety ($p < .05$) compared to female pilots. On the sub-scale measuring behavioral/emotional control, female pilots reported greater health compared to male pilots ($p < .01$). The gender difference on the overall mental health index was not significant.

Deployment History By Gender

Table 31 shows the sub-scale scores for the MHI for deployment history within gender. The only observed significant difference was that male pilots who were deployed had better behavioral/emotional control than male pilots who were not deployed ($p < .05$).

Gender Differences By Deployment History

Table 32 details the sub-scale scores on the MHI by gender, within deployment history. There were no significant differences by gender for pilots who reported being deployed in the 18 months previous to the study. For those who did not deploy in the 18 months previous to the study, male pilots reported better mental health on the emotional ties ($p < .05$) sub-scale than female pilots. Non-deployed female pilots reported better mental health than non-deployed male pilots on the sub-scale of behavioral/emotional control ($p < .05$).

Recent Life Events Checklist

Deployment History

Table 33 depicts the total score for the Recent Life Events Checklist. For the sample of pilots, those who reported deployment in the 18 months previous to the study obtained a significantly higher score compared to those who did not report deployment ($p < .01$). Table 34 shows the percent of those who fell into the low-, mild/moderate-, and major-risk categories, based on their scores on this scale.

Gender Differences

Table 35 shows the total score for the Recent Life Events Checklist by gender. There was no significant difference by gender. Table 36 reports the percent by gender of those who fell into the low-, mild/moderate-, and major-risk categories.

Deployment History by Gender

Table 37 indicates the total score for the Recent Life Events Checklist by deployment history, within gender. Male pilots who were deployed obtained a significantly higher score than male pilots who did not deploy ($p < .01$). There was no significant finding for women. Table 38 reports the percent of those who fell into the low-, mild/moderate-, and major-risk categories.

Gender Differences by Deployment History

Table 39 depicts the total score for the recent life events checklist by gender, within deployment history. There was no significant finding between deployed male and female pilots. For those who were not deployed, female pilots obtained a significantly higher score on the ($p < .05$) than male pilots. Table 40 shows the percent of those who fell into the low-, mild/moderate-, and major-risk categories.

Ways of Coping Checklist

Deployment History

Table 41 shows relative scores (percent of time used) obtained from the Ways of Coping Checklist questions. Those pilots who deployed in the 18 months previous to the study used escape/avoidance coping significantly more than those who did not deploy ($p<.05$). There were no other significant differences for this comparison.

Gender Differences

Table 42 depicts the relative scores for each coping strategy by gender. Male pilots reported using the strategies of distancing ($p<.05$), self-control ($p<.01$), and planful problem solving ($p<.01$) more than female pilots in the sample. On the other hand, female pilots reported using the strategies of seeking confrontive coping ($p<.05$), social support ($p<.01$), and escape/avoidance ($p<.01$) more than male pilots in the general sample.

Deployment History by Gender

Table 43 shows the relative scores for the percent of time each coping strategy was used by deployment history, within gender. There were no significant differences on this measure for these comparisons.

Gender Differences by Deployment History

Table 44 indicates the relative scores for the percent of time each coping strategy was used by gender, within deployment history. For those on deployment, female pilots reported using the strategy of escape/avoidance ($p<.05$) more than the deployed male pilots in the sample. For those not deployed, male pilots reported using self-control ($p<.01$) and planful problem solving ($p<.05$) more than female pilots. On the other hand, non-deployed female pilots reported using the coping strategy of seeking social support more than non-deployed male pilots ($p<.01$).

Gender Role Stress Scale

Deployment History

Table 45 depicts the scores on the Gender Role Stress Scale for deployed versus non-deployed pilots. The deployed pilots scored significantly lower on the scales measuring stress related to emotional inexpressiveness ($p<.05$). There were no other significant findings for this comparison.

Gender Differences

Table 46 depicts the scores on the Gender Role Stress Scale for male versus female pilots. The male pilots scored significantly higher on the scales measuring stress from physical inadequacy ($p<.01$) and subordination to women ($p<.01$), and the overall male gender-role stress scale ($p<.05$) than the women in the sample. The women in the sample scored significantly higher than the male pilots on the sub-scales assessing stress from intellectual inferiority ($p<.05$), emotional detachment ($p<.01$), physical

unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .01$), and failed nurturance ($p < .01$), and the overall female gender-role stress scale score ($p < .01$).

Deployment History by Gender

Table 47 depicts the scores on the Gender Role Stress Scale by deployment history, within gender. For male pilots, those who were deployed scored lower than the male pilots not deployed on the sub-scales measuring stress associated with emotional inexpressiveness ($p < .01$). There were no other significant findings for this comparison.

Gender Differences by Deployment History

Table 48 depicts the scores on the Gender Role Stress Scale by gender, within deployment history. For those on deployment, male pilots in the sample scored significantly higher than female pilots only on the scale assessing stress related to subordination to women ($p < .01$). Women on deployment scored higher than deployed male pilots on the scale assessing stress from intellectual inferiority ($p < .05$), emotional detachment ($p < .01$), physical unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .01$), and failed nurturance ($p < .01$), as well as the overall female gender-role stress sub-scale ($p < .01$). For those not on deployment, male pilots scored significantly higher than female pilots on the scales assessing stress from physical inadequacy ($p < .01$) and subordination to women ($p < .01$), as well as the overall male gender-role stress scale ($p < .05$). Non-deployed female pilots scored higher than non-deployed male pilots on the sub-scale assessing stress from emotional detachment ($p < .01$), physical unattractiveness ($p < .01$), victimization ($p < .01$), unassertiveness ($p < .05$), and failed nurturance ($p < .01$), as well as the overall female gender-role stress scale ($p < .01$).

SF-36

Deployment History

Table 49 shows sub-scale transformed scores on the SF-36 for deployed versus non-deployed pilots. The only significant difference was on the scale assessing perceived mental health: those on deployment scoring significantly lower than those not deployed ($p < .05$).

Gender Differences

Table 50 displays the sub-scale transformed scores on the SF-36 for the male versus female samples. Female pilots scores indicated better health than the male pilots surveyed on the sub-scales measuring perceived emotional role limitations ($p < .05$) and general health ($p < .01$).

Deployment History by Gender

Table 51 depicts the sub-scale transformed scores on the SF-36 by deployment history, within gender. There were no observed differences between deployed and non-deployed male pilots on any of the sub-scales. Deployed female pilots had significantly poorer reported health than non-deployed female pilots as measured on the sub-scale of mental health ($p < .05$).

Gender Differences by Deployment History

Table 52 shows the sub-scale transformed scores on the SF-36 by gender, within deployment history. For those who were deployed, female pilots reported significantly better health as measured by the general health sub-scale ($p < .05$). For those not deployed, there were no significant differences on this measure for this comparison.

DISCUSSION

OVERALL SAMPLE

Deployment History Comparison

The results comparing those deployed to those not deployed in the 18 months previous to the study were not too surprising. From prior research, the finding that those who were deployed reported poorer mental health was expected. This study advances earlier ones in that, besides the differences found in overall perception of mental health (SF-36), it found more specific differences with deployment that were related to decreased positive affect and increased depression. Not surprisingly, the study also found that those who were deployed reported significantly more recent stressful life events. These events may relate to the poorer mental health reported by those who had deployed. It is important to keep in mind that, although there were significant differences in reported mental health status, the overall mental health and physical health of deployed members were much better than the average person, based on established norms. Also, to be worldwide deployable, one has to be in good physical and mental health. So perhaps some of those who were deployed were a slightly biased sample, as they should be very healthy to begin with.

Two truly interesting findings on deployment history were the differences in coping style and on the Gender Role Stress Scale. Questions arise from these findings:

- Why did those on deployment report relying more on confrontive coping skills than non-deployed individuals, who relied more on seeking social support?
- Why did the findings suggest that those on deployment were, on average, much lower on the measure of identification with the female gender role?

Was there some sort of selection bias in deployment, where those identifying more with the male gender role were more likely to volunteer, or to be in career fields that were more likely to be deployed?

Or is it that events during deployment made those filling out the survey more likely to identify with the male gender role (i.e., does deployment make one more masculine)?

Unfortunately, since this was not a pre/post study, we cannot answer these questions. But, regardless of the reasons, this study does suggest that those active duty members who deployed are now different than those who did not deploy, on the GRAMH measures of gender-role stress and coping styles.

Gender Differences Comparison

The study highlighted several differences between active duty men and women on all the measures of interest. But, these findings are similar to those gender differences in the general population, with a few exceptions.

First, women were significantly more likely to report suffering ill physical health and mental health, as measured by the MHI and SF-36. Gender differences on these measures, although not large, are great from a population perspective. According to Ware (1993), a two-point difference in a population-based survey indicates a great difference in health care utilization and related costs. Again, this finding is similar to that found in civilian studies.

Second, the gender differences in coping strategies reported in this study follow stereotypic gender lines: men used distancing, self-control, and planful problem solving, while women were more likely to use positive reappraisal, escape/avoidance, or seek social support in dealing with problems.

Third, gender differences obtained on the GRSS also followed those found in civilian studies, with one exception: women were more likely to be stressed about performance-failure issues than were men. In the general population, this is stereotypically a male gender-role issue. Perhaps something about the military environment (i.e., its focus on performance standards) changed this for the men and women in the sample.

Deployment History by Gender Comparison

Deployed Versus Non-Deployed Women

The comparison between deployed and non-deployed women revealed several interesting differences.

First, deployed women reported poorer mental and physical health, as measured by the SF-36 and the MHI. This finding is not a great surprise, as the deployed women also reported significantly more stressful life events than non-deployed women.

Second, deployed women actually reported better mental health on sub-scales measuring behavioral/emotional control and emotional ties. Perhaps something about the deployment environment (living in close quarters with others, high demand for performance, etc.) positively impacted these aspects of the deployed women's mental health.

Third, the Gender Role Stress Scale did not greatly differentiate between deployed and non-deployed women, except that non-deployed women reported a greater impact by challenges to their ability to nurture (Failed Nurturance sub-scale). We did not expect great differences on the GRSS.

Fourth, differences observed in coping skills suggested deployed women used escape/avoidance more, and seeking social support and planful problem solving less, than non-deployed women. This may explain some of the differences found on measures of physical health and mental health. Perhaps deployed women are using coping skills that are less effective than the ones they use when they are not deployed. To examine this question, the research team will analyze the dataset further and report its findings at a later date.

Deployed Versus Non-Deployed Men

The comparison between deployed and non-deployed men revealed a pattern very different from the one for women.

The only reported health impacts on either the SF-36 or MHI were for decreased positive affect and poorer overall mental health for deployed men, compared to non-deployed men. Similar to the women, deployed men reported significantly greater numbers of recent stressful events. This is not surprising, given their deployment.

The truly interesting findings for men were on the GRSS. The deployed men had scores indicating they identified even more with the male gender role and even less with the female gender role than non-deployed men. There are at least two possible explanations for this finding: first, perhaps men who identified more with the male gender role were more likely to be in jobs that were more likely to be deployed; or, second, perhaps spending time in the harsh deployment environment brought out those stereotypical male traits.

Gender Differences by Deployment History Comparison

The findings from this comparison are strikingly consistent with gender differences observed for non-deployed members.

For example, deployed women reported significantly poorer mental and physical health than deployed men, as measured by the SF-36 and the MHI. But, the same pattern was seen between men and women who were not deployed in the 18 months previous to the study. The only difference was that deployed women reported a greater decrease in positive affect and poorer overall mental health.

PILOTS

Deployment History Comparison

Among the pilots surveyed, the differences found by this study were quit similar to those found for the general Air Force population. Deployed pilots reported overall poorer mental health, as measured by the SF-36 and MHI. Given the fact that deployed pilots reported significantly more stressful life events in the 18 months previous to the

study, it is understandable that they were reporting poorer mental health. It is important to keep in mind that, although there were significant differences in reported mental health status, the overall mental health and physical health of deployed pilots were much better than the average person, based on established norms.

Gender Differences Comparison

The pattern of findings from the comparison of male and female pilots was significantly different from the gender pattern for the whole survey sample. Pilots reported significantly different mental and physical health status by gender (women reporting poorer health), but these differences were smaller, and fewer sub-scales showed differences when compared to general Air Force population data. This suggests that perhaps female pilots are not too different from male pilots in the areas of perceived health. One reason may be that there was no difference by gender in the number of recent life stressors for pilots. Female and male pilots reported similar numbers of stressful life events. The observed differences in perceived health status may be related to observed differences in coping styles used by male and female pilots. Perhaps this difference somehow buffered male pilots better from the impact of their stressors.

Two other interesting findings were: 1) female pilots were more likely than male pilots to use confrontive coping, and 2) female pilots were more likely to take exception to attacks on their intellectual abilities. These two characteristics are more stereotypically masculine in our society. Perhaps to be a successful pilot, women find it important to cultivate these parts of their personalities. On the other hand, perhaps there is a selection bias in the aviation field that simply pulls for women with these characteristics.

Deployment History by Gender Comparison

This comparison yielded few findings, but they were significant. Deployed female pilots reported poorer mental health than non-deployed female pilots, but only on one sub-scale of one measure. Perhaps this lack of findings for female pilots was because there was no difference in the number of recent stressful life events between deployed and non-deployed female pilots. On the other hand, deployed male pilots reported significantly more stressful life events than non-deployed male pilots. But, no difference in physical or mental health was observed for male pilots, based on deployment history.

Gender Differences by Deployment History Comparison

The findings from this comparison are quite interesting.

First, there were almost no significant differences between male and female pilots on deployment. The primary health-related difference was that female pilots' perceived quality of general health status, as measured by the SF-36, was poorer than that of male pilots. We also found that deployed female pilots were more distressed over attacks on

their intellectual ability (a masculine gender role characteristic) than men were. However, non-deployed female pilots were not. Again, there are two possible explanations: 1) the deployment environment brings out this characteristic, or 2) women with this characteristic were more likely to have gone on deployment. Further study is needed to answer this question.

Another interesting finding in this comparison was that responses from deployed female pilots were very similar to those from deployed male pilots. But, responses from non-deployed female pilots were very different than those from non-deployed male pilots. For example, non-deployed female pilots reported better emotional/behavioral control, more use of social support, more recent stressful life events, and less use of planful problem solving and self-control strategies than non-deployed male pilots. Further, non-deployed male and female pilots fell much more into the stereotypical roles, as measured by the GRSS, than deployed male and female pilots. The current study answered the question "Do we see any gender differences by deployment history?" Future study is needed to answer the question "Why do we see these differences?"

CONCLUSIONS

Overall, our findings suggest that gender differences due to deployment are minimal, except on certain global mental health measures. By no means were they universal to all deployed men and women. Also, although we found gender and deployment history differences on these measures, scores were still within the normal range of functioning. What we found was that there were differences that may relate to increased medical utilization.

In furthering these findings, we will conduct statistical modeling to determine if some deployed women and men benefited from certain coping strategies that buffered them from developing the mental and physical health concerns noted in this study. The goal of this modeling will be to determine what preventive services should be offered to active duty men and women before they are deployed.

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TABLES

Table 1: Distribution of response rates

Deployed by Gender		Response Rate
General		
No		
Male		31% (731/2350)
Female		38% (882/2350)
Yes		
Male		45% (1052/2350)
Female		53% (616/1164)
Overall		40% (3281/8214)
Pilots		
Male		41% (409/1000)
Female		43% (139/321)
Overall		41% (548/1321)
Total		40% (3829/9535)

Table 2: Distribution of demographic variables for individuals not deployed, by gender

Variable	Category	Population (n=237,380)	Male Samples (n=2,350)	Respondents (n=731)	Population (n=46,218)	Female Samples (n=2,350)	Respondents (n=882)
Rank	Enlisted	77.3%	77.6%	72.7%	78.8%	80.1%	77.2%
	Officer	22.7%	22.4%	27.4%	21.2%	19.9%	22.8%
Age	<20	0.3%	0.1%	0.1%	0.6%	0.2%	0.4%
	20-<25	19.6%	19.4%	17.3%	28.4%	29.0%	27.9%
	25-<30	22.3%	21.1%	18.0%	26.1%	25.1%	24.9%
	30-<35	22.6%	23.0%	21.0%	18.2%	20.1%	20.9%
	35-<40	20.3%	21.7%	22.7%	15.2%	13.8%	12.8%
	40-<45	10.4%	10.0%	13.1%	8.8%	9.1%	9.5%
	45-<50	3.6%	3.5%	5.9%	2.4%	2.3%	3.0%
	50-<55	0.7%	1.0%	1.6%	0.3%	0.3%	0.6%
	55-<60	0.1%	0.1%	0.3%	0.1%	0.0%	0.0%
	>=60	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Marital Status	Singled	25.7%	26.6%	26.9%	40.3%	40.0%	42.8%
	Married	74.3%	73.4%	73.1%	59.7%	60.0%	57.2%

Table 3: Distribution of demographic variables for individuals deployed, by gender

Variable	Category	Population (n=12,240)	Male		Female*	
			Samples (n=2,350)	Respondents (n=1,052)	Population (n=1,164)	Respondents (n=616)
Rank	Enlisted	85.8%	84.6%	85.2%	88.3%	88.5%
	Officer	14.2%	15.4%	14.8%	11.7%	11.5%
Age	<20	0.0%	0.0%	0.0%	0.2%	0.0%
	20-<25	26.4%	24.8%	18.4%	35.1%	30.5%
	25-<30	26.0%	26.9%	23.1%	30.9%	29.6%
	30-<35	22.5%	22.6%	25.9%	15.2%	16.4%
	35-<40	16.9%	17.4%	22.1%	11.6%	16.1%
	40-<45	6.3%	6.5%	8.4%	5.8%	5.7%
	45-<50	1.6%	1.6%	1.8%	1.0%	1.5%
	50-<55	0.2%	0.2%	0.3%	0.1%	0.2%
	55-<60	0.0%	0.0%	0.0%	0.0%	0.0%
	>=60	0.0%	0.0%	0.0%	0.0%	0.0%
Marital Status	Singled	33.6%	34.2%	30.4%	52.7%	52.0%
	Married	66.4%	65.8%	69.6%	47.3%	48.0%

* = Includes 100% of deployed females

Table 4: Distribution of demographic variables for pilots, by gender

Variable	Category	Population (n=15,041)	Male		Female*	
			Samples (n=1,000)	Respondents (n=409)	Population (n=321)	Respondents (n=139)
Age	20-<25	0.8%	0.7%	1.3%	0.9%	2.3%
	25-<30	21.1%	19.9%	19.1%	50.5%	48.8%
	30-<35	36.2%	35.5%	29.3%	29.9%	24.0%
	35-<40	22.8%	24.9%	23.2%	14.6%	17.1%
	40-<45	15.1%	15.7%	21.4%	4.0%	6.2%
	45-<50	3.6%	3.0%	5.4%	0.0%	1.6%
	50-<55	0.3%	0.2%	0.3%	0.0%	0.0%
Marital Status	Singled	15.9%	15.7%	13.0%	47.4%	39.3%
	Married	84.1%	84.3%	87.0%	52.6%	60.7%

* = Includes 100% of female pilots

Table 5: Whole sample scores for the Mental Health Inventory, by deployment history

Scale		Deployed?	
		Yes	No
Anxiety	N	1667	1612
	Mean	45.89	46.22
	STD	6.55	6.18
Depression	N	1667	1612
	Mean	*22.27	22.62
	STD	4.54	4.37
Behavioral/emotional control	N	1667	1612
	Mean	**26.08	25.80
	STD	2.90	2.64
Positive affect	N	1667	1612
	Mean	**43.16	45.08
	STD	10.74	10.43
Emotional ties	N	1667	1612
	Mean	9.87	9.73
	STD	2.36	2.26
Mental health index	N	1667	1612
	Mean	**147.28	149.46
	STD	17.37	16.75

* = $p < .05$

** = $p < .01$

Table 6: Whole sample scores for the Mental Health Inventory, by gender

Scale		Male	Female
Anxiety	N	1781	1498
	Mean	**46.65	45.35
	STD	5.97	6.75
Depression	N	1781	1498
	Mean	**22.81	22.00
	STD	4.28	4.62
Behavioral/emotional control	N	1781	1498
	Mean	**25.82	26.09
	STD	2.68	2.88
Positive affect	N	1781	1498
	Mean	44.28	43.90
	STD	10.57	10.69
Emotional ties	N	1781	1498
	Mean	*9.88	9.70
	STD	2.26	2.37
Mental health index	N	1781	1498
	Mean	**149.44	147.05
	STD	16.55	17.65

* = $p < .05$

** = $p < .01$

Table 7: Whole sample scores for the Mental Health Inventory, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Anxiety	N	1051	730	616	882
	Mean	46.55	46.79	**44.77	45.75
	STD	6.11	5.76	7.10	6.47
Depression	N	1051	730	616	882
	Mean	22.67	23.01	**21.59	22.29
	STD	4.36	4.17	4.76	4.51
Behavioral/emotional control	N	1051	730	616	882
	Mean	25.89	25.72	**26.41	25.88
	STD	2.80	2.50	3.03	2.76
Positive affect	N	1051	730	616	882
	Mean	**43.61	45.24	**42.40	44.95
	STD	10.68	10.34	10.79	10.50
Emotional ties	N	1051	730	616	882
	Mean	9.87	9.89	*9.86	9.60
	STD	2.30	2.22	2.46	2.29
Mental health index	N	1051	730	616	882
	Mean	*148.60	150.66	**145.02	148.47
	STD	16.77	16.17	18.16	17.16

* = p<.05

** = p<.01

Table 8: Whole sample scores for the Mental Health Inventory, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Anxiety	N	1051	616	730	882
	Mean	**46.55	44.77	**46.79	45.75
	STD	6.11	7.10	5.76	6.47
Depression	N	1051	616	730	882
	Mean	**22.67	21.59	**23.01	22.29
	STD	4.36	4.76	4.17	4.51
Behavioral/emotional control	N	1051	616	730	882
	Mean	**25.89	26.41	25.72	25.88
	STD	2.80	3.03	2.50	2.76
Positive affect	N	1051	616	730	882
	Mean	*43.61	42.40	45.24	44.95
	STD	10.68	10.79	10.34	10.50
Emotional ties	N	1051	616	730	882
	Mean	9.87	9.86	**9.89	9.60
	STD	2.30	2.46	2.22	2.29
Mental health index	N	1051	616	730	882
	Mean	**148.60	145.02	**150.66	148.47
	STD	16.77	18.16	16.17	17.16

* = p<.05

** = p<.01

Table 9: Whole sample scores for the Recent Life Events Checklist, by deployment history

		Deployed?	
		Yes	No
Life events	N	1586	1534
	Mean	*234.31	223.05
	STD	137.60	131.48

* = $p < .05$

Table 10: Whole sample risk factor scores for the Recent Life Events Checklist, by deployment history

		Deployed?		
Risk of significant health change		Yes	No	Total
Low	N	489	505	994
	Percent	30.8	32.9	31.9
Mild	N	218	244	462
	Percent	13.7	15.9	14.8
Moderate	N	425	388	813
	Percent	26.8	25.3	26.1
Major	N	454	397	851
	Percent	28.6	25.9	27.3

Table 11: Whole sample scores for the Recent Life Events Checklist, by gender

		Male	Female
Life events	N	1712	1408
	Mean	**217.90	241.99
	STD	132.06	136.78

** = $p < .01$

Table 12: Whole sample risk factor scores for the Recent Life Events Checklist, by deployment history within gender

		**Gender		
Risk of significant health change		Male	Female	Total
Low	N	602	392	994
	Percent	35.2	27.8	31.9
Mild	N	253	209	462
	Percent	14.8	14.8	14.8
Moderate	N	436	377	813
	Percent	25.5	26.8	26.1
Major	N	421	430	851
	Percent	24.6	30.5	27.3

** = $p < .01$

Table 13: Whole sample scores for the Recent Life Events Checklist, by deployment history within gender

		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Life events	N	1003	709	583	825
	Mean	*224.27	208.89	*251.58	235.21
	STD	136.33	125.31	138.16	135.47

* = $p < .05$

Table 14: Whole sample risk factor scores for the Recent Life Events Checklist, by deployment history within gender

Risk of significant health change		Male Deployed?		Female Deployed?		Total
		Yes	No	Yes	No	
Low	N	344	258	145	247	994
	Percent	34.3	36.4	24.9	29.9	31.9
Mild	N	135	118	83	126	462
	Percent	13.5	16.6	14.2	15.3	14.8
Moderate	N	257	179	168	209	813
	Percent	25.6	25.2	28.8	25.3	26.1
Major	N	267	154	187	243	851
	Percent	26.6	21.7	32.1	29.5	27.3

Table 15: Whole sample scores for the Recent Life Events Checklist, by gender within deployment history

		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Life events	N	1003	583	709	825
	Mean	**224.27	251.58	**208.89	235.21
	STD	136.33	138.16	125.31	135.47

** = $p < .01$

Table 16: Whole sample risk factor scores for the Recent Life Events Checklist, by deployment history within gender

		Deployed?				Total
		**Yes		**No		
Risk of significant health change		Male	Female	Male	Female	
Low	N	344	145	258	247	994
	Percent	34.3	24.9	36.4	29.9	31.9
Mild	N	135	83	118	126	462
	Percent	13.5	14.2	16.6	15.3	14.8
Moderate	N	257	168	179	209	813
	Percent	25.6	28.8	25.2	25.3	26.1
Major	N	267	187	154	243	851
	Percent	26.6	32.1	21.7	29.5	27.3

** = $p < .01$

Table 17: Relative scores for the Ways of Coping checklist, by deployment history

Coping skill		Deployed?	
		Yes	No
Confrontive coping	N	1657	1603
	Mean	**11.04	10.70
	STD	4.52	4.40
Distancing	N	1657	1603
	Mean	11.47	11.20
	STD	5.85	5.35
Self-controlling	N	1657	1603
	Mean	15.26	14.97
	STD	5.05	4.72
Seeking social support	N	1657	1603
	Mean	**13.21	14.21
	STD	5.28	5.97
Accepting responsibility	N	1657	1603
	Mean	11.75	11.54
	STD	5.37	5.20
Escape/avoidance	N	1657	1603
	Mean	7.17	7.03
	STD	5.33	5.44
Planful problem-solving	N	1657	1603
	Mean	17.31	17.24
	STD	6.84	6.74
Positive reappraisal	N	1657	1603
	Mean	12.78	13.12
	STD	5.66	6.10

* = $p < .05$

** = $p < .01$

Table 18: Relative scores for the Ways of Coping checklist, by gender

Coping skill		Male	Female
Confrontive coping	N	1770	1490
	Mean	10.93	10.80
	STD	4.74	4.11
Distancing	N	1700	1490
	Mean	**11.73	10.88
	STD	6.10	4.94
Self-controlling	N	1770	1490
	Mean	**15.49	14.67
	STD	5.37	4.21
Seeking social support	N	1770	1490
	Mean	**12.97	14.57
	STD	5.90	5.22
Accepting responsibility	N	1770	1490
	Mean	11.55	11.77
	STD	5.48	5.04
Escape/avoidance	N	1770	1490
	Mean	**6.50	7.82
	STD	5.39	5.29
Planful problem-solving	N	1770	1490
	Mean	**18.24	16.14
	STD	7.19	6.09
Positive reappraisal	N	1770	1490
	Mean	**12.60	13.36
	STD	6.01	5.71

* = $p < .05$

** = $p < .01$

Table 19: Relative scores for the Ways of Coping checklist, by gender within deployment history

Coping Skill		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Confrontive coping	N	1045	612	725	878
	Mean	11.11	10.91	10.66	10.72
	STD	4.86	3.87	4.56	4.27
Distancing	N	1045	612	725	878
	Mean	11.67	11.14	**11.80	10.70
	STD	6.38	4.81	5.67	5.02
Self-controlling	N	1045	612	725	878
	Mean	**15.52	14.80	**15.44	14.57
	STD	5.64	3.82	4.97	4.46
Seeking social support	N	1045	612	725	878
	Mean	**12.70	14.07	**13.35	14.92
	STD	5.37	5.01	6.57	5.33
Accepting responsibility	N	1045	612	725	878
	Mean	11.63	11.97	11.43	11.63
	STD	5.51	5.12	5.45	4.98
Escape/avoidance	N	1045	612	725	878
	Mean	**6.50	8.31	**6.49	7.48
	STD	5.23	5.32	5.62	5.24
Planful problem-solving	N	1045	612	725	878
	Mean	**18.33	15.58	**18.10	16.53
	STD	7.55	4.96	6.65	6.74
Positive reappraisal	N	1045	612	725	878
	Mean	*12.52	13.23	*12.72	13.45
	STD	5.80	5.39	6.30	5.92

* = $p < .05$

** = $p < .01$

Table 20: Relative scores for the Ways of Coping checklist by deployment history within gender

Coping Skill		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Confrontive coping	N	1045	725	612	878
	Mean	11.11	10.66	10.91	10.72
	STD	4.86	4.56	3.87	4.27
Distancing	N	1045	725	612	878
	Mean	11.67	11.80	11.14	10.70
	STD	6.38	5.67	4.81	5.02
Self-controlling	N	1045	725	612	878
	Mean	15.52	15.44	14.80	14.57
	STD	5.64	4.97	3.82	4.46
Seeking social support	N	1045	725	612	878
	Mean	**12.70	13.35	**14.07	14.92
	STD	5.37	6.57	5.01	5.33
Accepting responsibility	N	1045	725	612	878
	Mean	11.63	11.43	11.97	11.63
	STD	5.51	5.45	5.12	4.98
Escape/avoidance	N	1045	725	612	878
	Mean	6.50	6.49	**8.31	7.48
	STD	5.23	5.62	5.32	5.24
Planful problem-solving	N	1045	725	612	878
	Mean	18.33	18.10	**15.58	16.53
	STD	7.55	6.65	4.96	6.74
Positive reappraisal	N	1045	725	612	878
	Mean	12.52	12.72	13.23	13.45
	STD	5.80	6.30	5.39	5.92

* = $p < .05$

** = $p < .01$

Table 21: Whole sample scores on the Gender Role Stress Inventory, by deployment history

Scale		Deployed?	
		Yes	No
Male Gender-Role Stress Physical inadequacy	N	1629	1572
	Mean	18.96	18.71
	STD	8.43	7.98
Emotional inexpressiveness	N	1629	1572
	Mean	11.47	11.78
	STD	6.36	6.18
Subordination to women	N	1629	1572
	Mean	6.98	6.67
	STD	6.59	6.17
Intellectual inferiority	N	1629	1572
	Mean	**10.53	10.97
	STD	6.36	6.13
Performance failure	N	1629	1572
	Mean	26.62	26.84
	STD	8.38	8.23
Female Gender-Role Stress Emotional detachment	N	1629	1572
	Mean	**23.67	26.49
	STD	11.49	11.46
Physical unattractiveness	N	1629	1572
	Mean	**14.87	16.47
	STD	8.77	8.66
Victimization	N	1629	1572
	Mean	**14.13	15.78
	STD	6.72	6.70
Unassertiveness	N	1629	1572
	Mean	**16.52	17.41
	STD	7.37	7.15
Failed nurturance	N	1629	1572
	Mean	**23.00	24.68
	STD	9.24	9.20
Male Gender-Role Stress	N	1629	1572
	Mean	74.55	74.97
	STD	30.10	28.89
Female Gender-Role Stress	N	1629	1572
	Mean	**92.18	100.82
	STD	37.11	36.98
Male Gender-Role Stress + Female Gender-Role Stress	N	1629	1572
	Mean	**166.74	175.80
	STD	63.75	62.12

** = $p < .01$

Table 22: Whole sample scores on the Gender Role Stress Inventory, by gender

Scale		Male	Female
Male Gender-Role Stress			
Physical inadequacy	N	1753	1448
	Mean	**19.59	17.92
	STD	8.74	7.43
Emotional inexpressiveness	N	1753	1448
	Mean	**11.87	11.32
	STD	6.54	5.92
Subordination to women	N	1753	1448
	Mean	**7.59	5.90
	STD	7.09	5.27
Intellectual inferiority	N	1753	1448
	Mean	10.58	10.94
	STD	6.49	5.94
Performance failure	N	1753	1448
	Mean	**26.45	27.07
	STD	8.78	7.69
Female Gender-Role Stress			
Emotional detachment	N	1753	1448
	Mean	**20.86	30.14
	STD	10.50	10.72
Physical unattractiveness	N	1753	1448
	Mean	**12.55	19.40
	STD	7.49	8.70
Victimization	N	1753	1448
	Mean	**12.47	17.93
	STD	6.17	6.21
Unassertiveness	N	1753	1448
	Mean	**15.94	18.18
	STD	7.27	7.08
Failed nurturance	N	1753	1448
	Mean	**21.35	26.82
	STD	8.77	8.93
Male Gender-Role Stress			
	N	1753	1448
	Mean	**76.08	73.16
	STD	31.82	26.36
Female Gender-Role Stress			
	N	1753	1448
	Mean	**83.17	112.48
	STD	34.20	34.47
Male Gender-Role Stress + Female Gender-Role Stress			
	N	1753	1448
	Mean	**159.25	185.63
	STD	64.20	58.61

** = $p < .01$

Table 23: Whole sample scores on the Gender Role Stress Inventory, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Male Gender-Role Stress Physical inadequacy	N	1037	716	592	856
	Mean	19.52	19.69	17.97	17.89
	STD	8.95	8.42	7.34	7.50
Emotional inexpressiveness	N	1037	716	592	856
	Mean	*11.57	12.31	11.28	11.34
	STD	6.60	6.44	5.93	5.92
Subordination to women	N	1037	716	592	856
	Mean	7.54	7.65	5.99	5.84
	STD	7.14	7.03	5.35	5.21
Intellectual inferiority	N	1037	716	592	856
	Mean	10.35	10.92	10.84	11.02
	STD	6.64	6.26	5.83	6.01
Performance failure	N	1037	716	592	856
	Mean	26.36	26.56	27.07	27.07
	STD	8.84	8.69	7.50	7.83
Female Gender-Role Stress Emotional detachment	N	1037	716	592	856
	Mean	**20.21	21.81	29.75	30.41
	STD	10.56	10.34	10.49	10.87
Physical unattractiveness	N	1037	716	592	856
	Mean	12.31	12.90	19.34	19.45
	STD	7.66	7.23	8.81	8.63
Victimization	N	1037	716	592	856
	Mean	*12.16	12.92	17.58	18.16
	STD	6.23	6.07	6.13	6.25
Unassertiveness	N	1037	716	592	856
	Mean	*15.62	16.41	18.09	18.25
	STD	7.40	7.07	7.05	7.11
Failed nurturance	N	1037	716	592	856
	Mean	21.19	21.56	*26.16	27.28
	STD	8.85	8.66	9.05	8.82
Male Gender Role Stress	N	1037	716	592	856
	Mean	75.36	77.14	73.14	73.16
	STD	32.30	31.10	25.76	26.78
Female Gender Role Stress	N	1037	716	592	856
	Mean	*81.48	85.61	110.93	113.55
	STD	34.75	33.26	33.51	35.09
Male Gender-Role Stress + Female Gender-Role Stress	N	1037	716	592	856
	Mean	156.84	162.75	184.07	186.71
	STD	65.33	62.40	56.92	59.76

* = p<.05

** = p<.01

Table 24: Whole sample scores on the Gender Role Stress Inventory, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Male Gender-Role Stress					
Physical inadequacy	N	1037	592	716	856
	Mean	**19.52	17.97	**19.69	17.89
	STD	8.95	7.34	8.42	7.50
Emotional inexpressiveness	N	1037	592	716	856
	Mean	11.57	11.28	**12.31	11.34
	STD	6.60	5.93	6.44	5.92
Subordination to women	N	1037	592	716	856
	Mean	**7.54	5.99	**7.65	5.84
	STD	7.14	5.35	7.03	5.21
Intellectual inferiority	N	1037	592	716	856
	Mean	10.35	10.84	10.92	11.02
	STD	6.64	5.83	6.26	6.01
Performance failure	N	1037	592	716	856
	Mean	26.36	27.07	26.56	27.07
	STD	8.84	7.50	8.69	7.83
Female Gender-Role Stress					
Emotional detachment	N	1037	592	716	856
	Mean	**20.21	29.75	**21.81	30.41
	STD	10.56	10.49	10.34	10.87
Physical unattractiveness	N	1037	592	716	856
	Mean	**12.31	19.34	**12.90	19.45
	STD	7.66	8.81	7.23	8.63
Victimization	N	1037	592	716	856
	Mean	**12.16	17.58	**12.92	18.16
	STD	6.23	6.13	6.07	6.25
Unassertiveness	N	1037	592	716	856
	Mean	**15.62	18.09	**16.41	18.25
	STD	7.40	7.05	7.07	7.11
Failed nurturance	N	1037	592	716	856
	Mean	**21.19	26.16	**21.56	27.28
	STD	8.85	9.05	8.66	8.82
Male Gender-Role Stress					
	N	1037	592	716	856
	Mean	75.36	73.14	**77.14	73.16
	STD	32.30	25.76	31.10	26.78
Female Gender-Role Stress					
	N	1037	592	716	856
	Mean	**81.48	110.93	**85.61	113.55
	STD	34.75	33.51	33.26	35.09
Male Gender-Role Stress + Female Gender-Role Stress					
	N	1037	592	716	856
	Mean	**156.84	184.07	**162.75	186.71
	STD	65.33	56.92	62.40	59.76

* = $p < .05$

** = $p < .01$

Table 25: Whole sample transformed scores for the SF-36, by deployment history

Scale		Deployed?	
		Yes	No
Physical functioning	N	1653	1609
	Mean	93.38	93.17
	STD	13.78	13.47
Role physical	N	1653	1609
	Mean	89.44	90.37
	STD	23.74	22.98
Role emotional	N	1653	1609
	Mean	85.42	86.61
	STD	29.56	27.51
Social functioning	N	1653	1609
	Mean	86.72	87.36
	STD	20.42	19.76
Mental health	N	1653	1609
	Mean	**73.72	75.88
	STD	18.94	17.66
Vitality	N	1653	1609
	Mean	58.53	59.42
	STD	21.53	21.55
General health	N	1653	1609
	Mean	77.01	76.86
	STD	16.95	17.11
Health transition	N	1653	1609
	Mean	45.92	45.57
	STD	14.16	14.49
Bodily pain	N	1653	1609
	Mean	81.02	81.91
	STD	19.67	18.95

* = $p < .05$

** = $p < .01$

Table 26: Whole sample transformed scores for the SF-36, by gender

Scale		Male	Female
Physical functioning	N	1772	1490
	Mean	**93.73	92.74
	STD	13.60	13.64
Role physical	N	1772	1490
	Mean	**91.10	88.47
	STD	22.15	24.68
Role emotional	N	1772	1490
	Mean	**87.92	83.72
	STD	26.76	30.43
Social functioning	N	1772	1490
	Mean	**88.81	84.92
	STD	18.46	21.71
Mental health	N	1772	1490
	Mean	**75.65	73.75
	STD	17.56	19.19
Vitality	N	1772	1490
	Mean	**61.39	56.09
	STD	20.37	22.53
General health	N	1772	1490
	Mean	77.24	76.58
	STD	16.71	17.40
Health transition	N	1772	1490
	Mean	46.05	45.39
	STD	13.75	14.97
Bodily pain	N	1772	1490
	Mean	81.52	81.39
	STD	18.99	19.71

* = $p < .05$

** = $p < .01$

Table 27: Whole sample transformed scores for the SF-36, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Physical functioning	N	1042	730	611	879
	Mean	93.73	93.72	92.77	92.72
	STD	14.02	13.00	13.36	13.83
Role physical	N	1042	730	611	879
	Mean	90.98	91.27	*86.81	89.62
	STD	22.19	22.10	25.98	23.68
Role emotional	N	1042	730	611	879
	Mean	87.59	88.40	*81.72	85.12
	STD	27.40	25.83	32.60	28.77
Social functioning	N	1042	730	611	879
	Mean	88.77	88.87	**83.22	86.11
	STD	18.63	18.22	22.76	20.89
Mental health	N	1042	730	611	879
	Mean	74.97	76.62	**71.57	75.26
	STD	18.01	16.87	20.25	18.27
Vitality	N	1042	730	611	879
	Mean	60.66	62.43	54.90	56.92
	STD	20.48	20.18	22.78	22.34
General health	N	1042	730	611	879
	Mean	77.46	76.92	76.25	76.81
	STD	16.45	17.07	17.74	17.16
Health transition	N	1042	730	611	879
	Mean	46.09	45.99	45.62	45.22
	STD	13.63	13.93	15.02	14.95
Bodily pain	N	1042	730	611	879
	Mean	81.13	82.06	80.82	81.78
	STD	19.21	18.67	20.45	19.19

* = $p < .05$

** = $p < .01$

Table 28: Whole sample transformed scores for the SF-36, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Physical functioning	N	1042	611	730	879
	Mean	93.73	92.77	93.72	92.72
	STD	14.02	13.36	13.00	13.83
Role physical	N	1042	611	730	879
	Mean	**90.98	86.81	91.27	89.62
	STD	22.19	25.98	22.10	23.68
Role emotional	N	1042	611	730	879
	Mean	**87.59	81.72	*88.40	85.12
	STD	27.40	32.60	25.83	28.77
Social functioning	N	1042	611	730	879
	Mean	**88.77	83.22	**88.87	86.11
	STD	18.63	22.76	18.22	20.89
Mental health	N	1042	611	730	879
	Mean	**74.97	**71.57	76.62	75.26
	STD	18.01	20.25	16.87	18.27
Vitality	N	1042	611	730	879
	Mean	**60.66	54.90	**62.43	56.92
	STD	20.48	22.78	20.18	22.34
General health	N	1042	611	730	879
	Mean	77.46	76.25	76.92	76.81
	STD	16.45	17.74	17.07	17.16
Health transition	N	1042	611	730	879
	Mean	46.09	45.62	45.99	45.22
	STD	13.63	15.02	13.93	14.95
Bodily pain	N	1042	611	730	879
	Mean	81.13	80.82	82.06	81.78
	STD	19.21	20.45	18.67	19.19

* = $p < .05$

** = $p < .01$

Table 29: Aviator sample scores for the Mental Health Inventory, by deployment history

Scale		Deployed?	
		Yes	No
Anxiety	N	233	314
	Mean	47.67	48.41
	STD	5.02	5.12
Depression	N	233	314
	Mean	*22.69	23.33
	STD	3.81	3.71
Behavioral/emotional control	N	233	314
	Mean	**25.89	25.28
	STD	2.73	2.00
Positive affect	N	233	314
	Mean	*45.12	46.92
	STD	9.38	9.12
Emotional ties	N	233	314
	Mean	9.21	9.38
	STD	2.17	1.89
Mental health index	N	233	314
	Mean	*150.58	153.33
	STD	14.01	14.14

* = p<.05

** = p<.01

Table 30: Aviator sample scores for the Mental Health Inventory, by gender

Scale		Male	Female
Anxiety	N	408	139
	Mean	*48.39	47.25
	STD	5.10	4.97
Depression	N	408	139
	Mean	23.14	22.82
	STD	3.82	3.61
Behavioral/emotional control	N	408	139
	Mean	**25.39	25.99
	STD	2.32	2.42
Positive affect	N	408	139
	Mean	46.14	46.21
	STD	9.23	9.41
Emotional ties	N	408	139
	Mean	9.40	9.05
	STD	1.99	2.06
Mental health index	N	408	139
	Mean	152.44	151.33
	STD	14.29	14.31

* = p<.05

** = p<.01

Table 31: Aviator sample scores for the Mental Health Inventory, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Anxiety	N	171	237	62	77
	Mean	47.95	48.70	46.90	47.53
	STD	4.97	5.18	5.12	4.86
Depression	N	171	237	62	77
	Mean	22.85	23.35	22.26	23.28
	STD	3.86	3.78	3.67	3.53
Behavioral/emotional control	N	171	237	62	77
	Mean	*25.71	25.15	26.39	25.68
	STD	2.62	2.04	2.97	1.82
Positive affect	N	171	237	62	77
	Mean	45.24	46.78	44.80	47.34
	STD	9.40	9.06	9.38	9.35
Emotional ties	N	171	237	62	77
	Mean	9.23	9.52	9.15	8.97
	STD	2.11	1.89	2.33	1.83
Mental health index	N	171	237	62	77
	Mean	150.98	153.50	149.50	152.80
	STD	14.35	14.18	13.09	15.16

* = $p < .05$

** = $p < .01$

Table 32: Aviator sample scores for the Mental Health Inventory, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Anxiety	N	171	62	237	77
	Mean	47.95	46.90	48.70	47.53
	STD	4.97	5.12	5.18	4.86
Depression	N	171	62	237	77
	Mean	22.85	22.26	23.35	23.28
	STD	3.86	3.67	3.78	3.53
Behavioral/emotional control	N	171	62	237	77
	Mean	25.71	26.39	*25.15	25.68
	STD	2.62	2.97	2.04	1.82
Positive affect	N	171	62	237	77
	Mean	45.24	44.80	46.78	47.34
	STD	9.40	9.38	9.06	9.35
Emotional ties	N	171	62	237	77
	Mean	9.23	9.15	*9.52	8.97
	STD	2.11	2.33	1.89	1.83
Mental health index	N	171	62	237	77
	Mean	150.98	149.50	153.50	152.80
	STD	14.35	13.09	14.18	15.16

* = $p < .05$

** = $p < .01$

Table 33: Aviator sample scores for the Recent Life Events Checklist, by deployment history

		Deployed?	
		Yes	No
Life events	N	222	302
	Mean	**244.87	208.44
	STD	135.16	128.10

* = $p < .05$

** = $p < .01$

Table 34: Aviator sample risk factor scores for the Recent Life Events Checklist, by deployment history

		Deployed?		
Risk of significant health change		Yes	No	Total
Low	N	62	110	172
	Percent	27.9	36.4	32.8
Mild	N	33	45	78
	Percent	14.9	14.9	14.9
Moderate	N	61	82	143
	Percent	27.5	27.2	27.3
Major	N	66	65	131
	Percent	29.7	21.5	25.0

Table 35: Aviator sample scores for the Recent Life Events Checklist, by gender

		Male	Female
Life events	N	390	134
	Mean	217.93	241.19
	STD	133.25	128.21

Table 36: Aviator sample risk factor scores for the recent life events checklist, by deployment history within gender

Risk of significant health change		Male	Female	Total
Low	N	135	37	172
	Percent	34.6	27.6	32.8
Mild	N	60	18	78
	Percent	15.4	13.4	14.9
Moderate	N	104	39	143
	Percent	26.7	29.1	27.3
Major	N	91	40	131
	Percent	23.3	29.9	25.0

Table 37: Aviator sample scores for the Recent Life Events Checklist, by deployment history within gender

		Male Deployed?		Female Deployed	
		Yes	No	Yes	No
Life events	N	163	227	59	75
	Mean	**245.83	197.89	242.24	240.36
	STD	141.02	123.86	118.55	136.11

** = $p < .01$

Table 38: Aviator sample risk factor scores for the Recent Life Events Checklist, by deployment history within gender

Risk of significant health change		Male Deployed?		Female Deployed?		Total
		Yes	No	Yes	No	
Low	N	48	87	14	23	172
	Percent	29.4	38.3	23.7	30.7	32.8
Mild	N	23	37	10	8	78
	Percent	14.1	16.3	16.9	10.7	14.9
Moderate	N	43	61	18	21	143
	Percent	26.4	26.9	30.5	28	27.3
Major	N	49	42	17	23	131
	Percent	30.1	18.5	28.8	30.7	25.0

Table 39: Aviator sample scores for the Recent Life Events Checklist, by gender within deployment history

Life events		Deployed?			
		Yes		No	
		Male	Female	Male	Female
N		163	59	227	75
Mean		245.83	242.24	*197.89	240.36
STD		141.02	118.55	123.86	136.11

* = $p < .05$

Table 40: Aviator sample risk factor scores for the Recent Life Events Checklist, by deployment history within gender

Risk of significant health change		Deployed?				Total
		Yes		No		
		Male	Female	Male	Female	
Low	N	48	14	87	23	172
	Percent	29.4	23.7	38.3	30.7	32.8
Mild	N	23	10	37	8	78
	Percent	14.1	16.9	16.3	10.7	14.9
Moderate	N	43	18	61	21	143
	Percent	26.4	30.5	26.9	28.0	27.3
Major	N	49	17	42	23	131
	Percent	30.1	28.8	18.5	30.7	25.0

Table 41: Aviator sample relative scores for the Ways of Coping checklist, by deployment history

Coping skill		Deployed?	
		Yes	No
Confrontive coping	N	232	314
	Mean	10.29	9.98
	STD	3.78	3.85
Distancing	N	232	314
	Mean	10.76	10.61
	STD	4.74	5.07
Self-controlling	N	232	314
	Mean	15.83	15.90
	STD	4.18	4.79
Seeking social support	N	232	314
	Mean	14.68	14.66
	STD	5.23	5.43
Accepting responsibility	N	232	314
	Mean	11.10	10.96
	STD	5.47	4.83
Escape/avoidance	N	232	314
	Mean	*5.86	5.01
	STD	5.46	4.32
Planful problem-solving	N	232	314
	Mean	18.89	19.43
	STD	6.10	5.96
Positive reappraisal	N	232	314
	Mean	12.59	13.45
	STD	4.97	5.67

* = $p < .05$

Table 42: Aviator sample relative scores for the Ways of Coping checklist, by gender

Coping skill		Male	Female
Confrontive coping	N	407	139
	Mean	*9.92	10.67
	STD	3.89	3.56
Distancing	N	407	139
	Mean	*10.93	9.90
	STD	5.10	4.32
Self-controlling	N	407	139
	Mean	**16.24	14.78
	STD	4.72	3.75
Seeking social support	N	407	139
	Mean	**14.25	15.90
	STD	5.26	5.42
Accepting responsibility	N	407	139
	Mean	11.06	10.91
	STD	5.22	4.76
Escape/avoidance	N	407	139
	Mean	**5.03	6.38
	STD	5.00	4.24
Planful problem-solving	N	407	139
	Mean	**19.59	18.06
	STD	6.21	5.29
Positive reappraisal	N	407	139
	Mean	12.97	13.40
	STD	5.48	5.14

* = $p < .05$

** = $p < .01$

Table 43: Aviator sample relative scores for the Ways of Coping checklist, by deployment history within gender

Coping Skill		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Confrontive coping	N	170	237	62	77
	Mean	10.15	9.76	10.67	10.67
	STD	3.91	3.88	3.42	3.69
Distancing	N	170	237	62	77
	Mean	11.02	10.87	10.03	9.80
	STD	4.82	5.29	4.45	4.23
Self-controlling	N	170	237	62	77
	Mean	16.10	16.35	15.08	14.54
	STD	4.29	5.01	3.81	3.71
Seeking social support	N	170	237	62	77
	Mean	14.43	14.12	15.38	16.32
	STD	5.27	5.25	5.08	5.67
Accepting responsibility	N	170	237	62	77
	Mean	11.09	11.04	11.14	10.72
	STD	5.78	4.79	4.53	4.96
Escape/avoidance	N	170	237	62	77
	Mean	5.40	4.76	7.14	5.76
	STD	5.73	4.40	4.45	3.99
Planful problem-solving	N	170	237	62	77
	Mean	19.19	19.88	18.05	18.07
	STD	6.42	6.05	5.11	5.47
Positive reappraisal	N	170	237	62	77
	Mean	12.62	13.23	12.51	14.12
	STD	5.10	5.73	4.61	5.46

Table 44: Aviator sample relative scores for the Ways of Coping checklist, by gender within deployment history

Coping Skill		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Confrontive coping	N	170	62	237	77
	Mean	10.15	10.67	9.76	10.67
	STD	3.91	3.42	3.88	3.69
Distancing	N	170	62	237	77
	Mean	11.02	10.03	10.87	9.80
	STD	4.82	4.45	5.29	4.23
Self-controlling	N	170	62	237	77
	Mean	16.10	15.08	**16.35	14.54
	STD	4.29	3.81	5.01	3.71
Seeking social support	N	170	62	237	77
	Mean	14.43	15.38	**14.12	16.32
	STD	5.27	5.08	5.25	5.67
Accepting responsibility	N	170	62	237	77
	Mean	11.09	11.14	11.04	10.72
	STD	5.78	4.53	4.79	4.96
Escape/avoidance	N	170	62	237	77
	Mean	*5.40	7.14	4.76	5.76
	STD	5.73	4.45	4.40	3.99
Planful problem-solving	N	170	62	237	77
	Mean	19.19	18.05	**19.88	18.07
	STD	6.42	5.11	6.05	5.47
Positive reappraisal	N	170	62	237	77
	Mean	12.62	12.51	13.23	14.12
	STD	5.10	4.61	5.73	5.46

* = p<.05

** = p<.01

Table 45: Aviator sample scores on the Gender Role Stress Inventory, by deployment history

Scale		Deployed?	
		Yes	No
Male Gender-Role Stress Physical inadequacy	N	229	311
	Mean	21.58	21.86
	STD	7.60	7.40
Emotional inexpressiveness	N	229	311
	Mean	*11.29	12.53
	STD	5.54	5.71
Subordination to women	N	229	311
	Mean	7.82	8.34
	STD	6.74	6.93
Intellectual inferiority	N	229	311
	Mean	12.80	12.69
	STD	6.20	5.91
Performance failure	N	229	311
	Mean	28.07	27.95
	STD	7.23	6.55
Female Gender-Role Stress Emotional detachment	N	229	311
	Mean	25.91	26.51
	STD	10.40	10.09
Physical unattractiveness	N	229	311
	Mean	16.18	15.81
	STD	7.55	7.33
Victimization	N	229	311
	Mean	13.90	13.96
	STD	6.34	6.12
Unassertiveness	N	229	311
	Mean	17.91	18.01
	STD	6.63	6.46
Failed nurturance	N	229	311
	Mean	23.47	24.45
	STD	8.20	7.23
Male Gender-Role Stress	N	229	311
	Mean	81.57	83.37
	STD	27.28	26.78
Female Gender-Role Stress	N	229	311
	Mean	97.37	98.73
	STD	32.56	31.47
Male Gender-Role Stress + Female Gender Role Stress	N	229	311
	Mean	178.94	182.10
	STD	56.07	53.88

* = p<.05

Table 46: Aviator sample scores on the Gender Role Stress Inventory, by gender

Scale		Male	Female
Male Gender-Role Stress			
	Physical inadequacy		
	N	403	137
	Mean	**22.24	20.28
	STD	7.76	6.41
Emotional inexpressiveness	N	403	137
	Mean	12.17	11.52
	STD	5.69	5.59
Subordination to women	N	403	137
	Mean	**8.88	5.87
	STD	7.15	5.29
Intellectual inferiority	N	403	137
	Mean	*12.44	13.62
	STD	6.05	5.90
Performance failure	N	403	137
	Mean	28.23	27.34
	STD	6.77	7.05
Female Gender-Role Stress			
Emotional detachment	N	403	137
	Mean	**23.88	33.24
	STD	9.51	8.95
Physical unattractiveness	N	403	137
	Mean	**14.10	21.47
	STD	6.49	7.29
Victimization	N	403	137
	Mean	**12.54	18.02
	STD	5.71	5.83
Unassertiveness	N	403	137
	Mean	**17.35	19.77
	STD	6.42	6.53
Failed nurturance	N	403	137
	Mean	**22.91	27.34
	STD	7.06	8.41
Male Gender-Role Stress			
	N	403	137
	Mean	*83.96	78.63
	STD	27.81	24.05
Female Gender-Role Stress			
	N	403	137
	Mean	**90.78	119.84
	STD	28.96	30.37
Male Gender-Role Stress + Female Gender-Role Stress			
	N	403	137
	Mean	**174.74	198.47
	STD	54.50	51.91

* = p<.05

** = p<.01

Table 47: Aviator sample scores on the Gender Role Stress Inventory, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Male Gender-Role Stress Physical inadequacy	N	169	234	60	77
	Mean	21.74	22.61	21.15	19.61
	STD	7.99	7.58	6.42	6.35
Emotional inexpressiveness	N	169	234	60	77
	Mean	11.31	12.79	11.23	11.74
	STD	5.56	5.71	5.53	5.67
Subordination to women	N	169	234	60	77
	Mean	8.43	9.21	6.11	5.69
	STD	6.89	7.32	6.00	4.70
Intellectual inferiority	N	169	234	60	77
	Mean	12.31	12.53	14.19	13.17
	STD	6.13	6.01	6.22	5.63
Performance failure	N	169	234	60	77
	Mean	28.37	28.13	27.22	27.43
	STD	7.13	6.50	7.50	6.73
Female Gender-Role Stress Emotional detachment	N	169	234	60	77
	Mean	23.29	24.30	33.28	33.21
	STD	9.77	9.32	8.42	9.39
Physical unattractiveness	N	169	234	60	77
	Mean	13.96	14.19	22.43	20.73
	STD	6.41	6.55	7.04	7.43
Victimization	N	169	234	60	77
	Mean	12.32	12.70	18.33	17.77
	STD	5.71	5.72	5.97	5.74
Unassertiveness	N	169	234	60	77
	Mean	17.10	17.53	20.19	19.45
	STD	6.63	6.28	6.12	6.85
Failed nurturance	N	169	234	60	77
	Mean	22.55	23.17	26.05	28.34
	STD	7.48	6.75	9.58	7.28
Male Gender-Role Stress	N	169	234	60	77
	Mean	82.16	85.26	79.91	77.64
	STD	28.18	27.53	24.74	23.62
Female Gender-Role Stress	N	169	234	60	77
	Mean	89.24	91.90	120.28	119.49
	STD	29.51	28.56	29.90	30.93
Male Gender-Role Stress + Female Gender-Role Stress	N	169	234	60	77
	Mean	171.40	177.15	200.19	197.13
	STD	55.66	53.64	52.00	52.13

Table 48: Aviator sample scores on the Gender Role Stress Inventory, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Male Gender-Role Stress Physical inadequacy	N	169	60	234	77
	Mean	21.74	21.15	**22.61	19.61
	STD	7.99	6.42	7.58	6.35
Emotional inexpressiveness	N	169	60	234	77
	Mean	11.31	11.23	12.79	11.74
	STD	5.56	5.53	5.71	5.67
Subordination to women	N	169	60	234	77
	Mean	*8.43	6.11	**9.21	5.69
	STD	6.89	6.00	7.32	4.70
Intellectual inferiority	N	169	60	234	77
	Mean	*12.31	14.19	12.53	13.17
	STD	6.13	6.22	6.01	5.63
Performance failure	N	169	60	234	77
	Mean	28.37	27.22	28.13	27.43
	STD	7.13	7.50	6.50	6.73
Female Gender-Role Stress Emotional detachment	N	169	60	234	77
	Mean	**23.29	33.28	**24.30	33.21
	STD	9.77	8.42	9.32	9.39
Physical unattractiveness	N	169	60	234	77
	Mean	**13.96	22.43	**14.19	20.73
	STD	6.41	7.04	6.55	7.43
Victimization	N	169	60	234	77
	Mean	**12.32	18.33	**12.70	17.77
	STD	5.71	5.97	5.72	5.74
Unassertiveness	N	169	60	234	77
	Mean	**17.10	20.19	*17.53	19.45
	STD	6.63	6.12	6.28	6.85
Failed nurturance	N	169	60	234	77
	Mean	*22.55	26.05	**23.17	28.34
	STD	7.48	9.58	6.75	7.28
Male Gender-Role Stress	N	169	60	234	77
	Mean	82.16	79.91	*85.26	77.64
	STD	28.18	24.74	27.53	23.62
Female Gender-Role Stress	N	169	60	234	77
	Mean	**89.24	120.28	**91.90	119.49
	STD	29.51	29.90	28.56	30.93
Male Gender-Role Stress + Female Gender-Role Stress	N	169	60	234	77
	Mean	**171.40	200.19	**177.15	197.13
	STD	55.66	52.00	53.64	52.13

* = p<.05

** = p<.01

Table 49: Aviator sample transformed scores for the SF-36, by deployment history

Scale		Deployed?	
		Yes	No
Physical functioning	N	233	313
	Mean	97.21	96.58
	STD	9.00	9.36
Role physical	N	233	313
	Mean	94.85	94.41
	STD	18.43	18.25
Role emotional	N	233	313
	Mean	88.98	91.27
	STD	26.58	23.15
Social functioning	N	233	313
	Mean	92.06	93.57
	STD	15.40	14.19
Mental health	N	233	313
	Mean	77.32*	80.03
	STD	14.98	14.75
Vitality	N	233	313
	Mean	62.00	62.65
	STD	18.27	18.55
General health	N	233	313
	Mean	82.43	81.42
	STD	14.95	15.22
Health transition	N	233	313
	Mean	46.67	47.20
	STD	11.47	11.76
Bodily pain	N	233	313
	Mean	87.02	85.91
	STD	14.54	15.58

Table 50: Aviator sample transformed scores for the SF-36, by gender

Scale		Male	Female
Physical functioning	N	408	138
	Mean	96.67	97.39
	STD	9.87	6.89
Role physical	N	408	138
	Mean	95.10	93.12
	STD	17.18	21.31
Role emotional	N	408	138
	Mean	*89.13	93.72
	STD	26.52	17.81
Social functioning	N	408	138
	Mean	92.56	94.02
	STD	15.41	12.47
Mental health	N	408	138
	Mean	78.82	79.03
	STD	14.91	14.88
Vitality	N	408	138
	Mean	62.40	62.29
	STD	18.44	18.41
General health	N	408	138
	Mean	*81.05	84.21
	STD	15.13	14.81
Health transition	N	408	138
	Mean	47.30	46.01
	STD	11.31	12.54
Bodily pain	N	408	138
	Mean	86.25	86.76
	STD	15.22	14.95

* = $p < .05$

Table 51: Aviator sample transformed scores for the SF-36, by deployment history within gender

Scale		Male Deployed?		Female Deployed?	
		Yes	No	Yes	No
Physical functioning	N	171	237	62	76
	Mean	96.84	96.54	98.23	96.71
	STD	10.03	9.77	5.13	8.02
Role physical	N	171	237	62	76
	Mean	95.32	94.94	93.55	92.76
	STD	17.36	17.09	21.20	21.53
Role emotional	N	171	237	62	76
	Mean	87.72	90.15	92.47	94.74
	STD	29.13	24.48	17.51	18.10
Social functioning	N	171	237	62	76
	Mean	91.89	93.04	92.54	95.23
	STD	15.90	15.06	14.04	10.99
Mental health	N	171	237	62	76
	Mean	77.78	79.58	*76.06	81.45
	STD	14.79	14.99	15.54	13.97
Vitality	N	171	237	62	76
	Mean	61.73	62.88	62.74	61.93
	STD	18.75	18.24	17.00	19.58
General health	N	171	237	62	76
	Mean	80.96	81.12	86.48	82.36
	STD	15.47	14.92	12.69	16.19
Health transition	N	171	237	62	76
	Mean	46.78	47.68	46.37	45.72
	STD	11.04	11.50	12.68	12.51
Bodily pain	N	171	237	62	76
	Mean	87.12	85.63	86.74	86.78
	STD	14.10	15.98	15.81	14.32

* = $p < .05$

Table 52: Aviator sample transformed scores for the SF-36, by gender within deployment history

Scale		Deployed?			
		Yes		No	
		Male	Female	Male	Female
Physical functioning	N	171	62	237	76
	Mean	96.84	98.23	96.54	96.71
	STD	10.03	5.13	9.77	8.02
Role physical	N	171	62	237	76
	Mean	95.32	93.55	94.94	92.76
	STD	17.36	21.20	17.09	21.53
Role emotional	N	171	62	237	76
	Mean	87.72	92.47	90.15	94.74
	STD	29.13	17.51	24.48	18.10
Social functioning	N	171	62	237	76
	Mean	91.89	92.54	93.04	95.23
	STD	15.90	14.04	15.06	10.99
Mental health	N	171	62	237	76
	Mean	77.78	*76.06	79.58	81.45
	STD	14.79	15.54	14.99	13.97
Vitality	N	171	62	237	76
	Mean	61.73	62.74	62.88	61.93
	STD	18.75	17.00	18.24	19.58
General health	N	171	62	237	76
	Mean	80.96	86.48	81.12	82.36
	STD	15.47	12.69	14.92	16.19
Health transition	N	171	62	237	76
	Mean	46.78	46.37	47.68	45.72
	STD	11.04	12.68	11.50	12.51
Bodily pain	N	171	62	237	76
	Mean	87.12	86.74	85.63	86.78
	STD	14.10	15.81	15.98	14.32

* = $p < .05$

APPENDIXES

*Gender Role Stress, Mental Health Risk Factors and Mental Health Sequela in Deployed Versus Non-Deployed and
Pilot-Rated Versus Non-Rated Active Duty Women Versus Men
Technical Report*

APPENDIX A: THE GRAMH SURVEY INSTRUMENT

Gender Role Stress, Mental Health Risk Factors and Mental Health Sequela in Deployed Versus Non-Deployed and Pilot-Rated Versus Non-Rated Active Duty Women Versus Men
Technical Report



The GRAMH Survey

*Seeking Information to Improve Your Health and Services,
Abroad and at Home*

May 1996

USAF SCN 96-45

OPHSA
**THE OFFICE FOR PREVENTION AND
HEALTH SERVICES ASSESSMENT**

The GRAMH Survey

Instructions

YOUR RESPONSES TO THIS SURVEY ARE ENTIRELY CONFIDENTIAL.

The answers you give will be used only for the study of groups. Individuals will not be identified.

- Please complete *all* questions in the survey.
- You may use pen or dark pencil.
- You may use checks (☑) or Xs (☒) for your responses in the boxes provided.
- Please follow instructions for all other parts of the survey.

This survey is in *six* parts:

Part A — Read each response and select the one answer that best describes your situation.

Part B — Select "Yes" or "No" to indicate whether you have experienced, in the past 18 months, each life event listed.

Part C — People use different strategies to cope with life's stresses. Please circle the appropriate number on the scale (0, 1, 2, or 3) to show how often you used each of the strategies listed for coping with stress in the past 18 months.

Part D — Please circle the response (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

Part E — This part of the survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Please mark the one answer that best describes your situation.

Part F — These questions are designed to provide information about you as an individual. Please try to answer the questions as honestly as possible. **Remember, your survey is CONFIDENTIAL. You will not be identified by name.**

This survey includes the SF-36™ Health Survey as item numbers E1 through E11.

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Part A

For each question, please select the one response that is most appropriate to your situation.

- 1A. How happy, satisfied, or pleased have you been with your personal life during the past month?
- ☐ (1) Extremely happy, could not have been more satisfied or pleased
 - ☐ (2) Very happy most of the time
 - ☐ (3) Generally satisfied, pleased
 - ☐ (4) Sometimes fairly satisfied, sometimes fairly unhappy
 - ☐ (5) Generally dissatisfied, unhappy
 - ☐ (6) Very dissatisfied, unhappy most of the time
- 2A. How much of the time have you felt lonely during the past month?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 3A. How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 4A. During the past month, how much of the time have you felt that the future looks hopeful and promising?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 5A. How much of the time, during the past month, has your daily life been full of things that were interesting to you?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 6A. How much of the time, during the past month, did you feel relaxed and free of tension?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time

For each question, please select the one response that is most appropriate to your situation.

- 7A. During the past month, how much of the time have you generally enjoyed the things you do?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 8A. During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory?
- ☐ (1) No, not at all
 - ☐ (2) Maybe a little
 - ☐ (3) Yes, but not enough to be concerned or worried about it
 - ☐ (4) Yes, and I have been a little concerned
 - ☐ (5) Yes, and I am quite concerned
 - ☐ (6) Yes, and I am very much concerned about it
- 9A. Did you feel depressed during the past month?
- ☐ (1) Yes, to the point that I did not care about anything for days at a time
 - ☐ (2) Yes, very depressed almost every day
 - ☐ (3) Yes, quite depressed several times
 - ☐ (4) Yes, a little depressed now and then
 - ☐ (5) No, never felt depressed at all
- 10A. During the past month, how much of the time have you felt loved and wanted?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 11A. How much of the time, during the past month, have you been a very nervous person?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time

For each question, please select the one response that is most appropriate to your situation.

- 12A. When you got up in the morning, this past month, about how often did you expect to have an interesting day?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 13A. During the past month, how much of the time have you felt tense or "high-strung"?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 14A. During the past month, have you been in firm control of your behavior, thoughts, emotions, feelings?
- ☐ (1) Yes, very definitely
 - ☐ (2) Yes, for the most part
 - ☐ (3) Yes, I guess so
 - ☐ (4) No, not too well
 - ☐ (5) No, and I am somewhat disturbed
 - ☐ (6) No, and I am very disturbed
- 15A. During the past month, how often did your hands shake when you tried to do something?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 16A. During the past month, how often did you feel that you had nothing to look forward to?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 17A. How much of the time, during the past month, have you felt calm and peaceful?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time

For each question, please select the one response that is most appropriate to your situation.

- 18A. How much of the time, during the past month, have you felt emotionally stable?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 19A. How much of the time, during the past month, have you felt downhearted and blue?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 20A. How often have you felt like crying, during the past month?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 21A. During the past month, how often did you feel that others would be better off if you were dead?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 22A. How much of the time, during the past month, were you able to relax without difficulty?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 23A. During the past month, how much of the time did you feel that your love relationships, loving and being loved, were full and complete?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time

For each question, please select the one response that is most appropriate to your situation.

- 24A. How often, during the past month, did you feel that nothing turned out for you the way you wanted it to?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 25A. How much have you been bothered by nervousness, or your "nerves," during the past month?
- ☐ (1) Extremely so, to the point where I could not take care of things
 - ☐ (2) Very much bothered
 - ☐ (3) Bothered quite a bit by nerves
 - ☐ (4) Bothered some, enough to notice
 - ☐ (5) Bothered just a little by nerves
 - ☐ (6) Not bothered at all by this
- 26A. During the past month, how much of the time has living been a wonderful adventure for you?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 27A. How often, during the past month, have you felt so down in the dumps that nothing could cheer you up?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 28A. During the past month, did you ever think about taking your own life?
- ☐ (1) Yes, very often
 - ☐ (2) Yes, fairly often
 - ☐ (3) Yes, a couple of times
 - ☐ (4) Yes, at one time
 - ☐ (5) No, never
- 29A. During the past month, how much of the time have you felt restless, fidgety, or impatient?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time

For each question, please select the one response that is most appropriate to your situation.

- 30A. During the past month, how much of the time have you been moody or brooded about things?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 31A. How much of the time, during the past month, have you felt cheerful, lighthearted?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 32A. During the past month, how often did you get rattled, upset, or flustered?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never
- 33A. During the past month, have you been anxious or worried?
- ☐ (1) Yes, extremely so, to the point of being sick or almost sick
 - ☐ (2) Yes, very much so
 - ☐ (3) Yes, quite a bit
 - ☐ (4) Yes, some, enough to bother me
 - ☐ (5) Yes, a little bit
 - ☐ (6) No, not at all
- 34A. During the past month, how much of the time were you a happy person?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 35A. How often during the past month did you find yourself having difficulty trying to calm down?
- ☐ (1) Always
 - ☐ (2) Very often
 - ☐ (3) Fairly often
 - ☐ (4) Sometimes
 - ☐ (5) Almost never
 - ☐ (6) Never

For each question, please select the one response that is most appropriate to your situation.

- 36A. During the past month, how much of the time have you been in low or very low spirits?
- ☐ (1) All of the time
 - ☐ (2) Most of the time
 - ☐ (3) A good bit of the time
 - ☐ (4) Some of the time
 - ☐ (5) A little of the time
 - ☐ (6) None of the time
- 37A. How often, during the past month, have you been waking up feeling fresh and rested?
- ☐ (1) Always, every day
 - ☐ (2) Almost every day
 - ☐ (3) Most days
 - ☐ (4) Some days, but usually not
 - ☐ (5) Hardly ever
 - ☐ (6) Never wake up feeling rested
- 38A. During the past month, have you been under or felt you were under any strain, stress, or pressure?
- ☐ (1) Yes, almost more than I could stand or bear
 - ☐ (2) Yes, quite a bit of pressure
 - ☐ (3) Yes, some, more than usual
 - ☐ (4) Yes, some, about normal
 - ☐ (5) Yes, a little bit
 - ☐ (6) No, not at all

Part B *Select "Yes" or "No" to indicate whether you have experienced, in the past 18 months, each life event listed.*

	<u>Yes</u>	<u>No</u>	<u>Life Event</u>
1B.	☐	☐	Death of spouse
2B.	☐	☐	Divorce
3B.	☐	☐	Marital separation
4B.	☐	☐	Court martial
5B.	☐	☐	Article 15
6B.	☐	☐	Letter of Reprimand or Letter of Counseling
7B.	☐	☐	Remote assignment
8B.	☐	☐	Overseas assignment
9B.	☐	☐	Death of close family member
10B.	☐	☐	Personal injury or illness
11B.	☐	☐	Marriage
12B.	☐	☐	Dishonorable discharge
13B.	☐	☐	Marital reconciliation
14B.	☐	☐	Adjustment to military lifestyle
15B.	☐	☐	Retirement
16B.	☐	☐	Change in health of family member
17B.	☐	☐	Change in financial status
18B.	☐	☐	Death of close friend

Part B, continued

Select "Yes" or "No" to indicate whether you have experienced, in the past 18 months, each life event listed.

	<u>Yes</u>	<u>No</u>	<u>Life Event</u>
19B.	☐	☐	Cross-training
20B.	☐	☐	Personnel Reliability Program decertification
21B.	☐	☐	Personnel Reliability Program suspension
22B.	☐	☐	Security clearance withdrawn
23B.	☐	☐	Entrance into Alcohol Rehabilitation Program
24B.	☐	☐	Change in number of arguments with spouse
25B.	☐	☐	Mortgage over \$30,000
26B.	☐	☐	Foreclosure of mortgage or loan
27B.	☐	☐	Change in responsibilities at work
28B.	☐	☐	Son or daughter leaving home
29B.	☐	☐	Trouble with in-laws
30B.	☐	☐	Outstanding personal achievement
31B.	☐	☐	Wife or husband begins or stops work
32B.	☐	☐	Begin or end school
33B.	☐	☐	Change in living conditions
34B.	☐	☐	Revision of personal habits
35B.	☐	☐	Trouble with boss
36B.	☐	☐	Trouble with those you supervise
37B.	☐	☐	Change in work hours or conditions
38B.	☐	☐	Change in residence
39B.	☐	☐	Change in schools
40B.	☐	☐	Change in recreation
41B.	☐	☐	Change in church activities
42B.	☐	☐	Change in social activities
43B.	☐	☐	Mortgage or loan less than \$30,000
44B.	☐	☐	Change in sleeping habits
45B.	☐	☐	Change in number of family get-togethers
46B.	☐	☐	Change in eating habits
47B.	☐	☐	Vacation
48B.	☐	☐	Christmas
49B.	☐	☐	Minor violations
50B.	☐	☐	Involved in combat
51B.	☐	☐	Threat of biological/chemical warfare exposure
52B.	☐	☐	Life in danger during deployment
53B.	☐	☐	Life in danger while not in deployment

Part C *People use different strategies to cope with life's stresses. Please circle the appropriate number on the scale (0, 1, 2, or 3) to show how often you used each of the strategies listed for coping with stress in the past 18 months.*

	Not used	Used some- what	Used quite a bit	Used a great deal
1C. Just concentrated on what I had to do next - the next step.	0	1	2	3
2C. I tried to analyze the problem in order to understand it better.	0	1	2	3
3C. Turned to work or substitute activity to take my mind off things.	0	1	2	3
4C. I felt that time would make a difference - the only thing to do was to wait.	0	1	2	3
5C. Bargained or compromised to get something positive from the situation.	0	1	2	3
6C. I did something that I didn't think would work, but at least I was doing something.	0	1	2	3
7C. Tried to get the person responsible to change his or her mind.	0	1	2	3
8C. Talked to someone to find out more about the situation.	0	1	2	3
9C. Criticized or lectured myself.	0	1	2	3
10C. Tried not to burn my bridges, but leave things open somewhat.	0	1	2	3
11C. Hoped a miracle would happen.	0	1	2	3
12C. Went along with fate; sometimes I just have bad luck.	0	1	2	3
13C. Went on as if nothing had happened.	0	1	2	3
14C. I tried to keep my feelings to myself.	0	1	2	3
15C. Looked for the silver lining, so to speak; tried to look on the bright side of things	0	1	2	3
16C. Slept more than usual.	0	1	2	3

People use different strategies to cope with life's stresses. Please circle the appropriate number on the scale (0, 1, 2, or 3) to show how often you used each of the strategies listed for coping with stress in the past 18 months.

	Not used	Used some- what	Used quite a bit	Used a great deal
17C. I expressed anger to the person(s) who caused the problem.	0	1	2	3
18C. Accepted sympathy and understanding from someone.	0	1	2	3
19C. I told myself things that helped me to feel better.	0	1	2	3
20C. I was inspired to do something creative.	0	1	2	3
21C. Tried to forget the whole thing.	0	1	2	3
22C. I got professional help.	0	1	2	3
23C. Changed or grew as a person in a good way.	0	1	2	3
24C. I waited to see what would happen before doing anything.	0	1	2	3
25C. I apologized or did something to make up.	0	1	2	3
26C. I made a plan of action and followed it.	0	1	2	3
27C. I accepted the next best thing to what I wanted.	0	1	2	3
28C. I let my feelings out somehow.	0	1	2	3
29C. Realized I brought the problem on myself.	0	1	2	3
30C. I came out of the experience better than when I went in.	0	1	2	3
31C. Talked to someone who could do something concrete about the problem.	0	1	2	3
32C. Got away from it for a while; tried to rest or take a vacation.	0	1	2	3
33C. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.	0	1	2	3
34C. Took a big chance or did something very risky.	0	1	2	3

*People use different strategies to cope with life's stresses.
Please circle the appropriate number on the scale (0, 1, 2, or 3)
to show how often you used each of the strategies listed for
coping with stress in the past 18 months.*

	Not used	Used some- what	Used quite a bit	Used a great deal
35C. I tried not to act too hastily or follow my first hunch.	0	1	2	3
36C. Found new faith.	0	1	2	3
37C. Maintained my pride and kept a stiff upper lip.	0	1	2	3
38C. Rediscovered what is important in life.	0	1	2	3
39C. Changed something so things would turn out all right.	0	1	2	3
40C. Avoided being with people in general.	0	1	2	3
41C. Didn't let it get to me; refused to think too much about it.	0	1	2	3
42C. I asked relative or friend I respected for advice.	0	1	2	3
43C. Kept others from knowing how bad things were.	0	1	2	3
44C. Made light of the situation; refused to get too serious about it.	0	1	2	3
45C. Talked to someone about how I was feeling.	0	1	2	3
46C. Stood my ground and fought for what I wanted.	0	1	2	3
47C. Took it out on other people.	0	1	2	3
48C. Drew on my past experiences; I was in a similar situation before.	0	1	2	3
49C. I knew what had to be done, so I doubled my efforts to make things work.	0	1	2	3
50C. Refused to believe that it had happened.	0	1	2	3
51C. I made a promise to myself that things would be different next time.	0	1	2	3
52C. Came up with a couple of different solutions to the problem.	0	1	2	3

*People use different strategies to cope with life's stresses.
Please circle the appropriate number on the scale (0, 1, 2, or 3)
to show how often you used each of the strategies listed for
coping with stress in the past 18 months.*

	Not used	Used some- what	Used quite a bit	Used a great deal
53C. Accepted it, since nothing could be done.	0	1	2	3
54C. I tried to keep my feelings from interfering with other things too much.	0	1	2	3
55C. Wished that I could change what had happened or how I felt.	0	1	2	3
56C. I changed something about myself.	0	1	2	3
57C. I daydreamed or imagined a better time or place than the one I was in.	0	1	2	3
58C. Wished that the situation would go away or somehow be over with.	0	1	2	3
59C. Had fantasies or wished about how things might turn out.	0	1	2	3
60C. I prayed.	0	1	2	3
61C. I prepared myself for the worst.	0	1	2	3
62C. I went over in my mind what I would say or do.	0	1	2	3
63C. I thought about how a person I admire would handle this situation and used that as a model.	0	1	2	3
64C. I tried to see things from the other person's point of view.	0	1	2	3
65C. I reminded myself how much worse things could be.	0	1	2	3
66C. I jogged or exercised.	0	1	2	3
67C. I tried something entirely different from any of the above. (Please describe)	0	1	2	3

Part D Please circle the reponse (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

	Not Stressful			Extremely Stressful		
1D. Feeling that you are not in good physical condition.	0	1	2	3	4	5
2D. Being perceived by others as overweight.	0	1	2	3	4	5
3D. Telling your mate that you love her/him.	0	1	2	3	4	5
4D. Not being able to meet your family members' emotional needs.	0	1	2	3	4	5
5D. Being outperformed at work by a woman.	0	1	2	3	4	5
6D. Feeling less attractive than you once were.	0	1	2	3	4	5
7D. Having to ask for directions when you are lost.	0	1	2	3	4	5
8D. Trying to be a good parent and excel at work.	0	1	2	3	4	5
9D. Being unemployed.	0	1	2	3	4	5
10D. Having others believe that you are emotionally cold.	0	1	2	3	4	5
11D. Not having a satisfying sex life.	0	1	2	3	4	5
12D. Being in a sexual relationship without any commitment.	0	1	2	3	4	5
13D. Having a female boss.	0	1	2	3	4	5
14D. Being pressured for sex when seeking affection from your mate.	0	1	2	3	4	5
15D. Having your partner say that she/he is not satisfied.	0	1	2	3	4	5
16D. Knowing your child is disliked by her/his peers.	0	1	2	3	4	5
17D. Letting a woman take control of the situation.	0	1	2	3	4	5
18D. Being seen in a bathing suit.	0	1	2	3	4	5

Please circle the response (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

	Not Stressful			Extremely Stressful		
19D. Not making enough money.	0	1	2	3	4	5
20D. Having a weak or incompetent mate.	0	1	2	3	4	5
21D. Being perceived by someone as "gay."	0	1	2	3	4	5
22D. Making sure you are not taken advantage of when buying a house or car.	0	1	2	3	4	5
23D. Telling someone that you feel hurt by what they said.	0	1	2	3	4	5
24D. Having an intimate relationship without any romance.	0	1	2	3	4	5
25D. Having a mate who makes more money than you.	0	1	2	3	4	5
26D. Being unable to change your appearance to please your mate.	0	1	2	3	4	5
27D. Working with people who seem more ambitious than you.	0	1	2	3	4	5
28D. Having to move to a new city or town alone.	0	1	2	3	4	5
29D. Finding you lack the occupational skills to be successful.	0	1	2	3	4	5
30D. Bargaining with a salesperson when buying a car.	0	1	2	3	4	5
31D. Losing in a sports competition.	0	1	2	3	4	5
32D. Negotiating the price of car repairs.	0	1	2	3	4	5
33D. Admitting that you are afraid of something.	0	1	2	3	4	5
34D. Being heavier than your mate.	0	1	2	3	4	5
35D. Being with a woman who is more successful than you.	0	1	2	3	4	5
36D. Being unusually tall.	0	1	2	3	4	5
37D. Talking with a "feminist."	0	1	2	3	4	5

Please circle the response (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

	Not Stressful			Extremely Stressful		
38D. Supervising older and more experienced employees at work.	0	1	2	3	4	5
39D. Being unable to become sexually aroused.	0	1	2	3	4	5
40D. Feeling that you are being followed by someone.	0	1	2	3	4	5
41D. Being perceived as having feminine traits.	0	1	2	3	4	5
42D. Being considered promiscuous.	0	1	2	3	4	5
43D. Having your children see you cry.	0	1	2	3	4	5
44D. Hearing a strange noise while you are home alone.	0	1	2	3	4	5
45D. Being outperformed in a game by a woman.	0	1	2	3	4	5
46D. Having to deal with unwanted sexual advances.	0	1	2	3	4	5
47D. Having people say you are indecisive.	0	1	2	3	4	5
48D. Losing custody of your children after divorce.	0	1	2	3	4	5
49D. Being too tired for sex when your partner shows interest.	0	1	2	3	4	5
50D. Having your mate unemployed and unable to find a job.	0	1	2	3	4	5
51D. Appearing less athletic than a friend.	0	1	2	3	4	5
52D. Feeling pressured to have sex.	0	1	2	3	4	5
53D. Talking with a woman who is angry with you.	0	1	2	3	4	5
54D. Talking with someone who is angry with you.	0	1	2	3	4	5
55D. Needling your mate to work to help support the family.	0	1	2	3	4	5
56D. Turning middle-age and being single.	0	1	2	3	4	5
57D. Having others say that you're too emotional.	0	1	2	3	4	5

Please circle the response (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

	Not Stressful				Extremely Stressful	
58D. Having your car break down on the road.	0	1	2	3	4	5
59D. Losing interest in sex.	0	1	2	3	4	5
60D. Being intimately involved with more than one person.	0	1	2	3	4	5
61D. Being compared unfavorably to men.	0	1	2	3	4	5
62D. Having to "sell" yourself at a job interview.	0	1	2	3	4	5
63D. Comforting a male friend who is upset.	0	1	2	3	4	5
64D. Hearing that a dangerous criminal has escaped nearby.	0	1	2	3	4	5
65D. Telling your friends that you do housework.	0	1	2	3	4	5
66D. Receiving an obscene phone call.	0	1	2	3	4	5
67D. Working with people who are brighter than you are.	0	1	2	3	4	5
68D. Having your children live with someone other than you.	0	1	2	3	4	5
69D. Getting passed over for a promotion.	0	1	2	3	4	5
70D. Trying to get your mate to take responsibility for child care.	0	1	2	3	4	5
71D. Knowing you cannot hold your liquor as well as others.	0	1	2	3	4	5
72D. Returning to work soon after your child is born.	0	1	2	3	4	5
73D. Having a man put his arm around your shoulder.	0	1	2	3	4	5
74D. Having a very close friend stop speaking to you.	0	1	2	3	4	5
75D. Being with a woman who is much taller than you.	0	1	2	3	4	5
76D. Having your mate be unwilling to discuss your relationship problems.	0	1	2	3	4	5

Please circle the reponse (0, 1, 2, 3, 4, or 5) that indicates how stressed you would feel in each situation if it happened to you.

77D. Staying home during the day with a sick child.

78D. Finding that you have gained 10 pounds.

79D. Getting fired from your job.

	Not Stressful			Extremely Stressful		
	0	1	2	3	4	5
77D.	0	1	2	3	4	5
78D.	0	1	2	3	4	5
79D.	0	1	2	3	4	5

Part E

This part of the survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Please mark the one answer that best describes your situation.

1E. In general, would you say your health is:

- ☐ (1) Excellent
- ☐ (2) Very good
- ☐ (3) Good
- ☐ (4) Fair
- ☐ (5) Poor

2E. Compared to one week ago, how would you rate your health in general now?

- ☐ (1) Much better now than one week ago
- ☐ (2) Somewhat better now than one week ago
- ☐ (3) About the same as one week ago
- ☐ (4) Somewhat worse now than one week ago
- ☐ (5) Much worse now than one week ago

3E. The following items are about activities you might do during a typical day. Does your health now limit you in these activities? If so, how much?

(circle one number on each line)

Activities	Yes, limited a lot	Yes, limited a little	No, not limited at all
a. Vigorous activities , such as running, lifting heavy objects, participating in strenuous sports	1	2	3
b. Moderate activities , such as moving a table, pushing a vacuum cleaner, bowling, or playing golf	1	2	3
c. Lifting or carrying groceries	1	2	3
d. Climbing several flights of stairs	1	2	3
e. Climbing one flight of stairs	1	2	3
f. Bending, kneeling, or stooping	1	2	3
g. Walking more than a mile	1	2	3
h. Walking several blocks	1	2	3
i. Walking one block	1	2	3
j. Bathing or dressing yourself	1	2	3

This part of the survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Please mark the one answer that best describes your situation.

4E. During the *past week*, have you had any of the following problems with your work or other regularly daily activities *as a result of your physical health*?

(circle one number on each line)

	Yes	No
a. Cut down on the amount of time you spent on work or other activities	1	2
b. Accomplished less than you would like	1	2
c. Were limited in the kind of work or other activities	1	2
d. Had difficulty performing the work or other activities (for example, it took extra effort)	1	2

5E. During the *past week*, have you had any of the following problems with your work or other regularly daily activities *as a result of any emotional problems* (such as feeling depressed or anxious)?

(circle one number on each line)

	Yes	No
a. Cut down the amount of time you spent on work or other activities	1	2
b. Accomplished less than you would like	1	2
c. Didn't do work or other activities as carefully as usual	1	2

6E. During the *past week*, to what extent has your physical health or emotional problems interfered with your normal social activities with family, friends, neighbors, or groups?

- ☐ (1) Not at all
- ☐ (2) Slightly
- ☐ (3) Moderately
- ☐ (4) Quite a bit
- ☐ (5) Extremely

7E. How much *bodily* pain have you had during the *past week*?

- ☐ (1) None
- ☐ (2) Very mild
- ☐ (3) Mild
- ☐ (4) Moderate
- ☐ (5) Severe
- ☐ (6) Very severe

8E. During the *past week*, how much did *pain* interfere with your normal work (including both work outside the home and housework)?

- ☐ (1) Not at all
- ☐ (2) A little bit
- ☐ (3) Moderately
- ☐ (4) Quite a bit
- ☐ (5) Extremely

This part of the survey asks for your views about your health. This information will help keep track of how you feel and how well you are able to do your usual activities. Please mark the one answer that best describes your situation.

- 9E. These questions are about how you feel and how things have been with you *during the past week*. For each question, please give the one answer that comes closest to the way you have been feeling. How much of the time during the *past week*:

(circle one number on each line)

	<i>All of the time</i>	<i>Most of the time</i>	<i>A Good bit of the time</i>	<i>Some of the time</i>	<i>A Little of the time</i>	<i>None of the time</i>
a. Did you feel full of pep?	1	2	3	4	5	6
b. Have you been a very nervous person?	1	2	3	4	5	6
c. Have you felt so down in the dumps that nothing could cheer you up?	1	2	3	4	5	6
d. Have you felt calm and peaceful?	1	2	3	4	5	6
e. Did you have a lot of energy?	1	2	3	4	5	6
f. Have you felt downhearted and blue?	1	2	3	4	5	6
g. Did you feel worn out?	1	2	3	4	5	6
h. Have you been a happy person?	1	2	3	4	5	6
i. Did you feel tired?	1	2	3	4	5	6

- 10E. During the *past week*, how much of the time has your *physical health or emotional problems* interfered with your social activities (such as visiting friends, relatives, etc.)?

- ☐ (1) All the time
☐ (2) Most of the time
☐ (3) Some of the time
☐ (4) A little of the time
☐ (5) None of the time

- 11E. How TRUE or FALSE is *each* of the following statements for you?

(circle one number on each line)

	<i>Definitely True</i>	<i>Mostly True</i>	<i>Don't Know</i>	<i>Mostly False</i>	<i>Definitely False</i>
a. I seem to get sick a little easier than other people.	1	2	3	4	5
b. I am as healthy as anybody I know.	1	2	3	4	5
c. I expect my health to get worse.	1	2	3	4	5
d. My health is excellent.	1	2	3	4	5

These questions are designed to provide information about you as an individual. Please try to answer the questions as honestly as possible. Your survey is CONFIDENTIAL. You will NOT be identified by name.

Part F

1F. Date of birth (Year/Month/Day): _____

2F. Gender: ____ Male ____ Female

3F. Rank (e.g., O3, E5): _____

4F. Years in service: _____

5F. Present marital status:

- ☐ Never married
- ☐ Married
- ☐ Separated
- ☐ Divorced
- ☐ Widowed

6F. Number of children: _____ (If none, skip to Question 11F)

7F. Ages of children:

Child 1 _____ Child 2 _____ Child 3 _____ Child 4 _____

Child 5 _____ Child 6 _____ Child 7 _____ Child 8 _____

8F. Who primarily cares for your children while you **are not** deployed?

- ☐ Me
- ☐ My spouse
- ☐ Sister/brother
- ☐ Grandparents
- ☐ Friends
- ☐ Childcare in my home
- ☐ Childcare outside my home

9F. Who primarily cares for your children while you **are** deployed?

- ☐ Never been deployed
- ☐ Me
- ☐ My spouse
- ☐ Sister/brother
- ☐ Grandparents
- ☐ Friends
- ☐ Childcare in my home
- ☐ Childcare outside your home

10F. Do you feel that your going on deployment affects the health of your children?

- ☐ Yes
- ☐ No
- ☐ Never been deployed and have no opinion
- ☐ Never been deployed, but think it would
- ☐ Never been deployed, but think it wouldn't

11F. Have you been deployed in the past 18 months?

- ☐ Yes
- ☐ No (If "No," skip to Question 14F)

12F. What were the dates of your deployment?

Departed
(YY/MM)

Returned
(YY/MM)

_____ to _____

13F. Where were you deployed? _____

14F. Has your spouse been deployed in the past 18 months?

- ☐ Yes
- ☐ No
- ☐ Not applicable; my spouse is not in the military
- ☐ Not applicable; I do not have a spouse

15F. At any time during the past 18 months, were you and your spouse deployed at the same time?

- ☐ Yes
- ☐ No

16F. With which race or ethnic group do you identify yourself?

17F. Are you presently on flying status, or have you been during the past 18 months?

- ☐ Yes
- ☐ No

If yes, which is your primary airframe?

- ☐ Fighter
- ☐ Heavy/tanker/bomber/transport
- ☐ Rotary wing

End of Survey

Thank You

for taking the time to complete this survey. Please return your completed survey, using the enclosed envelope, through your base mail system. Your responses are vital to us.

The GRAMH Survey

*Seeking Information to Improve Your Health and Services,
Abroad and at Home*

APPENDIX B: ITEMS REPRESENTING EACH SCALE

Part A: Mental Health Inventory

Scale	Items
Anxiety	3,11,13,15,22,25,29,32,33,35
Depression	9,19,30,36,38
Behavioral/Emotional Control	8,14,16,18,20,21,24,27,28
Positive Affect	1,4,5,6,7,12,17,26,31,34,37
Emotional Ties	2,10,23

Part C: Coping Scales

Scale	Items
Confrontive Coping	46,7,17,28,34,6
Distancing	44,13,41,21,15,,12
Self-Controlling	14,43,10,35,54,62,63
Seeking Social Support	8,31,42,45,18,22
Accepting Responsibility	9,29,51,25
Escape-Avoidance	58,11,59,33,40,50,47,16
Planful Problem solving	49,26,1,39,48,52
Positive Reappraisal	23,30,36,38,60,56,20

Part D: Gender Role Stress Scales

Scale	Items
MGRS:	
Physical Inadequacy	1,11,15,21,31,41,51,61,71
Emotional Inexpressiveness	3,23,33,43,53,63,73
Subordination to Women	5,13,17,25,35,45,55,65,75
Intellectual Inferiority	7,27,37,47,57,67,77
Performance Failure	9,19,29,39,49,59,69,79
FGRS:	
Emotional Detachment	4,10,12,14,24,42,46,52,60,76
Physical Unattractiveness	2,6,18,26,34,36,56,78
Victimization	28,40,44,58,64,66
Unassertiveness	8,22,30,32,38,54,62
Failed Nurturance	16,20,48,50,68,70,72,74

Part E: SF-36 Health Survey

Scale	Items
Physical Functioning	3a-3j
Role Physical	4a-4d
Role Emotional	5a-5c
Social Functioning	6,10
Mental Health	9b,9c,9d,9f,9h
Vitality	9a,9e,9g,9j
General Health Perceptions	1,11a,11b,11c,11d
Reported Health Transition	2
Bodily Pain	7,8

APPENDIX C: GRAMH SURVEY, PART B

Weighting Factors for Each Life Event

	Life Event	Average Value
1	Death of spouse	100
2	Divorce	73
3	Marital separation	65
4	Court martial	63
5	Article 15	63
6	Letter of Reprimand or Letter of Counseling	53
7	Remote assignment	50
8	Overseas assignment	49
9	Death of close family member	45
10	Personal injury or illness	45
11	Marriage	44
12	Dishonorable discharge	40
13	Marital reconciliation	39
14	Adjustment to military lifestyle	39
15	Retirement	39
16	Change in health of family member	38
17	Change in financial status	37
18	Death of close friend	36
19	Cross training	35
20	Personnel Reliability Program de-certification	31
21	Personnel Reliability Program suspension	30
22	Security clearance withdrawn	29
23	Entrance into Alcohol Rehabilitation Program	29
24	Change in number of arguments with spouse	29
25	Mortgage over \$30,000	28
26	Foreclosure of mortgage or loan	26
27	Change in responsibilities at work	26
28	Son or daughter leaving home	25
29	Trouble with in-laws	24
30	Outstanding personal achievement	23
31	Wife or husband begins or stops work	20
32	Begin or end school	20
33	Change in living conditions	20
34	Revision of personal habits	20
35	Trouble with boss	20
36	Trouble with those you supervise	20
37	Change in work hours or conditions	20
38	Change in residence	19
39	Change in schools	19
40	Change in recreation	19
41	Change in church activities	19
42	Change in social activities	18
43	Mortgage or loan less than \$30,000	17
44	Change in sleeping habits	16
45	Change in number of family get-togethers	15

Weighting Factors for Each Life Event, cont.

	Life Event	Average Value
46	Change in eating habits	15
47	Vacation	14
48	Christmas	13
49	Minor violations	12

Recent Life Events Score Categories for Part B

Score	Risk of Significant Health Change
150-199	Mild
200-299	Moderate
300 or more	Major

*Gender Role Stress, Mental Health Risk Factors and Mental Health Sequela in Deployed Versus Non-Deployed and
Pilot-Rated Versus Non-Rated Active Duty Women Versus Men
Technical Report*