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The Effects of Stress on Job Functioning of Military Men and Women

ROBERT M. BRAY, CAROL S. CAMLIN, JOHN A FAIRBANK, GEORGE H. DUNTEMAN, and SARA C. WHEELLESS

Both military women and men are exposed to a wide range of stressor events as a part of military training and work assignments.¹ In addition, military women may also experience stressors related to being a woman in a traditionally and predominantly male work environment.² The link between perceived work-related stress and impaired functioning on the job is well-documented, demonstrating the classic inverted U-shaped relationship between stress and performance. That is, employees who experience a moderate degree of job stress perform their jobs most efficiently, while those who experience either low or high work-related stress show reduced work efficiency.³ The potential moderating effects of various physiological, psychological, and social factors on the stress-job performance relationship also have been examined; these moderators may act by contributing to or reducing the resources that individuals can bring to bear in coping with stressors.⁴

Coping is one of several psychosocial factors posited to moderate or mediate the relationship between stress and job functioning. Conceptual models that view coping as a conscious effort to manage distressing problems and emotions have guided much of the stress and coping research over the past two decades.⁵ These models generally predict that there are at least three major components to stress-functioning relations: (a) the type of stressor or environmental demand; (b) psychosocial moderators and mediators, such as an individual's coping style; and (c) the resulting psychosocial, physiological, and behavioral outcomes.⁶ The study of coping points to two basic modes for understanding individuals' response to stress: approach and avoidance.⁷ As conceptualized, approach and avoidance are constructs describing behavioral, cognitive, and emotional activity that is oriented either toward or away from threat. Studies examining the moderating effect of various approach or avoidance coping styles, however, have not consistently shown benefits of specific coping strategies.⁸ For example, the literature indicates that avoidance strategies are good predictors of alcohol abuse, while the association between approach coping strategies and alcohol consumption is uncertain.⁹

Health research in the past decade has shown that women consistently report higher levels of stress and depressive symptoms than men, whereas disorders associated with substance abuse are more common in men.¹⁰ For example, rates of depression among women are at least twofold higher than among men.¹¹ In terms of job functioning, depressive symptoms are related to lower performance at work, independent of interpersonal stress attributed to co-workers and others and job stress related to dissatisfying work.¹² Studies of gender differences in the rate, nature, and timing of life events associated with depression have shown inconsistent results, in part due to differences in the methods used and the results examined. For example, the literature suggests that the relationship between gender and the onset of depression is conditioned more by the *type* of life events that are salient for men versus women (i.e., women are more likely than men to report events involving their social network) rather than the

quantity of events experienced.¹³ Stressful life events may play a larger role in the provocation of recurrent episodes of depression for women than for men, but there do not appear to be gender differences in the extent to which interpersonal versus noninterpersonal events or difficulties are associated with depression.¹⁴ Subject to debate is whether women's greater experience of stress is due to gender-related differences in appraisal of stress or coping, women's greater readiness to report stress and illness symptoms, or their greater exposure to stressful life events or chronic stressors relative to men.¹⁵

There has been little empirical examination of gender differences in the relationship between stress and functional impairment at work; still less attention has been paid to gender differences in the stress-work relationship in the military. As issues of gender and equity in the military are debated in the media and policymakers rethink gender integration, information is needed to provide an empirical basis for informing critical military and public policy decisions on how to structure the training and working relationships of men and women in the armed forces.

This study provides needed data bearing on one aspect of this issue: the relationship between job functioning and stress for military women and men. Analyses draw on data from the 1995 Department of Defense (DoD) Survey of Health Related Behaviors Among Military Personnel¹⁶ and examine functioning at work among female and male military personnel and its relationships to work stress and nonwork stress, symptoms of depression, substance abuse, and coping style.

Methods

Sampling Design and Data Collection

The sample for the 1995 DoD survey was selected using a stratified, two-stage probability design. The eligible survey population consisted of all active-duty personnel, excluding recruits, service academy students, persons absent without official leave, and persons who had a permanent change of station at the time of data collection. The first stage of sampling involved selection of military installations stratified by branch of service (Army, Navy, Marine Corps, and Air Force) and world region within and outside the continental United States. Within the selected installations, the second stage of sampling involved selection of military personnel stratified by pay grade (junior, middle, and senior enlisted, junior and senior officers) and gender (male, female). The sample was selected to be representative of the active-duty force worldwide. Women and officers were oversampled because of their smaller numbers.

Data were collected between April and August 1995 using self-administered questionnaires completed anonymously by respondents. The questionnaire averaged about 55 minutes to complete. Most respondents (88%) attended group sessions at 59 installations, where questionnaires were administered by civilian data collection teams. Eligible personnel who were not able to attend group sessions were mailed a questionnaire along with an explanation of the purpose and anonymity of the survey, as well as instructions for completing and returning it.

The sampling and data collection procedures resulted in a sample size of 16,193 respondents (13,219 men, 2,974 women; 12,531 enlisted personnel, 3,662 officers) for an overall response rate among eligible survey participants of 70 percent. However, the response rate varied significantly with respect to gender (females higher than males), rank, (officers higher than enlisted), and service (Air Force higher than other branches). As a result, the respondent distribution was composed of too many females, officers, and members of the Air Force when compared to the original sample distribution. These differential response-rate patterns combined with differential answer patterns to the questionnaire represent a potential for nonresponse bias. To avoid this, the data for each survey were weighted to represent the

population of eligible active-duty personnel, and adjustments were made for the potential biasing effects of differential nonresponse.

Poststratification methods were used to develop the nonresponse adjustment factors. Updated counts of military personnel were obtained and observed eligibility rates were applied to these new personnel counts for the 96 sampling strata defined by the intersection of service, region, gender, and pay-grade groups. Adjustment factors were then calculated and applied to the weights to correct for differences in the proportion responding in the sample relative to the proportion in the population.

Measures

The key dependent measure for the study was the level of job functioning. For multivariate cumulative logistic regression analysis, an ordinal-categories dependent measure was constructed to reflect the level of job functioning. Scores representing the number of workdays in the past year on which behaviors occurred were assigned to each of the following five items and summed: personnel (a) were late for work by 30 minutes or more, (b) left work early for a reason other than an errand or early holiday leave, (c) were hurt in an on-the-job accident, (d) worked below their normal level of performance, and (e) did not come to work at all because of an illness or a personal accident. The total number of days on which these behaviors occurred was then categorized into the following ordinal groups: 0 days, 1 to 4 days, 5 to 8 days, and 9 or more days.

Combining the scores of the five job-functioning items into one linear composite was supported by a factor analysis of the intercorrelation matrix of the five items. We used a commonly accepted criterion of eigenvalues equal to or greater than 1 for determining the number of factors to be retained for subsequent varimax rotation. Only the first eigenvalue (= 1.63) was greater than 1. Thus, there is support for a single underlying factor accounting for the variation in the five job items. The loadings on the factor ranged from .37 (hurt in an on-the-job accident) to .68 (left work early).

The key independent measures examined in the cumulative logistic regression were four domains of stressors: (a) work-related stress, family-related stress, financial stress, and health-related stress; (b) negative and positive ways of coping with stress; (c) symptoms of depression; and (d) substance use, including levels of alcohol use and illicit drug use. Sociodemographic characteristics were also included as control variables to take account of individual differences among military personnel and differences among the services.

Items used to define *work-related stress* were being deployed at sea or in the field; having a permanent change of station; having problems in relationships with co-workers; having problems in the relationship with immediate supervisor; experiencing concern about being separated from the military; and increases in workload. Items used to define *family-related stress* were being away from family and experiencing changes in the family, such as the birth of a baby, a divorce, or a death, and conflicts between military and family responsibilities. Items used to define *financial stress* were experiencing problems with money and problems with housing. Items used to define *health-related stress* were health problems experienced by military members and health problems experienced in one's family.

Conceptually, the 13 items measuring sources of stress fell into the four clusters noted above. Responses to each item were scored from 1 (no stress) to 5 (great deal of stress). Scores for questions related to a particular stress domain were summed and standardized to a mean of zero and a standard deviation of one. This grouping of items was empirically validated by a factor analysis of these 13 items followed by a varimax rotation. A rotated four-factor solution indicated a strong family-related stress factor and a strong work-related stress factor. The third

factor, while somewhat less important, represented a health-related stress factor. Finally, the fourth factor was interpreted as a financial-stress factor, although the loadings were not as strong as for the other factors; it had a high loading for housing stress but a more moderate loading for money problems. The correlations between each factor and its corresponding conceptually based linear composite were .84, .65, .50, and .20, respectively, for work-related stress, health-related stress, family-related stress, and financial-related stress.

In addition to these composite measures of stress, military women and men were asked to appraise the perceived levels of stress that they experienced at work and in their personal relationships and family life. Both military women and men were asked the following two items, and military women were additionally asked the third item:

- During the past 12 months, how much stress did you experience at work or while carrying out your military duties?
- During the past 12 months, how much stress did you experience in your family life or in a relationship with a person you live with or date seriously?
- In the past 12 months, how much stress did you experience as a woman in the military?

Although these measures of stress are single items and do not provide information about the full context of stress-producing situations, this type of item is often used to depict the level of stress in various settings.

Two variables assessed two coping styles: a positive, action-oriented coping style and a negative coping style. Coping styles are thought to be relatively stable characteristics and are divided into basic types: avoidant (i.e., ignores the problem but takes steps to reduce negative affect), and problem-focused (i.e., does something to remove the source of stress).¹⁷ In general, problem-focused coping is associated with better health outcomes. To develop the measures, a principal components analysis was conducted with varimax rotation on eight variables drawn from several coping indexes¹⁸ to identify underlying factors related to coping styles. The eight items loaded heavily (factor loadings ranged from .45 to .68) on two factors consistent with an avoidant coping style and a problem-focused style. This finding matches the theoretical groundwork characterizing the two general coping styles. The response to each item was scored from “1 (never)” to “4 (frequently)” with respect to engaging in that activity when feeling “pressured, stressed, depressed, or anxious.” A positive coping measure was constructed by summing the responses to the following three items: (a) talking to a friend or family member, (b) exercising or playing sports, or (c) thinking of a plan to solve the problem. A negative coping measure was constructed by summing the responses to the following five items: (a) lighting up a cigarette, (b) drinking, (c) using illicit drugs, (d) getting something to eat, or (e) thinking about hurting or killing one’s self. The scores were standardized to a mean of zero and a standard deviation of one.

Depressive symptomatology was measured by asking respondents whether, in the past 12 months, (a) they had 2 weeks or more in which they “felt sad, blue, or depressed,” or (b) they “felt sad or depressed much of the time.”¹⁹ Those indicating a positive response for either or both items were scored as a one; others were scored as a zero.

A multilevel measure of alcohol consumption was used based on the frequency and quantity of alcohol consumed in the past year and past month.²⁰ Past 12-month alcohol consumption was classified as “heavy drinking” for men if they drank five or more drinks per typical drinking occasion at least once a week and for women if they drank four or more drinks per typical drinking occasion two to three times per month. Different consumption levels for defining heavy drinking were used for men and women to account for potential differences in body mass, for women’s higher susceptibility to the physiological consequences of alcohol,²¹ and

women's greater likelihood to underestimate the quantity of alcohol they consume.²² Four other drinking levels also were defined: abstainers, infrequent/light, moderate, and moderate/heavy.²³

To assess any illicit drug use, we developed a measure commonly used in a number of major surveys.²⁴ Respondents were asked whether in the past 12 months they used marijuana, phencyclidine (PCP), lysergic diethylamide (LSD), cocaine, amphetamines, tranquilizers, barbiturates, heroin, analgesics, inhalants, or "designer drugs" at least once for nonmedical purposes. Nonmedical purposes were defined as use of the drugs on their own either without a doctor's prescription, or in greater amounts or more often than prescribed, or for any reasons other than a doctor said they should take them, such as to get high, for thrills or kicks, to relax, to give insight, for pleasure, or curiosity about the drug's effect. Those indicating "yes" to one or more items were scored as a one; others were scored as a zero.

Analysis Procedures

Population prevalence estimates and associated standard errors were computed from weighted survey data using the SURvey DATA ANalysis (SUDAAN) software.²⁵ Multiple cumulative logistic regression analyses also were computed separately for women and men using SUDAAN to model a four-level ordinal-categories job function measure. The dependent variable was the number of workdays in the past year in which negative events occurred. This measure was highly skewed in that both males and females had experienced either no problematic workdays or only a few. Because there were a substantial number of zeros, a log or reciprocal transformation to make the distribution at least approximately normal was not feasible. Thus, based on the distribution of scores, four ordered categories were created as the dependent variable: 0 days, 1 to 4 days, 5 to 8 days, and 9 or more days. Some independent variables were continuous and others were categorical.

Cumulative logit or proportional odds models were fit to the data using SUDAAN. The cumulative logit model takes advantage of the fact that the dependent variable categories are ordered and assumes that the effect of the independent variables on the odds of being in a higher category versus a lower category is the same regardless of the location of the cutpoint. The effect of an independent variable is the same for modeling the following odds: being in a 1 or more day category (i.e., the three highest categories) versus the 0 day category; being in a 5 to 8 day or 9 or more day category versus being in a 0 or 1 to 4 day category; and being in a 9 or more day category versus being in a 0 day, 1 to 4 day, or 5 to 8 day category.

Results

Demographic Characteristics

Table 1 displays a summary of the counts of the respondents and the demographic characteristics of the eligible respondent population. Overall, the majority of respondents were young (mostly younger than 35 years), mostly white, mostly enlisted rather than officers, and moderately well-educated (most had some education beyond high school).

Several demographic differences between women and men in the active-duty military were notable. A higher proportion of women (26%) than men (16%) were African American, women (72%) were more likely than men (62%) to have some education beyond high school, and men (62%) were more likely than women (51%) to be married. Among the services, women were more likely than men to serve in the Air Force (36% women vs. 27% men) and less likely to serve in the Marine Corps (4% women vs. 12% men).

Appraisal of Perceived Stress Among Military Personnel

Analyses were conducted of the levels of perceived stress that military personnel indicated in their experience at work and in their personal relationships and family life, and, for women, perceived stress associated with being a woman in the military. The findings in Table 2 show distributions across response categories for each type of stress overall and by gender. Overall, military personnel were more likely to report a great deal or a fairly large amount of stress in their military work (39%) than in their family life (22%). About 40 percent of both women and men perceived a great deal or a fairly large amount of work-related stress. In contrast, women perceived more family stress than did men. About 29 percent of women perceived a great deal or a fairly large amount of family stress versus about 22 percent for men. An estimated 33 percent of the women reported a great deal or a fairly large amount of stress due to being a woman in the military.

Stress-Related Factors Associated with Lower Job Functioning

To better understand these gender differences, we conducted multivariate cumulative logistic regression models testing the associations of stressor types, symptoms of depression, coping styles, and substance use with level of job functioning for military women and men. The models were identical except for the heavy drinking measure described above, which accounted for gender-appropriate alcohol consumption levels. Independent measures included the four stress scales (work-related stress, family-related stress, financial stress, health-related stress), symptoms of depression, positive and negative coping styles, drinking levels, illicit drug use, and demographic characteristics.

Table 3 displays the findings from the models for women and men separately. The odds ratios shown in Table 3 reflect a change in the odds of being in a lower job-functioning category as a function of an increase by one standard deviation for the four stress and two coping measures. The remaining variables were categorical, so their odds ratios can be interpreted as a contrast between a particular category and a reference group category. Initially, each model tested the main effect of coping style on the outcome, as well as the interaction of each coping style with each of the four stress types on the outcome. Because the interaction terms were not significant, they were not included in the final model.

Analyses showed that the stressor types predictive of a lower level of functioning at work were similar for women and men. An increase by one standard deviation on the work-related stress scale significantly increased the odds of being in a lower job-functioning category by 28 percent for women and 15 percent for men. An increase by one standard deviation on the health-related stress scale increased the odds of lower functioning at work by about 30 percent for both women and men. Family-related stress significantly increased the odds of lower job functioning by 19 percent for men, but it was not significant for women. Symptoms of depression also increased the odds of lower job functioning by about 30 percent for both women and men.

Several other measures were significantly associated with job functioning for men, but not for women. Specifically for men, one standard deviation change in the negative coping measure increased the odds of lower functioning by 15 percent, being a heavy drinker versus an abstainer or a light drinker increased the odds of lower job functioning by about 20 percent, and illicit drug use increased the odds by 35 percent. Race/ethnicity and age also were associated with job functioning, but are not discussed because they were used as control variables.

Discussion

Descriptive analyses indicated that from 22 percent to 40 percent of military men and women experienced high levels of stress in their work or family and personal relationships. Overall,

both military men and women were nearly twice as likely to report feeling high levels of stress in their military work (39%) than in their family life (22%). For both men and women, nearly 4 out of 10 perceived a great deal or a fairly large amount of work-related stress. In contrast, women perceived more family-related stress than did men. It is not possible to determine in this study whether women's greater reported family stress relative to that of men may be due to gender differences in the appraisal of stress or gender norms related to the report of family problems. The finding could indicate differences in men's and women's level of responsibility for child care or household duties, perhaps leading to role overload or role conflict for women balancing a career in the military with lives at home.²⁶ In addition, there may be gender role-related differences in the level of stress that men and women experience as a result of being away from family members (due to deployment or duty assignments) or family problems (such as separation or divorce).

In addition to reports of stress associated with work and family, about one-third of military women reported a great deal or a fairly large amount of stress due to being a woman in the military. Also, another third of the women said they experienced at least some stress from being a woman in the military. The nature of such stress and the underlying factors contributing to it are not clear from the present study, but they may be a result of particular features of military life, the challenges of competing in a predominantly male organization, problems of unwanted sexual advances or harassment by their male counterparts, the result of relatively poor coping skills, or some combination of these or other factors.

Of particular significance were findings that job functioning was related to stress, depression, substance use, and coping styles. Exposure to work-related stress and health-related stress was associated with a lower level of job functioning for military women and men alike and confirms prior research linking exposure to stress with lower functioning on the job.²⁷ Similarly, symptoms of depression also increased the odds of a lower level of job functioning for both women and men. Although rates of depressive symptoms generally tend to be higher among women than men,²⁸ there appeared to be no gender-related differences in the effect of depressive symptoms on lower functioning on the job. Additionally, among men only, family-related stress, heavy drinking, illicit drug use, and a negative coping style increased the odds of lower job functioning. These data suggest that although some gender differences exist in the experience or report of stress and depression, the performance of men and women in the military is equally likely to suffer following exposure to work-related and health-related stressors or as a function of depression. Indeed, the job functioning of military women appears less likely than that of men to be impaired by certain types of stress, negative coping, and substance abuse. The stress associated with such events as being away from one's family, conflicts between military and family responsibilities, or significant changes, such as the birth of a child, divorce, or death, did not significantly affect the capacity to function at work for women, but did so for men. Apparently, military men were less able than military women to manage family-related stressors so that they did not negatively affect work.

The finding that family-related stress does not significantly affect women's job performance is not altogether surprising. Given women's contemporary dual roles as family care-givers and as members of the labor force, women may be more likely than men to be adept at managing family-related stressors while also continuing to function on the job. As men's involvement in family matters has traditionally been more circumscribed, it may be that when family-related stress affects men, traditional social roles conspire to limit men's ability to take the time and ask for the support they need to manage this type of stress. The data suggest that women in the military may be more resilient than their male counterparts to certain types of stress, as evidenced by their greater ability to function on the job despite these stressor types.

Taken together, the findings from our analyses suggest that it may be useful for military health providers to focus on interventions to identify, prevent, and provide therapeutic care for stress-related problems and depression for military personnel, in that these problems affect military men's and women's ability to function in their military jobs. Of course, reducing stress and depression is a worthwhile goal in itself, not just because it might improve job functioning, but to enhance quality of life. It is of interest to note that even though the military is a predominantly male organization that puts considerable emphasis on physical fitness and prowess, and consequently may convey an image of a macho organization, military men are as likely as women to need therapeutic and preventive interventions to ameliorate the effects of stress and depressive symptoms. Military men especially appear to need training in learning how to cope with and balance competing demands from work and family life. Despite efforts by the military to recognize the key role of the family as an integral part of military life and to provide special time periodically for military members to attend to family responsibilities during the normal workweek, this by itself does not appear to be sufficient. Additional efforts appear to be needed, perhaps in the form of specific training programs or other interventions, to build needed awareness and coping skills. For example, classes could be offered on stress management and coping that include approaches to setting priorities to balance work and family within the context of the military environment. Additionally, reminders and encouragement by commanders could give added emphasis to the necessity of balancing both family and work demands and responsibilities.

Similarly, interventions may be needed to improve military work environments and work relationships that are a locus of stress for both women and men and can affect their quality of life and ability to function well on the job. For certain, some aspects of military work may be prone to higher levels of stress, such as uncertainties associated with the nature, location, and duration of some deployments and various types of missions. But even these situations can be made less stressful if personnel have taken advance steps to address issues of family separation prior to deployments, such as having child care arrangements in place, financial affairs in order, and wills and other legal documents up to date.

Despite the stresses of deployments and separations, much of military life and work is fairly predictable, can foster positive working relationships, and give responsibility and control to military personnel. The latter may be particularly important in that interventions designed to increase workers' control over their jobs have resulted in improved health and attitudes toward work.²⁹ For example, the military work environment may benefit from giving work teams responsibility for achieving group goals such that they share the load and help reduce stress on just a few persons.

Finding ways to improve job functioning and the ability to cope with day-to-day stressors in the military are vital to the readiness of the armed forces. This is particularly important in the current military work environment when the size of the military force is smaller due to the draw down over the past decade, but the job demands and stresses have remained the same or perhaps have even increased.

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Biographies

ROBERT M. BRAY, Ph.D., is director of the Substance Abuse Epidemiology, Prevention, and Risk Assessment Program at Research Triangle Institute. His research interests include substance use and other health behaviors in military and civilian populations. He was principal investigator for the DoD Survey discussed in this article and is principal editor of *Drug Use in Metropolitan America*.

CAROL S. CAMLIN, M.P.H., is a research scientist at AVSC International with interests in substance use and HIV risk behaviors. She was a research analyst at Research Triangle Institute when this study was conducted.

JOHN A FAIRBANK, Ph.D., is an associate professor of medical psychology in the Department of Psychiatry Medical School at Duke University and also an associate professor in the Department of Psychology: Social and Health Sciences there. His research interests include traumatic stress, psychiatric epidemiology, and mental health services.

GEORGE H. DUNTEMAN, Ph.D., is a chief scientist at the Research Triangle Institute who has published widely on important issues such as drug abuse. He is the author of three books on multivariate analysis and has applied these analytic techniques to address critical issues in the social sciences.

SARA C. WHEELLESS, Ph.D., is a senior statistician at Research Triangle Institute. She has worked on sampling and statistical analysis activities for numerous sample surveys, covering a range of areas such as the military, drug abuse, education, and other health-related areas. She was involved in sampling and analysis for the 1985, 1988, 1992, 1995, and 1998 DoD Surveys of Health-Related Behaviors among Military Personnel.

Table 1

Sociodemographic Characteristics of U.S. Military Women and Men

Characteristic	Women		Men	
	N	Percentage	N	Percentage
Age (years)				
≤20	393	15.2	1,212	11.3
21–25	860	32.5	2,843	31.9
26–34	910	32.5	3,497	33.3
≥35	811	19.9	5,667	23.5
Race/ethnicity				
White	1,813	59.8	9,308	68.8
African American	704	25.6	1,967	16.0
Hispanic	258	7.9	1,078	8.6
Other	199	6.7	866	6.6
Education				
≤H.S. graduate	796	27.6	4,308	38.1
Trade/technical graduate or some college	1,424	50.7	5,611	42.9
≥College graduate	754	21.6	3,300	19.0
Service				
Army	686	33.7	2,952	31.6
Navy	864	26.1	3,401	29.2
Marine Corps	576	4.1	3,384	11.9
Air Force	848	36.2	3,482	27.2
Job status				
Enlisted	2,355	83.6	10,176	84.5
Officer	619	16.4	3,035	15.5
Marital status				
Married	1,581	51.0	9,099	61.6
Unmarried	1,393	49.0	4,120	38.4
Total	2,974	100.0	13,219	100.0

Source: DoD Survey of Health Related Behaviors among Military Personnel, 1995.

Table 2

Levels of Perceived Stress among U.S. Military Personnel

Type of stress/level of stress	Women n = 2,974	Men n = 13,219	Total DoD n = 16,913
Stress at work			
Great deal	17.6	15.7	16.0
Fairly large amount	22.5	23.4	23.3
Some	30.7	29.7	29.8
A little	22.7	20.6	20.9
None	6.5	10.5	10.0
Stress in family			
Great deal	13.4	8.8	9.3
Fairly large amount	15.9	12.7	13.1
Some	27.3	27.1	27.2
A little	26.9	30.6	30.1
None	16.6	20.8	20.3
Stress being a woman in military			
Great deal	16.2	NA	16.2
Fairly large amount	16.8	NA	16.8
Some	35.4	NA	35.4
A little	18.4	NA	18.4
None	13.2	NA	13.2

Note: Table entries are column percentages of personnel who reported the indicated levels of stress in the past 12 months. NA = Not applicable.

Source: DoD Survey of Health Related Behaviors among Military Personnel, 1995.

Table 3

Factors Associated with Lower Functioning at Work: U.S. Military Personnel, 1995

Independent variables ¹	Women			Men		
	Adjusted OR	Adjusted 95% CI	p	Adjusted OR	Adjusted 95% CI	p
Work-related stressors	1.28	1.17, 1.40	<.0001	1.15	1.08, 1.21	<.0001
Family-related stressors	1.01	0.91, 1.12	ns	1.19	1.14, 1.25	<.0001
Financial-related stressors	1.04	0.94, 1.15	ns	0.95	0.90, 1.01	ns
Health-related stressors	1.31	1.20, 1.43	<.0001	1.30	1.23, 1.37	<.0001
Symptoms of depression	1.32	1.07, 1.62	<.01	1.30	1.19, 1.43	<.0001
Positive coping measures	1.01	0.91, 1.11	ns	1.03	0.98, 1.08	ns
Negative coping measures	1.09	0.94, 1.26	ns	1.15	1.08, 1.21	<.0001
Drinking level						
Heavy vs. abstainer	0.97	0.80, 1.18	ns	1.18	1.02, 1.36	<.01
Heavy vs. infrequent/light	1.08	0.84, 1.39	ns	1.21	1.05, 1.39	<.01
Heavy vs. moderate	0.90	0.66, 1.23	ns	1.08	0.95, 1.22	ns
Heavy vs. moderate/heavy	1.07	0.72, 1.58	ns	0.97	0.83, 1.13	ns
Illicit drug use in past year vs. no use in past year	1.31	0.86, 1.97	ns	1.35	1.12, 1.64	<.01
Enlisted vs. officer status	0.92	0.69, 1.23	ns	0.86	0.71, 1.04	ns
Unmarried vs. married	0.97	0.82, 1.14	ns	1.06	0.93, 1.21	ns
Race/ethnicity						
African American vs. white	0.89	0.73, 1.08	ns	0.88	0.72, 1.07	ns
Hispanic vs. white	0.67	0.48, 0.94	<.05	0.79	0.69, 0.90	<.01
Other vs. white	0.77	0.52, 1.15	ns	0.74	0.69, 0.88	<.01
Education						
≤ H.S. vs. college grad.	1.13	0.79, 1.60	ns	1.05	0.87, 1.25	ns
> H.S. vs. college grad.	1.04	0.78, 1.40	ns	1.16	0.96, 1.39	ns
Age (years)						
≤ 20 vs. ≥ 35 years old	1.16	0.78, 1.73	ns	1.31	1.10, 1.55	<.001
21–25 vs. ≥ 35 years old	1.37	1.10, 1.72	<.01	1.32	1.15, 1.53	<.001
26–34 vs. ≥ 35 years old	1.06	0.86, 1.31	ns	1.28	1.15, 1.42	<.001
Age (years)						
≤ 20 vs. ≥ 35 years old	1.16	0.78, 1.73	ns	1.31	1.10, 1.55	<.001

Independent variables ¹	Women			Men		
	Adjusted OR	Adjusted 95% CI	p	Adjusted OR	Adjusted 95% CI	p
21-25 vs. ≥ 35 years old	1.37	1.10, 1.72	<.01	1.32	1.15, 1.53	<.001
26-34 vs. ≥ 35 years old	1.06	0.86, 1.31	ns	1.28	1.15, 1.42	<.001

ns = not statistically significant at $p \leq .05$.

¹ Continuous variables standardized.

Source: DoD Survey of Health Related Behaviors among Military Personnel, 1995.