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# How Deployments Affect Service Members

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The research described in this report results from the RAND Corporation's continuing program of self-initiated independent research. Support for such research is provided, in part, by donors and by the independent research and development provisions of RAND's contracts for the operation of its U.S. Department of Defense federally funded research and development centers.

**Library of Congress Cataloging-in-Publication Data**

Hosek, James R.

How deployments affect service members / James Hosek, Jennifer Kavanagh, Laura Miller.

p. cm.

Includes bibliographical references.

"MG-432."

ISBN 0-8330-3868-0 (pbk. : alk. paper)

1. United States—Armed Forces—Recruiting, enlistment, etc. 2. United States—Armed Forces—Personnel management. 3. Deployment (Strategy) I. Kavanagh, Jennifer, 1981– II. Miller, Laura, 1967– III. Title.

UB323.H669 2006

355.1'2940973—dc22

2005029107

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Published 2006 by the RAND Corporation  
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138  
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## Summary

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Recent developments in the national security environment have led to unprecedented strains on the all-volunteer force, including extended and increased frequency of deployment and exposure to nontraditional, hostile combat conditions. Personnel are sometimes deployed for 12 months, with only six months at home before their next deployment. A large percentage of personnel deployed to Iraq and Afghanistan have faced hostile fire or have seen friends and colleagues injured or killed (Hoge et al., 2004). One question on the minds of military planners is, How has the changed nature of military service affected the attitudes of service members toward the military and their reenlistment intentions? Previous research found that personnel who deployed were more likely to reenlist than were their peers who did not deploy (Hosek and Totten, 2002). However, these findings are based on data from the 1990s, when the pace and nature of deployment were different than they are today.

This monograph focuses on how more-recent deployments have affected military personnel and, perhaps, have altered their intention to stay in the military. We present a conceptual model of how deployment affects individual utility (in economics, the concept of individual well-being); review literature from several disciplines having both concepts and previous research relevant to deployment and retention (economics, sociology, and psychology); discuss the findings from focus groups exploring deployment- and work-pace-related issues; and present results from an analysis of Status of Forces Surveys of Active Duty Personnel, surveys of military personnel conducted by the Defense Manpower Data Center from March and July 2003 regarding the relationships between work hours, deployment, preparation, stress relative to one's usual level of stress, and reenlistment intention.

### Conceptual Model and Literature

Economics, sociology, and psychology all have useful insights to contribute to our study, and we consider each in turn. We first present an expected-utility model of deployment and individual utility. The model assumes that the individual has preferences regarding home time, deployed time, and income including deployment pay. The model shows how the probability of deployment, expected duration of deployment, randomness of deployment length, base pay, and deployment pay affect utility. The model implies that the individual will have a preferred deployment time, and this is distinguished from the expected and actual deployment time. For some individuals, the expected deployment time might be less than preferred, and a higher-than-expected realized deployment time then produces a higher-than-expected

level of utility. For others, expected deployment time is greater than preferred deployment time, and a higher-than-expected realized deployment time produces a lower-than-expected level of utility.

The model suggests that many service members probably prefer some deployment to none; consequently, members who were deployed might have realized levels of utility higher than those of members who were not deployed. Among deployed members, an unusually long deployment time would reduce their levels of utility. The model also implies that individuals prefer knowing how long they will be deployed to randomness of deployment time. The preferred mix of home time and deployed time depends on income (deployment pay can compensate for the disutility of long deployment) and on factors affecting the utility from home time over that of deployed time. Satisfaction from deployed time can be expected to depend on individual preparation, unit preparation, unit cohesion, combat/risk conditions, length of duty-day, communication with family, family support programs, length of deployment, and uncertainty about length of deployment. Satisfaction from home time might depend on length of duty-day, enjoyment from being together with one's family day to day, participation in family events (e.g., births, birthdays), the burden of household chores, the quality of housing, recreational facilities, schools, family support programs, and so forth.

Economic models of service member utility consider monetary as well as nonmonetary factors. Several studies support the argument that, to the extent that deployment increases individual utility by moving an individual closer to his or her preferred amount of deployment, deployment can have a positive effect on reenlistment rates (Hosek and Totten, 2002). A review of reenlistment research suggests that pecuniary variables (e.g., basic pay, bonuses) have a significant positive effect on reenlistment (Goldberg, 2001). Other variables important to service member utility include job satisfaction, civilian wage, civilian unemployment rate, and work hours (Teplitzky, Thomas, and Nogami, 1988; Boesel and Johnson, 1984; Hosek and Peterson, 1985).

Sociological literature on deployment and reenlistment focuses on small-group dynamics and unit cohesion under deployment or combat conditions; combat motivation; the effects of various types of operations on personnel and unit morale; and the tension between military and family life for service members. Studies have shown that unit bonding and commitment to the group play a role in combat motivation and individual morale (Moskos, 1970; MacCoun, 1993) and may contribute to improved group performance (Mullen and Cooper, 1993). Thus, unit cohesion can help to explain why members might choose to reenlist despite difficult deployment or work conditions.

Studies find that combat motivation may also be determined by shared ideological commitments and the perception of a threat (Moskos, 1970; Kellet, 1982). In considering the effect of deployments for operations other than war on personnel morale, research finds commonalities between troop attitudes across combat and nonconventional (peacekeeping or humanitarian) deployments (Fussell, 1975; Herzog, 1992; Miller and Moskos, 1995). Personnel tend to express satisfaction with real-world missions, including peacekeeping and humanitarian missions, that allow them to use their skills and take on additional responsibility (e.g., Miller, 1997). However, peacekeeping missions may require a different set of expectations among service members, expectations focused less on combat and more on stabilization and international relations-building (Segal and Segal, 1993; Franke, 1997).

Finally, sociological literature on the effects of deployment analyzes the tension between family and military demands, the military and the family both being “greedy institutions” that make heavy demands for the commitment and time of individuals (Segal, 1988). Previous studies suggest that spousal attitudes toward the military are linked to service member reenlistment intentions (Bourg and Segal, 1999; Lakhani, 1995), suggesting that if the family is continually sacrificed in favor of military demands, dissatisfaction of the spouse could be a factor in the member’s reenlistment decision. In these studies, perceived unit support for family issues and integration of the family into the military community appear to offset some of the negative effects of military-family tension on spouse and member retention attitudes (Bourg and Segal, 1999; Burrell, Durand, and Fortado, 2003). Although increased deployments and a higher operating tempo can increase the strain that the military places on family life, improved communication while on deployments has helped to mediate this stress to some extent (Schumm et al., 2004).

A final important body of literature is that relating stress to individual and group performance. Military personnel face a range of stressors on deployment, including physical/environmental stressors, high operating tempo and long work hours, and family separation. Previous surveys of military personnel have shown that these stressors affect the morale and performance of military personnel (Campbell et al., 1998; Halverson et al., 1995). However, research on how deployment stressors affect reenlistment is mixed, with some studies finding negative effects and others finding positive effects (Kelley and Hock, 2001; Hosek and Totten, 2002). Much research has suggested a U-shaped relationship between stress and performance—that is, individual performance is higher under moderate levels of stress than under very high and very low levels of stress (Selye, 1956).

Stress can have several effects on individual functioning relevant to the military, including perceptual narrowing (paying attention to fewer sensory cues or stimuli that could contribute to behaviors or decisions), reduced attention to important stimuli or cues, altered or abbreviated decisionmaking processes, and increased task completion time (Easterbrook, 1959; Janis and Mann, 1977; Friedman, 1981; Staw, Sandelands, and Dutton, 1981; Idzikowski and Baddeley, 1983). Stress can affect group performance by reducing communication between members, contributing to a concentration of power in the leadership ranks, and leading to poor group decisionmaking (Driskell, Carson, and Moskal, 1988; Janis and Mann, 1977; Bowers, Weaver, and Morgan, 1996).

*Moderators* are variables that can intervene in the stress-performance relationship and reduce the level of stress resulting from given stressors, as well as the effect of stress on individual or group functioning. Just as preferences are person-specific in the economic model of utility, stress responses are person-specific. For any person, important moderators of stress include self-efficacy beliefs, personality, individual characteristics, additional information, and unit cohesion and leadership (Pearson and Thackray, 1970; Jex and Bliese, 1999; Kahana, Harel, and Kahana, 1988; Adler, Vaitkus, and Martin, 1996; Glass and Singer, 1972); Kirmeyer and Dougherty, 1988; Griffith, 1998).

Training is another significant moderator and, perhaps, the one most relevant to the military (Driskell and Johnston, 1998; Sheehy and Horan, 2004; Hytten, Jensen, and Skauli, 1990; Friedland and Keinan, 1992; Saunders et al., 1996; Serfaty, Entin, and Johnston, 1998). Stress-exposure training, in which individuals or groups are exposed to certain types of stressors and asked to perform tasks under these stressors, is a common training technique

that can help provide individuals with accurate expectations of the types of stress they might face and how they will respond under stressful conditions; teach them coping strategies to deal with stressors and challenges; and help them maintain effective performance even under difficult conditions (Kozlowski, 1998; Friedland and Keinan, 1992; Saunders et al., 1996; Serfaty, Entin, and Johnston, 1998).

Although moderate levels of stress may improve performance, long-term exposure to stressors or a single exposure to a highly traumatic stressor can have adverse health effects, including post-traumatic stress disorder and other mental health problems, both of which have affected veteran populations in the past (Adler and Castro, 2001; Adler, Vaitkus, and Martin, 1996; Litz et al., 1997a, b). Given the intense nature of combat and counterinsurgency operations in Iraq, military health officials are closely monitoring the mental health of returning soldiers and using short-term treatment (combat stress teams deployed to the field) to prevent more-widespread health consequences (Helmus and Glenn, 2005).

The model and these bodies of literature create a context for our focus-group discussions and provide support and explanations for many of the findings from our data analysis.

## Findings from the Focus Groups

We conducted separate focus groups with enlisted personnel and with officers in each service in the first six months of 2004. The focus groups covered topics such as expectations of service life, expectations of deployment, most valuable military experiences, unexpected challenges, deployment experiences, suggestions for improved preparation for service life and deployments, and reenlistment or career plans. Most focus groups were enlisted personnel; most focus group members were junior or early-career personnel. Focus group members came from a variety of occupations.

Focus group members who had deployed reported many different sources of deployment stress. Preparing for deployment created stress from training, personal preparation, and family preparation. Preparation required weeks of fast-paced work and time away from family prior to the deployment itself. Increased frequency and length of deployment, long work hours, and intense work pace on deployment were cited as factors that increased personnel stress and led to burnout and exhaustion. Personnel differed on whether or not these factors would affect their reenlistment intentions. Some members reported that they enjoyed the intense work pace, finding it exciting and challenging, but most did not. Physical challenges (heat, poor sanitation, lack of supplies) and exposure to danger were also significant sources of stress for those who deployed to combat zones. Uncertainty surrounding deployment dates and job requirements also increased stress, particularly when this uncertainty concerned how to act in specific combat or peacekeeping situations. Some personnel felt that better preparation for counterinsurgency and urban combat operations would have decreased the uncertainty associated with their mission and reduced their stress. Separation from family and friends created stress for personnel. Some focus group members said separation from family was one of the hardest aspects of deployment and caused them to consider leaving the military. Others said separation was difficult, but not enough to affect their reenlistment intentions. Finally, reintegration with family and readjustment to life at home were stressors faced by personnel after returning from deployment. Although the military

offered briefings and counseling services for returning personnel, focus group members had mixed feelings about their usefulness.

Personnel who did not deploy were stressed by deployments, too, because their workload and operational tempo increased. The requirements of preparing personnel for deployment and supporting the units that had already deployed increased their work hours and workweeks. Focus group members said that personnel shortages caused by the loss of personnel to deployment meant that those left behind had to accept more responsibilities and take on extra work. Overtime and longer workweeks created family-separation stress for nondeployed personnel by taking them away from their families and preventing them from taking part in family activities. Nondeployed personnel also had to deal with the stress of reintegrating with returning deployed units, which could sometimes be difficult because deployed units had formed strong bonds and had a set of shared experiences that did not include the nondeployed.

Although focus group participants reported that deployments had many negative aspects, we also heard about several benefits of deployments that improved the morale and deployment attitudes of those service members to whom we spoke. First among these was financial gain. Military personnel in our focus groups noted that special and incentive pays relating to deployment (especially Family Separation Pay, Hostile Fire Pay, and tax exemptions for money earned while deployed to combat zones) significantly increased their total compensation and helped offset some of the negative effects of deployment for them and their families. Another benefit was the opportunity, on deployment, for the member to use his or her training and preparation in real-world situations. Deployment also offered personnel the chance to take on additional responsibility and participate in challenging, fulfilling missions. In some cases, successful completion of deployed operations meant learning to handle situations and missions for which members had not been trained explicitly. Participants reported returning home with a sense of accomplishment because they had contributed to a larger cause. Finally, focus group members valued deployment for the opportunity to build strong bonds with other members of their units. They said their units became like families while on deployment, and these connections lasted when the unit came home.

Our focus group members (also referred to as *discussants*) cited several factors that moderated their stress, both while on deployment and at home base. Training was perhaps the most significant stress reducer. Discussants noted that their training helped to prepare them for the requirements of their missions and day-to-day jobs. However, some Army and Marine personnel in our groups commented that they lacked training in counterinsurgency and peacekeeping that might have been useful in reducing their stress and improving their performance. Importantly, the services are now implementing this type of training.

Discussants also cited talking with friends and colleagues as helpful in coping with their stress and dealing with traumatic or difficult experiences, preferring to rely on other members in their units for support when feeling stressed out or depressed rather than turning to chaplains or mental health professionals. They reported that it was more helpful to talk to people who had been through similar experiences, particularly combat experiences, than to a third party who might not be able to relate directly. In addition, a stigma was attached to seeking help from a mental health professional, and a permanent record of the visit would be

created. Military-sponsored reintegration briefings were also cited as a somewhat helpful resource.

Overall, our focus groups suggested that deployment experiences include positive and negative aspects. For some individuals, the positive outweighed the negative; for others, the opposite was true. Individuals reported that they felt fairly well prepared to deal with and adapt to stress and challenging job requirements. Finally, focus group discussions suggest that the finding that reenlistment rates are higher among personnel who have deployed may be explained, at least in part, by both the positive effects of deployment on those who deployed and the negative effects of nondeployment on those who did not deploy.

### **Analysis of Survey Data**

The data analysis was based on Status of Forces Surveys of Active Duty Personnel for March and July 2003 (Defense Manpower Data Center, 2003a, b). The analysis focused on stress and intention to stay in the military. However, the measures of stress available in the survey were self-reports of whether stress was higher or lower than usual, rather than an absolute metric of stress (such as a measured electric shock or a systematically varied set of purportedly threatening circumstances applied in an experimental setting) based on a specific stressor or stress-assessment instrument. The measures of intention to stay were also based on self-reports. We analyzed two measures of stress, higher-than-usual work stress and higher-than-usual personal stress; we analyzed four measures of intention—intention to stay, intention to stay for a career of 20 years or more, whether desire to stay increased in the past year as a result of being away from permanent duty station or, for those not away, as a result of not being away, and whether the respondent felt that his (or her) spouse wanted him (or her) to stay in the military. The explanatory variables included categorical variables for the number of times in the past 12 months that a member worked longer than the usual duty-day, whether the member was away from home station in the past 12 months, whether being away involved participating in combat operations in Operation Enduring Freedom (OEF) or Operation Iraqi Freedom (OIF), whether being away was longer or shorter than expected, whether the member felt prepared, and whether the member felt his or her unit was prepared. These variables corresponded closely to topics discussed by focus group members. Additional variables controlled for junior/senior rank, married/not married, female/male, and minority/nonminority.

We estimated linear probability models for the different measures of stress and intentions. Among the measures, the higher-than-usual work stress and the intention to stay told the core story; the results for the other measures were in many ways similar but showed weaker statistical relationships. Generally speaking, the explanatory variables in the higher-than-usual work stress and the intention-to-stay regressions were statistically significant.

#### **Relationship Between Higher-Than-Usual Work Stress and Intention to Stay**

Cross tabulations showed that service members who reported higher-than-usual work stress also indicated a higher intention to stay on active duty. This result can be understood in terms of the particular measure of stress and the dynamics of the military personnel system. As mentioned, the stress variable is not an absolute measure of stress but the individual's per-

ception of whether stress is higher than usual. It is possible that an absolute measure of stress would have a negative relationship with intention to stay. The positive relationship between self-reported higher-than-usual work stress and intention to stay, we suggest, reflects an internal sorting process: Service members who are well-matched to the military service may be more likely to have a positive intention to stay and to be assigned or promoted to positions that have more responsibility and that more frequently involve stress.

Given this positive relationship, we did find in the regressions that variables that increased the likelihood of higher-than-usual work stress also decreased the likelihood that the individual would stay in the military. That is, the explanatory variables typically had opposite effects on higher-than-usual work stress and intention to stay. For instance, more numerous workdays longer than the usual duty-day tended to increase our stress measure and decrease intention to stay. These effects were larger for personnel who had been away from home base in the past 12 months, because these personnel had more workdays longer than the usual duty-day. Further, personnel who reported the greatest decrease in their intention to stay over the previous 12 months were also likely to be the ones reporting a high intention to stay at survey time. Nevertheless, the simple association between higher-than-usual work stress and intention to stay remained positive: Members who reported higher-than-usual stress also had a higher intention to stay, and members who had a higher intention to stay also were more likely to report having higher than usual stress.

### **Regressions on Higher-Than-Usual Work Stress and Intention to Stay**

As mentioned, the explanatory variables often had opposite effects on higher-than-usual work stress and intention to stay: A variable that increased the likelihood of a member reporting higher-than-usual work stress typically decreased the likelihood of intention to stay. According to the regression results,

- frequently working longer than the usual duty-day increased the probability of higher-than-usual stress and decreased the probability of intention to stay.
- personnel who were away in the past 12 months, many of whom were presumably deployed, had more instances of working longer than the normal duty-day than did personnel who were not away. This frequency contributed to higher-than-usual stress and lower intention to stay among those away than among those not away. The relationship between working longer than the usual duty-day and higher-than-usual stress was the same for personnel who were away as for those who were not away, as was that between working longer than the usual duty-day and intention to stay. Therefore, being away per se did not have a differential effect on higher-than-usual stress or intention to stay. Instead, the effect came from the fact that those away generally had more long days than did those who stayed at home base.
- involvement in OEF/OIF combat operations did not affect the probability of higher-than-usual work stress for enlisted personnel, except for airmen, for whom it decreased this stress; also, it increased Army officer stress and decreased Marine officer stress. Involvement in OEF/OIF combat operations did not affect intention to stay, except for Army enlisted and officers, for whom it was associated with a decrease.

- our measures of work stress and intention to stay were related to whether time away was less, or more, than expected. Higher-than-usual work stress was more likely and intention to stay was less likely when personnel were away much more than expected.
- higher-than-usual work stress was less likely and intention to stay was more likely if the member felt personally prepared and felt that his/her unit was well prepared.
- senior-rank enlisted personnel were less likely to have higher than usual work stress (except in the Air Force) and more likely to intend to stay, compared with junior-rank enlisted personnel. Senior-rank officers had no difference in the likelihood of higher-than-usual work stress and were more likely to intend to stay, compared with junior-rank officers.
- marital status was unrelated to higher-than-usual work stress, but had a positive effect on intention to stay. However, being married was associated with a higher likelihood of higher-than-usual personal stress.

Several of these findings supported what we heard from focus group participants. First, that deployment itself was not significantly related to higher-than-usual work stress or to intention to stay was consistent with focus group discussions. As noted above, personnel in our groups reported that deployments contained both positive and negative aspects and had generally mixed feelings about whether deployment experiences would affect their reenlistment intentions.

Second, the significance of numerous long workdays in the stress and intention-to-stay regressions reflected what we heard in our focus groups. Deployed personnel and non-deployed personnel alike noted that the increased operating tempo led to longer work hours and a more intense work pace, which increased work stress and caused some members to consider leaving the military. The relevance of preparation to higher-than-usual work stress and intention to stay supported the focus group finding about the importance of training for military personnel.

Third, the data analysis also confirmed the negative effects of uncertainty—deployment length differing from what was expected—on stress and intentions that we heard from some focus group members.

Fourth, although not recapped above, the effect of the member's deployment and long work hours on spousal attitudes, as well as the effect of time away on the likelihood of higher-than-usual personal stress, was consistent with focus group comments about the strain that deployments placed on family members and relationships.

The literature discussed above also supported the data analysis—for example, the effect of deployments on reenlistment, the relevance of an expected utility model to analyzing member preferences and intentions, the tension between work and family for military personnel, the effect of stress on job performance and morale, and the relevance of certain moderators to reducing the effects of stress.

## Conclusions and Policy Implications

Taken together, our focus groups and data analysis provide insights into the effect of deployment on military personnel and permit us to draw several implications for policy.

*Service members value deployments as an opportunity to use their training in real-world missions and to participate in meaningful operations. This implies that, when possible, deployments should be spread widely across qualified service members and units rather than limited to repeatedly deploying the same individuals.*

Deployments often enable service members to apply their training to actual situations, assume new responsibilities, and take on challenges. This sense of accomplishment from deployments contributed to positive deployment attitudes among personnel to whom we spoke and can help explain why we found in the data analysis that deployment did not decrease intention to stay. At the time of our data, 2003 into early 2004, most active-duty personnel had been deployed to Iraq or Afghanistan once or not at all. By 2005, many soldiers and Marines had deployed, some had deployed twice, and some were facing a third deployment. The burden of deployment has been spread widely, and although the burden has been heavy, reenlistment remains high. Higher reenlistment bonuses have no doubt helped to sustain reenlistment, and we speculate that service members continue to find satisfaction in the opportunity to use their training and experience in actual missions and to meet new challenges.

*Deployment pay helps to offset negative aspects of deployment. Military officials should examine additional ways to compensate personnel who are sent on long, difficult, or dangerous deployments or are deployed frequently, and they have initiatives under way to do so.*

Previous research confirms the importance of pay in reenlistment decisions. Many focus group participants were clear that deployment pay was a positive aspect of deployment and one that improved their attitudes toward deployment and military service. Our deployment model indicated that, beyond some point, increases in time deployed would cause satisfaction to decrease at an increasing rate. Some focus group members said that they did not look forward to a military life that would have them deployed a large fraction of the time. The model and focus group comments suggest that increasing deployment pay depending on the member's previous amount of deployment over some period—for example, in the previous three years—could offset some of the negative effects of long and frequent deployments on morale and reenlistment. In addition, high current and future deployments may deter some prospective recruits, and the military may need to compensate for this greater perceived risk.

The services have already increased the use of enlistment and reenlistment bonuses, and, if reenlistment occurs in a combat zone, the bonus is tax-exempt. Alternatively, deployment pay could be revised to increase its flexibility and its ability to compensate members for the sacrifice of long deployments. Current deployment pays appear to be moving in this direction. For example, “Hardship Duty Pay for Involuntary Extension of Duty” is activated for members assigned or attached to specific units in the Iraqi area of operations that have been in Iraq and/or Afghanistan for 12 months within a 15-month period and have been asked to stay past the 12-month-rotation date. As another option, the most common deployment pays—Family Separation and Hostile Duty Pays—could be restructured to pay at a higher rate for extensive deployment (meaning a large number of days away in a given period, or an unusually long deployment, or both). Furthermore, prospective recruits who might today anticipate more frequent, long, dangerous deployments than in the past may demand higher pay to compensate for being placed at greater risk. Finally, Congress has passed legislation in the National Defense Authorization Act 2004

permitting a bonus of \$100 per day for members deployed over the predefined threshold of 400 days in any 730-day period or more than 191 days in a 365-day period. However, this High Deployment Pay has been suspended under Secretary of Defense authority since its formulation. Suspension probably resulted from the fact that High Deployment Pay would have reduced the services' ability to flexibly deploy personnel needed for OEF/OIF and, at the same time, would have increased the cost of military operations. Although \$100 per day might not be the right amount, some sort of compensation for long deployments along these lines might be effective.

It seems worthwhile to analyze whether and how to alter the compensation structure—for example, to increase deployment pay depending on the extent of the service member's prior deployment, to use enlistment and reenlistment bonuses to offset today's higher risk of future deployment, or to increase the rate of deployment pay in order to most directly affect enlistment and reenlistment attitudes and behaviors. These questions are complex and will require further research before any concrete recommendations can be made.

*It is worth considering additional pay and recognition for nondeployed personnel who are often called upon to work longer than the usual duty-day.*

Many nondeployed personnel frequently worked long days to support the heightened pace of military operations. Our analysis showed that frequently working longer than the usual duty-day resulted in a higher likelihood of higher-than-usual stress and a lower likelihood of intention to stay—for both nondeployed and deployed personnel. Nondeployed service members in our focus groups commented on the long hours they had put in to accomplish their unit's assigned work, and some said that doing so created family stress and left little time for their personal life. Service members receive no additional compensation or formal recognition for frequently working longer than the usual duty-day.

It seems worth considering whether additional pay should be instituted for these individuals and what the specific terms and level of such pay would be. One option would be to extend the eligibility for Special Duty Assignment Pay, which is payable to personnel in specific jobs as defined by the Secretary of Defense, to include certain personnel who do not deploy, but who fill difficult positions at continental United States (CONUS) bases. Recognition should also be considered—for example, through a public event, commendation, or decoration.

*Family separation, high tempo, long work hours, and uncertainty surrounding deployments are some of the more negative aspects of deployment and aspects that most significantly affect higher-than-usual stress and intention to stay. These aspects could be addressed through improved access to communication channels for deployed personnel, improved communication to service members about deployments, increased attention to the number of hours service members are asked to work, and, perhaps, through expanded family support programs.*

Our focus group discussions and data analysis suggest that strain of deployment on family relationships, uncertainty surrounding deployment length, and long work hours are factors that increase the likelihood of higher-than-usual stress and decrease the intention to stay. Comments in our focus groups implied that effective, accessible, inexpensive communication home while on deployment could help to reduce the stress of family separation. Turning to the effects of uncertainty, a predictable rotation cycle could help to offset the adverse effects on stress and intention to stay caused by differences between expected and actual length of deployment. When deployment length is not predictable—for example, because of

uncertainty about operation requirements—it would be useful to advise members of this uncertainty so that they and their families can plan around it.

Given that long work hours effect higher-than-usual stress and reduce intentions to stay, military planners should pay careful attention to why personnel are being asked to work longer than the normal duty-day so often, add personnel if possible, eliminate or postpone low-priority tasks, and examine potential ways to compensate and recognize personnel for frequently working long hours. Expanded family programs might also play a role. However, determining which programs to expand and in what way may require an assessment of the benefits and cost of such changes, including a sense of whether some families—for example, those living off base—would be better served by having more money than by expanded family programs.

*Training and preparation are important to improving the ability of personnel to respond effectively in challenging or unfamiliar circumstances. They help reduce the likelihood of higher-than-usual stress and increase the intention to stay. Although existing training is extensive, the military should continue to revise and update its training programs in a timely way to address the changing nature of combat and the requirements of nontraditional combat.*

The importance of training and preparation in helping personnel deal with and perform under stress is supported by the literature, data analysis, and focus group comments. Many personnel in our focus groups agreed that training prepared them to perform their duties, but many also felt that existing training needed to be revised to include more training for nontraditional, counterinsurgency, and peacekeeping operations. The military is already adapting its training, using lessons learned in Iraq. Training programs should be kept flexible and responsive, so that changes in enemy tactics can quickly be incorporated into predeployment preparation.

*Many service members cope with combat-related stressors informally by turning to their peers for support. It may be worthwhile to consider ways of removing the stigma, or reluctance, to seek professional counseling and, further, to consider additional training to enable service members to be more effective in counseling or supporting one another.*

Our data analysis found that involvement in OEF/OIF combat operations was often unrelated to higher-than-usual stress and intention to stay—a finding that may be a product of the time of our data, 2003 and early 2004. The results could differ in 2005, now that many more service members have been subjected to stress from insurgency attacks. Previous and very recent research on returning veterans, combined with focus group discussions about the difficulties of reintegration and readjustment, suggest that attention must be paid to the mental health consequences of high work stress and combat-intense deployments.

Military health officials and leaders are aware of this risk and are taking steps to ensure that personnel receive the counseling and support they require during and after their deployments. However, most focus group participants reported that they and their colleagues were hesitant to ask for professional help for fear of being perceived as weak or of harming their chance for promotion. They were also skeptical of the value of some existing programs, and some wished that the military would expand its existing reintegration training. Military officials should work against the conception that seeking help for combat-related mental health problems is weak or will affect a member's military career. They should ensure that support services are accessible to all returning personnel and address the most common sources and manifestations of postdeployment mental problems. The Army is currently

screening returning personnel for post-traumatic stress disorder (PTSD), a process that eliminates the need for an individual soldier to decide whether to seek help and that aids in ensuring that soldiers with PTSD symptoms are referred for care. In addition, it might be useful to train soldiers in how to help other soldiers handle stress.

### **Further Research**

Further research on the issue of how deployments affect reenlistment seems warranted. Additional analysis of more-recent Status of Forces surveys and personnel data would enable researchers and military planners to determine whether the relationships between work hours, deployments, higher-than-usual work stress, and reenlistment intentions are changing as longer, more-hostile deployments become the norm and as individuals return from their second or third tour. Interestingly, only the surveys contain information about long work hours, whereas the services' personnel files, which have been frequently used in retention analyses, do not. Future work should also revisit the question of how reenlistment bonuses and special pays affect the reenlistment of personnel with extensive deployment.