How Military Families Function Before, During, and After Deployment

Findings from the RAND Deployment Life Study

WHAT HAPPENS to military families when a service member is deployed? In study after study, deployment has been associated with poorer mental health in military families, behavioral problems in children, a higher risk of divorce, and higher rates of suicide. Not surprisingly, service members and spouses regularly name deployments as the most stressful aspect of military life.

The Deployment Life Study (DLS)—a first-of-its-kind longitudinal study—was designed to assess the impact of deployment on military families and to help the Department of Defense, policymakers, and service providers better prepare these families for a deployment. The DLS surveyed more than 2,700 married military families from all branches (i.e., Army, Air Force, Navy, and Marine Corps) and components (active, reserve, and Guard) of the military. Up to three family members—the service member, the spouse, and a child age 11–18 (if available)—were surveyed every four months for three years. While deployment policies regarding length of each deployment vary across services, our study allowed us to define a study deployment for each family individually and monitor them across their own deployment-related experience.

The DLS evaluated key outcomes, including the quality of marital and parental relationships; psychological, behavioral, and physical health of family members; child well-being; and military integration (or attitudes toward military service). Conducted from 2011 to 2015, the DLS allowed researchers to examine family functioning and individual well-being before, during, and after deployment. The analysis was designed to answer three questions, and our findings are detailed below.

By the Numbers

2700
military families studied

9
surveys per family member before, during, and after deployment

5
study areas:
marriage, family, psychological and behavioral health, child and teen well-being, and military integration

1. What happens to military families over the course of a deployment cycle?

The most common theme was that military families are resilient. Despite the challenges they experienced before and during a service member's deployment, family relationships and other outcomes generally returned to previous levels once the service member came home.

During deployment, outcomes changed—some for the better (physical and psychological aggression between partners declined, service members reported a better family environment, higher parenting satisfaction, and less binge drinking) and some for the worse (increased depressive symptoms among service members and spouses,

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Family relationships and other outcomes generally returned to previous levels once the service member came home.

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increased posttraumatic stress disorder and anxiety symptoms among spouses, elevated psychological symptoms in children). In some cases, service members and spouses had opposite reactions to deployment. For example, while service members as a group rated their experiences as a parent higher during deployment, spouses reported less satisfaction with being a parent during the same time period.

When service members returned home, most of these changes reversed: By the end of the reintegration phase, family relationships and well-being had generally returned to pre-deployment

levels. An exception was observed among teen participants, who reported significantly lower-quality relationships with the deployed parent when the parent came home.

2. How do post-deployment outcomes differ between families that did and did not experience deployment?

Not all service members in the study actually deployed. By comparing the outcomes of families that experienced deployment to those of well-matched families that did not, the analyses attempted to identify the *causal* effect of deployment on family well-being. The results of these analyses were striking and unambiguous: Across a wide range of variables, there was little difference between the two groups by the end of the study.

The exceptions were teens and children. In families that experienced a deployment, spouses reported more child difficulties (specifically, emotional conduct and peer problems) at the end of the study than their peers whose spouses did not deploy. Interestingly, this concern applied only to children younger than 11, not to teenagers. Neither teens' parents nor the youths themselves reported behavioral difficulties. But teens did report worse family cohesion and lower relationship quality with the non-deployed parent than did their peers in non-deployed families.

Across a wide range of variables, there was little difference between families that experienced deployment and those that didn't by the end of the study.

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3. How well do characteristics of families and the deployment explain which families are doing better or worse when the service member returns?

The analyses found that preparation and communication were critical factors. For example, the more service members and spouses reported preparing for deployment (developing an emergency financial plan or buying life insurance), the higher their

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The analyses found that preparation for deployment and communication during deployment were critical factors.

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parenting satisfaction after deployment. The more frequently that spouses reported communicating with their partners during deployment, and the more satisfied spouses were with the amount of communication, the higher their marital satisfaction when the service member returned.

In addition, couples who left the military after deployment (and during the three years they were in the DLS) reported lower marital satisfaction and increased psychological symptoms by the end of the study. There was no way to determine whether these activities directly affect family functioning or whether more or less resilient families simply engage in different behaviors around deployments. These associations emerged even after controlling for family characteristics at the time of study enrollment, consistent with the view that the behaviors themselves influence family well-being.

The study's findings also suggested that service members' exposure to

traumatic events *during* deployment, rather than separation from family itself, brought about any negative effects associated with being deployed. However, the relationship between traumatic experiences and post-deployment outcomes was complex.

The DLS assessed the effects of physical trauma (such as being injured), combat trauma (exchanging fire with the enemy), and psychological trauma (witnessing trauma or vicarious exposure to trauma) during deployment on military family outcomes after deployment. All three predicted greater symptoms of posttraumatic stress disorder and depression, lower satisfaction with the military, and weaker intentions to remain in the service post-deployment. Other outcomes differed based on the type of trauma. For example, service members' exposure to physical and psychological trauma predicted *higher* levels of psychological and physical aggression post-deployment, according to spouses; however, combat trauma predicted *lower* levels of psychological aggression among both service members and spouses post-deployment. For teens, a parent's experiencing combat trauma was related to poorer functioning and worse relationships with parents, but a service member's experiencing psychological trauma (in the absence of injury or combat trauma) was related to better teen functioning and relationships with parents.

3 Types of Deployment Trauma Studied

Some outcomes differed depending on the type of trauma that the service member experienced during deployment.

Physical
Injury to the service member

Combat
Exchanging fire with the enemy

Psychological
Witnessing or vicarious exposure to trauma

IMPLICATIONS FOR IMPROVING THE WELL-BEING OF MILITARY FAMILIES

The current findings led RAND researchers to make a number of recommendations for improving the well-being of military families.

- **Programs, services, and policies should target families that experience deployment trauma, especially when the service member returns.** Given that service members' exposure to trauma appears to have multiple negative consequences when they come home, these families could be targeted for post-deployment support. Programs that target families based on documented experiences, rather than self-reported symptoms, might help mitigate problems before they can affect multiple family members.

- **Addressing problems around the time of separation may be important for avoiding the longer-term impairments caused by these problems, such as increased morbidity, homelessness, unemployment, and substance use among veterans.** The results indicate that service members who have separated from service post-deployment have significantly elevated psychological symptoms. Regardless of whether psychological problems predate separation or not, the separation period appears to be a high-risk time for individuals who leave the military.

- **Programs that allow and encourage communication both between and within military families during a deployment may promote their well-being.** When spouses were satisfied with the quantity of communication during deployment,

STUDY LIMITATIONS

Although extremely valuable because of its analytical rigor and unprecedented scope, the DLS does have a few limitations. First, the survey was conducted during a period when operational tempo among U.S. troops was decreasing, combat zones were less volatile, and deployments were less dangerous compared with the years immediately prior. Second, most married service members eligible for the study *had previously deployed* by the time recruitment for DLS began. This means that families vulnerable to the most negative consequences from deployments may have left the military or divorced before the study began. The impact on first-time deployers may be very different from our findings about families with more experience in deployment. Finally, the study's focus was on *families in married* households, both with and without children, so the findings cannot be extended to single-parent household families or single service members.

family relationships were better when the service member returned. Maintaining open lines of communication between family members during the separation may ease the process of reintegration once the service member returns.

- **Support to improve relationships among service members, spouses, and their teen children during the post-deployment period may improve family functioning.** Given the effects of deployment on teens' relationships with both parents, it may be more effective to pursue programs that focus on preventing declines in relationship quality and family cohesion after the service member returns as means of promoting family well-being rather than relying on programs that wait for families to seek help once relationships degrade.

The DLS provides a robust data set that should enable further exploration of the issues and challenges that military families face. For examples, these data can be used to help understand the predictors of separation from the military, further explore the relationship between communication and deployment related effects, and assess the effect of frequent moves on military family outcomes.

IMPLICATIONS FOR FUTURE RESEARCH ON MILITARY FAMILIES

The findings also highlight several areas where changes to current research strategies could result in improved data—both in terms of timeliness and quality—for making policy decisions that will help military families.

- **Future research on military families should explore ways in which data can be collected from multiple family members at the same time.** For some outcomes, such as family environment and anxiety, service members and spouses reported different outcomes during the same period of the deployment cycle. Collecting data from multiple members of the same families can capture these differences, and the results can help to tailor support for individual family members based on their relationship to the service member (e.g., spouse, child, teen).

- **When funding resources become scarce, future research on military families should prioritize longitudinal studies.** Compared with retrospective or cross-sectional reports, longitudinal study designs that follow the same families over time offer the most methodologically robust way to assess the impact of deployment on families.

- **Procedures for collecting real-time data from military families should be explored.** No single type of real-time data can address all the relevant research and policy questions. Some combination of administrative data for service members (such as medical records or personnel data) and ongoing data from a representative panel of military family members could prove to be a very useful, cost-effective solution for informing time-sensitive concerns.

- **Develop new theories, measures, and analyses of deployment experiences that can account for the complex relationship between deployment and post-deployment outcomes.** The complex pattern of our findings deserves further study. In light of the mixed results for different types of traumatic experiences, new theories, measures, and analyses are needed to better understand which specific deployment experiences have persistent effects on service members and their families, as well as how those effects are produced.
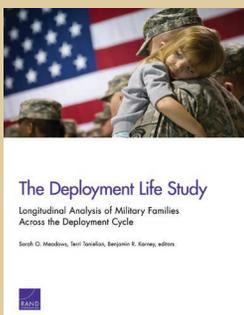
DEPLOYMENT LIFE STUDY

The Deployment Life Study
Longitudinal Analysis of Military Families Across the Deployment Cycle
Sarah O. Meadows, Terri Tanielian, Benjamin R. Karney, editors

U.S. Air Force photo by Justin Connaher

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