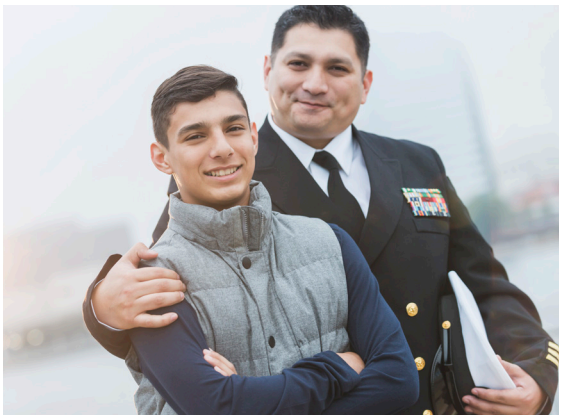
Strengthening the MILITARY FAMILY READINESS SYSTEM for a Changing American Society

Stress and Resilience in Military Families

Although there are many benefits to serving in the military, there are also many stressors that affect service members and their families. These include deployments and the separation they bring, family member's worries about the service member's safety, and the repercussions of injuries and death. The stresses are inherent in the job, but by understanding these stresses and ways to help people deal more effectively with them, it should be possible to alleviate some of the worst effects of the stresses on military family well-being.



The Effects of High-Impact Duty-Related Stressors on Families

Military families are affected by a variety of experiences that offer both challenges and opportunities, but certain types of high-stress events require particular attention because of their potential for serious negative consequences. Both physical injury and psychological traumatic stress, for example, can lead to various issues within a family, affect marital and parenting relationships, and undermine the individual and collective well-being of both the adults and the children.

Mental health conditions are among the most common high-impact duty-related stressors. For instance, 19 percent of service members returning from combat in Iraq or Afghanistan reported symptoms consistent with the presence of a psychiatric disorder, including posttraumatic stress disorder (PTSD), depression, anxiety disorder, and substance abuse. Each of those disorders can affect not only the service member but also the individuals in his or her family.

PTSD, which was estimated to have affected between 5 and 15 percent of the veterans of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), has wide-ranging consequences for the military family. Combat veterans suffering from PTSD are more likely to exhibit aggressive and violent behaviors, for example. Among married service members and veterans, PTSD is associated with lessened communication, marital confidence, relationship dedication, parental alliance, and relationship bonding. The effects on the spouses include higher rates of distress, depression, and suicidal ideation, and lower levels of satisfaction with the marriage. Parenting behaviors are often affected by the PTSD of one parent as well, with some of the more common changes

including greater emotional reactivity, a loss of cognitive capacity, greater levels of interpersonal aggression, and an increased avoidance and disconnection from loved ones. Finally, children are likely to be affected by the emotional and behavioral changes in a PTSD-affected parent, with the precise effects being dependent on the child's age, developmental level, temperament, and any pre-existing conditions. Among the effects observed in children of veterans with PTSD are general distress, depression, low self-esteem, aggression, impaired social relationships, and school-related difficulties, and young children may have an especially hard time understanding and coping with the parental overreaction or disengagement that can result from PTSD.

Major depression, which affected between 2 and 14 percent of returning OIF and OEF veterans, is the other most common serious mental health issue affecting service members and veterans. Studies in the general population have found depressive disorders to be associated with interpersonal negativity, communication difficulties, and interpersonal stress within affected couples and families along with greater levels of marital dissatisfaction and discord. Furthermore, a parent's depression is known to increase the risks of depression and anxiety, behavioral problems, and academic and cognitive difficulties in children.

Substance use disorders, like PTSD and depression, are associated with combat deployments. Research done in the general population has found that substance use disorders increase the risk of marital issues and problems in parenting.

Nearly 30,000 service members were wounded in action during OIF and OEF, with long-lasting consequences that include amputations, blindness, and deafness. Furthermore, according to the Defense and Veterans Brain Injury Center, since 2000 nearly 380,000 service members have been diagnosed with traumatic brain injury (TBI) resulting not only from combat-related injuries, but also from other duty-related events, such as training, operations, or deployment and from non-duty-related events, such as recreational events and motor vehicle accidents. Combat-related injuries create a variety of stresses on families, such as long and stressful rounds of treatment and rehabilitation, which can lead to relocation or extended periods of separation, as well as changes in functioning, which can require family members to assume new roles within the family, such as caregiving. Depending upon the nature of the physical injury, service members may have physical, psychological, or cognitive changes that affect how they function in a variety of areas, including their spousal relationships and their parenting.

TBI's consequences, which can include personality changes, loss of control, unexpected emotional reactions, irritability, anger, and apathy or lack of energy, can be more distressing to family members and disruptive to family functioning than other, non-neurological physical injuries. TBI has been correlated with compromised parenting in both the injured and the noninjured parent, and children of TBI-affected parents report feelings of loss, isolation, and loneliness after the TBI incident.

In the 10 years following 9/11, almost 16,000 service members died while on active duty. The causes included accidents (34%), combat (32%), suicide (15%), illness (15%), homicide (3%), and terrorism (less than 1%). These service members left behind 9,667 widowed spouses and 12, 641 dependent children with an average age of 10.3 years. About one in seven widowed spouses report grief so deep that it interferes with their ability to live their normal lives. Furthermore, after the death the widowed spouses and their families must leave the military communities they have been living in, losing much of the support they offer, and find themselves living among civilians who often do not fully appreciate their history or their culture. And among the children of deceased service members, studies have found anxiety, depression, and posttraumatic stress symptoms.

Stress in Military Children

One of the goals of the Military Family Readiness System (MFRS) is to help ameliorate the consequences of these various duty-related stresses on military children. To do that, it is important first to understand the effects of such stress in children as well as the role that resilience plays in helping children deal with these stresses. Although there are few research studies that have examined these issues specifically in military children, much is known about the issues among children in general.

While a certain amount of stress is necessary for optimal health, excessive stress has been found to impair functioning at multiple levels—epigenetic, biological, physiological, and behavioral—and to increase an individual's risk for disease or illness later in life. One of the major ways in which stress can affect children is to disrupt their normal development. The experience of extreme stress during a child's development likely increases vulnerability to lifetime disease, for example, but the research is not yet clear on exactly what constitutes a sensitive period for early life stress.

The effects of both chronic and acute stressors may vary depending on the areas of the brain that are developing at the time of the stress exposure. For example, prenatal stress affects the development of regions of the brain associated with the development of the so-called HPA axis—that is, the hippocampus, amygdala, and frontal cortex—whereas stress in early postnatal life affects the production of glucocorticoids. Adolescents are very vulnerable to the effects of stress, likely because of the increases in frontal cortex volume that occur during this stage of life.

Biologically speaking, excessive stress can be seen as a threat to the body's homeostasis, that is, its tendency to maintain internal equilibrium. When the body senses such a threat, it responds by increasing autonomic nervous system activity and releasing hormone secretions. The HPA axis is the biological system most closely linked to stress, and when individuals perceive stress, it releases the hormone cortisol. Extensive research on the HPA axis's response to stress has shown that while the response may help the body in the moment, if the axis is triggered chronically, the result can be damage to other bodily systems, including the brain's structure and function.

What is known from civilian research is that severe stressors—for example, physical injury or psychological trauma caused by a parent, a parent's death, or family violence—may have complex influences on child development that span multiple domains, including physiological, biological, behavioral, social-emotional, and cognitive functioning. One of the main results of such stress in childhood is a disruption in the ability to handle later stresses. On the other hand, these results are not inevitable. There is significant variability across individuals, and the negative effects of stresses can be ameliorated by supportive caregiving.

These general results seem likely to apply to military children as well. It is worth noting, however, that the vast majority of the parenting literature in this area focuses on mothers, while far less research has been done on fathers and fathering. Because the majority of service member parents are fathers, there is an important opportunity to begin to examine the special role of military fathers in their children's development.

Resilience in Military Children

Among children who experience high-risk conditions in the family and broader environment, some fare better than others. Indeed, some studies have found that as many as one-third of youth exposed to early stressors, such as parental mental illness, poverty, violence, or single parenthood fare as well as their low-risk peers. Youth who do as well as their low-risk peers despite their exposure to stressful conditions in the home and the broader environment are considered *resilient*.

Because the processes involved in childhood resilience operate across multiple domains both within and beyond the child, there is no single resiliency trait. Instead, there are a variety of factors known to be associated with childhood resilience. First and foremost, childhood resilience is associated with sensitive, responsive, loving, predictable, and protective parents and caregivers who encourage the development of a secure attachment relationship in infancy and early childhood. A secure attachment relationship not only provides a child with an internal working model of healthy relationships, but it also provides a secure base from which a child can explore and feel effective in the outside world.

A second key correlate of resilience is self-regulation—the ability to monitor and regulate one's behavior, attention, thoughts, and emotions. Children with effective self-regulation are at lower risk for behavioral and emotional problems and are able to be more successful in school because they can follow and comply with teacher directions. Effective self-regulation may be particularly important in high-risk settings.

Mastery motivation is a third key factor associated with resilience. It refers to the feelings of mastery that one gets after successfully interacting with the outside environment, such as when a young child learns to walk, and it is closely connected with feelings of self-efficacy, which seems related to persistence and perseverance of effort.

Higher cognitive abilities of the sort assessed by tests of intelligence quotient or problem-solving capacity also appear to be significantly associated with resilience. Better cognitive functioning is likely related to the success in schoolwork, in navigating novel situations, and in flexible problem solving and is also protective for youth at risk of behavior problems.

Finally, both hopefulness (or positive outlook) and meaning-making may be associated with resilience. Although relatively little empirical research has been done on these two constructs, both observations and anecdotal accounts from resilient children who have grown up indicate that they are important factors for youth who have been resilient in the face of challenges.

There appears to be little, if any, published empirical research on the correlates of resilience in military children, but it is likely that the same sources of resilience found in general samples of children are relevant to military children and youth. However, there may be certain experiences specific to children growing up in military families that help to confer resilience. For example, the resilience-focused approaches of much military training may convey the importance of hope, optimism, or a positive outlook on life to parent service members, who may in turn share this outlook with their children. More research is needed to understand the specifics of resilience in military children.

The Role of Context and Prior Events

To understand the effects that stress has on members of a military family, it is not enough simply to examine the stresses and the family's current situation. and resilience. The developmental context must also be taken into account. In particular, the accumulation of the effects of various events experienced prior to military life—family members' prior traumas, adverse or beneficial childhood experiences, acute or chronic family stressors, and so forth—can play a major role in how stresses affect an individual, either magnifying the effects of a particular stressor or mitigating them.

As noted above, children whose background events have helped them develop resilience—through the development of secure attachment relationships or of the ability to self-regulate—are likely to respond more effectively to

stressors than children whose developmental history was not conducive to these factors. Conversely, children and adults who have lived through negative prior events—such as traumas, adverse interactions with others, regular or severe stressors, or microagressions—will likely be more vulnerable to stressors later in life. Research has found, for example, that prior adverse childhood experiences put service members at higher risk of developing depression.

The context within which service members and their families experience stresses is also important, and that context is constantly changing and evolving. Marriages, divorces, the births of children, new medical conditions or educational statuses among family members, a new job of the loss of a job for a military spouse, transitions from military life, or changes in extended family obligations, such as unexpected child care requirements or new responsibilities associated with aging parents—all of these affect the context in which stressors are experienced. Some of the changes can improve an individual's ability to deal with stress, such as marriage to a supportive spouse, while others are themselves stressful—divorces, the birth of a child—and can make it more difficult to deal with stressors.

There are many other factors that are likely to affect the associations between military-related adversities and family and child health and well-being but have not been studied enough for those effects to be clear. Families with a member on National Guard or Reserve status remain understudied, for example. There have also been few, if any, studies on the effects of various stressors on nontraditional families (including single-parent families, female service member families, dual-military families, sexual minority families, and immigrant families) or on families having low socioeconomic status. Similarly little is known about the effects of racial, ethnic, and religious factors. The greater stigmatization that families in some of those categories experience, the lower level of resources available to some of them, their increased need for services, and their reduced access to community support are all likely to add vulnerability in the face of military adversities. Furthermore, community service and health care providers are less likely to be aware of and educated about the needs within these subpopulations, making it more difficult to address their needs.

Evidence-Based Interventions

Given all of the different stresses that military children may be challenged with, it is natural to ask: Is it possible to strengthen military children's resilience and prepare them for some of the stresses and challenges they may encounter growing up in a military household? Over the past several decades, a number of interventions designed to increase children's resilience have been rigorously tested in randomized controlled trials, and although few of these trials have been targeted specifically at military children, the available evidence indicates that resilience can indeed be enhanced.

Most of the trials were of two basic types. Some were intended to modify parenting and caregiving behavior in ways that would encourage the development of greater resilience in their children, while others were focused directly on helping children develop resilience-related skills and capabilities. Both types are promising for use in military settings.

Far more of the intervention studies were focused on improving caregiving and parenting than on targeting children's resilience directly. A likely reason for this is that the interventions aimed at parents have been shown to have positive effects on both parents and children and thus to improve overall family well-being, whereas the children-focused interventions have less effect on the parents.

Two particular caregiving/parenting interventions illustrate the power of this approach. One of them, the Nurse–Family Intervention, works with new parents beginning in the second trimester to strengthen the parent–child attachment relationship and to give the parents early childcare skills and knowledge. This intervention has been tested in three randomized controlled trials with diverse low-income mothers in three cities. Long-term follow up of the families in those trials has found reductions in child maltreatment, benefits to the families' socioeconomic status, and improvements in multiple domains of child and youth functioning over more than 15 years, including improved school readiness, reduced substance use and psychopathology, fewer injuries, and improved academic achievement.

Strong African American Families is a 7-week parenting program for parents with pre-adolescent children. A randomized controlled trial in rural families in the southern United States found improvements on multiple child health and development indicators, including self-regulation, behavioral risks (substance use, antisocial, and risky sexual behaviors), and school attendance.

Programs have also had success in targeting children directly, generally as school or in a community environment, to help them develop capabilities, such as executive functioning, emotion regulation, and problem-solving skills, all of which can increase resilience. An example of such a program is Head Start REDI, which provided enrichment to the standard Head Start curriculum. A randomized controlled trial of the program that followed 4-year-old children for 5 years found improvements in children's academic outcomes by third grade as well as significant and sustained improvements in executive function among the children in the study who had the poorest executive functioning skills at the beginning of the study.

Another intervention for school-age children, Promoting Alternative Thinking Strategies, increased students' verbal fluency and inhibitory control after 1 year, which led to improvements in teacher reports of the youths' behavioral and emotional problems.

By better understanding the sorts of stresses faced by military families, the sources of resilience in the face of these stresses, and what sorts of interventions are effective in ameliorating the effects of these stresses, the MFRS should be able to significantly improve military family well-being in the face of the sorts of stresses that are a part of military life.

Learn More

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