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Military Children and Families

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The Future of Children

Military Children and Families

Military Children and Families: Introducing the Issue

Colonel Stephen J. Cozza (U.S. Army, Retired) and Richard M. Lerner

In this issue of *The Future of Children,* we seek to integrate existing knowledge about the children and families of today's United States military; to identify what we know (and don't know) about their strengths and the challenges they face, as well as the programs that serve them; to specify directions for future research; and to illuminate the evidence (or lack thereof) behind current and future policies and programs that serve these children and families. At the same time, we highlight how research on nonmilitary children and families can help us understand their military-connected counterparts and, in turn, how research on military children can contribute both to a general understanding of human development and to our knowledge of other populations of American children.

These goals are timely and important. Since the war in Afghanistan began in 2001, followed in 2002 by the war in Iraq, the United States has seen the largest sustained deployment of military servicemen and servicewomen in the history of the all-volunteer force. As a result, more than two million military children have been separated from their service member parents, both fathers and mothers, because of combat deployments. Many families have seen multiple deployments—three, four, even five or more family separations and reunifications. Others have struggled with combat-related mental health problems, including posttraumatic stress disorder (PTSD); physical injuries, including traumatic brain injury (TBI); and death, all of which can affect children and families for years.[1]

Media reports about the wars and human interest stories about combat veterans and their families have made most Americans more aware of the challenges that military families and children have faced over the past decade. The history of military children,

however, goes back much further in time and tells a complex story of the interrelationship among these children, their military parents and families, and the military and civilian communities in which they live. Though these children face many hardships, they also demonstrate health and wellness in many ways, and they live in communities with rich traditions and resources that strive to support them.

The terms *military child* and *military family* have been used in various ways. President Barack Obama and the Joint Chiefs of Staff define military families as active-duty service members, members of the National Guard and Reserve, and veterans, plus the members of their immediate and extended families, as well as the families of those who lost their lives in service to their country.[2] However, researchers who study and collect data on military families and children typically define military families as the spouses and dependent children (age 22 and younger) of men and women on active duty or in the National Guard and Reserve. This is the definition we use here, although we broaden it to include the children of military veterans because the experience of military family life may continue to affect the growth and health of parents, families, and children long after service members leave the armed forces. Though we recognize that military service also affects parents, siblings, and other relatives of service members, our authors do not discuss these relatives in any detail, reflecting a paucity of research in this area. In addition, what becomes of military children when they reach adulthood, including their own greater propensity to volunteer for military service, is also of great interest and worthy of future research, but it is outside the scope of this issue.

The articles here present considerable evidence about America's military-connected children and their families, but the authors also point to the limits of our knowledge. At this writing, in the second decade of the 21st century, we still need unbiased, basic information about what typically characterizes children's development in our diverse military-connected families. Research on the development of military children has focused largely on the quality or function of their family systems and on the potential risks of a parent's deployment to their wellbeing, but we need to understand more about the strengths and resilience of these young people, particularly as they face challenging circumstances. A few studies describe how a parent's PTSD affects children, but we know very little about the effect on children of combat-related injuries (including TBI) and death, and we must extrapolate from the civilian literature in those areas; we need longitudinal studies (research that follows children and family members across time) that examine military children in these circumstances. The knowledge we have is sufficient neither to guide our understanding of military children's resilience nor to help us design better programs to mitigate the risks they face.

Much of the research about military children examines stressful experiences (for example, a parent's deployment, moving, or maltreatment and abuse) or the deficits that these stress factors purportedly cause (for example, poor academic performance, depression, or behavioral problems).[3] Though we need to understand any negative effects of military life on children, the data from such research tell neither the complete story nor what is perhaps the more important story. In large part, researchers have yet to examine military children's strengths, how these strengths can sustain them through adversity, or how

their own strengths interact and develop with the strengths of their military families and the communities where they live. Moreover, we have yet to fully identify and assess the resources for positive development that exist in these children's schools, in the military, and in their civilian communities. In short, the existing research offers only a rudimentary depiction of military children and their families across their respective life courses, and certainly not a representative one.

The children of military families deserve to have policies and programs designed to fit their developmental needs. Given the extraordinary sacrifices that military personnel make, and the invaluable services that they provide, our lack of a thorough understanding of their children's development is not appropriate. A balanced approach to the study and understanding of military children—one that measures the effect of risks but also incorporates a focus on strengths—will give us the clearest and most comprehensive picture of this population, for several reasons:

1. Research that focuses on the broader impact of stressful or traumatic events on children describes a wide range of responses, including not only anxiety, depression, behavioral problems, risky behaviors, and even PTSD, but also positive adaptation and growth. The severity of the stress, the proximity of the experience, the children's age and gender, their history of exposure to other traumatic experiences, their parents' or caregivers' functional capacity, and the availability of social supports all typically contribute to the outcome. Understanding specific risks and the disorders or dysfunction they can produce lets us more effectively target prevention and intervention strategies that promote health.

2. Most children exposed to traumatic events are likely to be healthy rather than ill. Therefore, preventive interventions that support health through adversity by imparting resources, skills, and broad resilience-building strategies may benefit not only military children but a larger segment of the population as well, and may help us develop community capacity to manage a broad range of challenging experiences throughout all children's lives.

3. Self-efficacy—the capacity to feel in control of one's own development—is a critical skill that helps both individuals and communities recover and thrive when they face adversity and traumatic experiences. Therefore, to support military children and their families, we must understand how to foster individual, family, and community capacity for self-efficacy.

4. Enhancing the lives of children in military families also enhances the quality of their families' lives. Research documents a positive relationship between the wellbeing of the families of military personnel and the likelihood that they will stay in the service. Given the nation's continual need for high-quality service members, it is in the public interest to ensure that military children and families are thriving.

5. Without precise knowledge of military children's strengths and their opportunities for positive development, conjecture and overgeneralization will inappropriately frame decisions about meeting their needs and supporting their health, and we cannot have confidence that we are using practices, formulating policies, and developing or sustaining programs based on the best information we can obtain. Decisions about ameliorating the inherent risks of military

life to help children grow and thrive need to be based on evidence derived from well-designed, theoretically predicated developmental research.

6. Given the current state of research on military children, we cannot adequately describe how they may be using their strengths and resources to cope with either the typical opportunities and challenges shared by all children or the unique opportunities and challenges of military family life. In addition, we need to know more about the life course of the hundreds of thousands of children with parents who have been wounded or profoundly changed as a result of a combat injury or PTSD, and about the development of children who have experienced the combat-related death of a military parent, sibling, or family member.

Noting the interconnections among service members, families, and child health and functioning, and how these interconnections influence child development, we support a theoretical approach that incorporates a life-course perspective. We know little about the "linked lives" within military families.[4] That is, we need to understand the mutually influential connections between the development of children and the development of their parents, both during the parents' periods of service and in the later periods of the life course. Finally, the links between the lives of children and parents—as they experience events such as moving, changing schools, deployment, reintegration, or a parent's traumatic injury, illness, or death—have yet to be thoroughly elucidated. As the articles in this issue show, a life-course perspective provides a vital and unifying theoretical approach to describe how military children develop.

Accordingly, in this issue we use a life-course perspective to review data about how contemporary military families and their children develop. This perspective is predicated on the idea that human lives are interdependent and "socially embedded in specific historical times and places that shape their content, pattern, and direction."[5] As a consequence, the life course involves interconnections among people's life paths as they live in their families, work, grow older, move, experience historic events like war, and face life events that are both ordinary (such as puberty, or starting and finishing the school years) and extraordinary (such as a parent's injury or death). In response to the settings, transitions, and events in their lives, writes Glen H. Elder Jr., "individuals construct their own life course through the choices and actions they take within the constraints and opportunities of history and social circumstances."[6]

Of course, we need good science to produce such knowledge about military children, knowledge that will let us better take care of their health and support their development through effective individual, family, and community prevention and intervention strategies. Most studies of military children have been limited by using small convenience samples—that is, groups of people who are easily accessible and available to the researchers, but who are not representative of the broader population—or by focusing on children's deficits rather than their strengths. We need an approach that moves beyond these children's purported deficits, and that recognizes and examines the broad impacts of both challenges as well as strengths in military children, families, and communities. Although the interactions of risk and health-promoting forces within military families and communities are complex, existing

longitudinal research demonstrates that we can study such dynamic interactions using larger, representative samples.[7]

Without precise knowledge of military children's strengths and their opportunities for positive development, conjecture and overgeneralization will inappropriately frame decisions about meeting their needs and supporting their health.

The articles in this issue expand our knowledge and illuminate a path toward a more representative depiction of military children and their families. In this way, they not only summarize the evidence we need to enhance existing policies and programs that ameliorate risk and promote positive development among military children; they also offer a critical guide for new research to support future innovations in policies and programs. Next, we provide an overview of the contributions to this issue and their implications, for military children and families as well as for all families.

The Demographics of Military Children and Families

Molly Clever and David R. Segal, both of the University of Maryland, find that, despite some general themes, our military families are strikingly diverse, by age, race, ethnicity, and cultural background. Thus, they write, our nation needs programs and policies that are flexible enough to adapt to the diversity of military families and to their continual transformations. They also note several areas where we need more and better demographic research: infants and toddlers in military families; reactions to frequent moves, including their effects on education; military families (such as those of Guard and Reserve members) who do not live in communities with a large military presence; and integrating knowledge about military families and veteran families.

Economic Conditions of Military Families

James Hosek of the RAND Corporation and Shelley MacDermid Wadsworth of Purdue University report that the economic circumstances of military families have improved considerably in the past decade as military salaries have risen. But military spouses face a range of economic difficulties. Their wages are lower than those of their civilian counterparts, they are less likely to find work or to work full time, and their job tenure is disrupted by frequent moves. Moreover, precisely because service members' salaries are now typically higher than those of their civilian counterparts, military families are likely to see their income fall when they leave the armed forces.

Military Children from Birth to Five Years

Joy D. Osofsky of the Louisiana State University School of Medicine in New Orleans and Lieutenant Colonel Molinda M. Chartrand of the U.S. Air Force note that we know very little about how the stresses of military life affect the very young, even though they are the most numerous and

perhaps most vulnerable children in military families. Accordingly, the authors make inferences from research in other contexts, and they conclude that an emotionally available and supportive caregiver is the key to building resilience in young children who face stressful situations. This suggests that support for the youngest military children means, above all, helping their parents and other caregivers cope with the stress in their lives.

Child Care and Other Support Programs

Major Latosha Floyd of the U.S. Army and Deborah A. Phillips of Georgetown University observe that the U.S. Department of Defense deservedly receives wide acclaim for offering accessible, affordable, high-quality child care—which the military sees as an essential element of combat readiness and effectiveness—to service members and their families. They also discuss how the military is coping with the challenge of providing child care to families who face multiple deployments, and to the growing share of military families who live in civilian communities. Finally, they argue that the military's experience with revamping its child-care system could be used as a template to improve child care for the nation as a whole.

Resilience among Military Youth

M. Ann Easterbrooks of Tufts University, Kenneth Ginsburg of the Children's Hospital of Philadelphia, and Richard M. Lerner, also of Tufts, present an approach to understanding resilience among military-connected young people that is based on sound theory, and they discuss gaps in our current knowledge. The research to date, they find, suggests that to bolster resilience among military children and their parents, we should advocate for enhancing the available social

support resources. However, they conclude that although many military and civilian programs aimed at promoting resilience are promising, we still know far too little about how children in military families become resilient and thrive.

How Wartime Military Service Affects Children and Families

Patricia Lester of the University of California, Los Angeles, and Major Eric Flake of the U.S. Air Force use developmental theory and research as the foundation to understand how children experience wartime deployments, paying particular attention to risk and resilience. Their goal is to provide a framework that can help guide a national research agenda and develop a public health approach for military-connected children and their families, at the same time that it offers insights about civilian children affected by other types of adversity. They conclude that a successful national public-health response for military-connected children and families requires policies that help military and civilian researchers—as well as communities and systems of care—communicate, connect, and collaborate with one another.

When a Parent Is Injured or Killed in Combat

Allison Holmes of the Uniformed Services University of the Health Sciences (USUHS), Paula Rauch of Harvard University, and Colonel Stephen J. Cozza, also of USUHS, examine how children are affected when a parent is injured (physically or psychologically) or dies during a combat deployment. Where there are gaps in the research on the modern military, the authors present data from studies of civilian life or past conflicts that can help us understand what military-connected children are likely to experience.

They conclude that we can help children cope and thrive by supporting parents' physical and mental health, bolstering their parenting capacity, and enhancing family organization. Throughout the family's recovery, they write, the most effective community support services and resources are those that emphasize family-focused care and resilience.

Building Communities of Care for Military Children and Families

Harold Kudler of Duke University and Colonel Rebecca I. Porter of the U.S. Army define communities of care as complex systems that work across individual, parent/child, family, community, military, national, and even international levels of organization to promote the health and development of military children. They note that relatively few elements of these communities are clinical, while others support military children (or, at least, minimize their vulnerabilities) through interaction with parents, schools, youth organizations, law enforcement and judicial systems, educational and vocational programs, and veterans' organizations, among others. The authors argue that researchers, practitioners, and policy makers need to recognize the presence of military children in our communities and tackle their problems in close proximity to their homes, schools, community organizations, and doctor's offices. The secret of creating communities of care for military children, they contend, is creating communities that care about military children.

Unlocking Insights about Military Children and Families

Anita Chandra of the RAND Corporation and Andrew S. London of Syracuse University discuss how we could help close the gaps in our knowledge about military children and families by collecting more and better data. They recommend that researchers routinely include questions about parental military experience in existing and future national surveys. They also suggest making use of smaller-scale studies to adapt survey questions for military populations, reformulate research questions, and examine the effects of unique military circumstances on children's health, behavior, and emotions. In addition, they call for longitudinal research that follows military, veteran, and civilian children into adulthood to enhance our understanding of how military service affects development across the life-span.

Afterword: What We Can Learn from Military Children and Families

Drawing from the preceding articles, Ann S. Masten of the University of Minnesota highlights what we can learn from military children and families that can be applied to families outside the military. She concludes that a system of solutions to promote family and child resilience and healthy development is emerging in the military, and that it heralds a fundamental transformation in thinking and practices with respect to sustaining military preparedness and excellence. She argues that what works to promote children's success and protect child development in military families may have profound significance for the future of all American children.

Conclusions

Framed by a life-course perspective that focuses on the linked lives of military children, their families, and the military and civilian communities in which they live, this issue of *The Future of Children* advances our understanding of the developmental

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Framed by a life-course perspective that focuses on the linked lives of military children, their families, and the military and civilian communities in which they live, this issue of the Future of Children *advances our understanding of the developmental processes and community supports that can lead to positive (or negative) outcomes among military youth in all their diversity.*

processes and community supports that can lead to positive (or negative) outcomes among military youth in all their diversity. The articles show how studying the life course of children and families in general can reveal the processes of individual development and parent-child relations in military families as they experience both ordinary and extraordinary life and historical events. In turn, we see how the resilience and strengths of military children, families, and communities exemplify processes pertinent to the linked lives of children and families in general. Together, the articles in this issue offer a framework both to enhance research and to understand the unique risks and strengths of military children and their families, and they point to the need to further develop evidence-based policies and programs that can capitalize on military children's strengths and better promote their positive development through challenging times.

ENDNOTES

1. Stephen J. Cozza, Ryo S. Chun, and James A. Polo, "Military Families and Children during Operation Iraqi Freedom," *Psychiatric Quarterly* 76 (2005): 371–78, doi: 10.1007/s11126-005-4973-y.

2. Office of the President of the United States, "Strengthening Our Military Families: Meeting America's Commitment," January 2011, http://www.defense.gov/home/features/2011/0111_initiative/ strengthening_our_military_january_2011.pdf); Office of the Joint Chiefs of Staff, "Keeping Faith with Our Military Family," accessed January 28, 2013, http://jcs.mil/page.aspx?ID=57.

3. For a review, see Richard M. Lerner, Jon F. Zaff, and Jacqueline V. Lerner, *America's Military Youth: Towards a Study of Positive Development in the Face of Challenge* (Harker Heights, TX: Military Child Education Coalition, 2009).

4. Glen H. Elder Jr., "The Life Course and Human Development," in *Theoretical Models of Human Development,* ed. Richard M. Lerner, vol. 1 of *Handbook of Child Psychology,* 5th ed., ed. William Damon (New York: Wiley, 1998), 939–91; Glen H. Elder Jr. and Michael J. Shanahan, "The Life Course and Human Development," in *Theoretical Models of Human Development,* ed. Richard M. Lerner, vol. 1 of *Handbook of Child Psychology,* 6th ed., ed. William Damon and Richard M. Lerner (Hoboken, NJ: Wiley, 2006), 665–715.

5. Elder, "Life Course," 969, 961.

6. Elder, "Life Course," 962; Elder and Shanahan, "Life Course." See also Paul B. Baltes, Ulman Lindenberger, and Ursula M. Staudinger, "Lifespan Theory in Developmental Psychology," in Lerner, *Theoretical Models* (2006), 569–664.

7. See, for example, Jacquelynne S. Eccles and Robert W. Roeser, "Schools, Academic Motivation, and Stage-Environment Fit," in *Individual Bases of Adolescent Development,* vol. 1 of *Handbook of Adolescent Psychology,* 3rd ed., ed. Richard M. Lerner and Laurence Steinberg (Hoboken, NJ: Wiley, 2009), 404–34; Jaqueline V. Lerner et al., "Positive Youth Development: Processes, Philosophies, and Programs," in *Developmental Psychology,* vol. 6 of *Handbook of Psychology*, ed. Richard M. Lerner, M. Ann Easterbrooks, and Jayanthi Mistry (Hoboken, NJ: Wiley, 2012), 365–92; Ann S. Masten et al., "Adversity, Resources, and Resilience: Pathways to Competence from Childhood to Late Adolescence," *Development and Psychopathology* 11 (1999): 143–69; and Ann S. Masten, Jelena Obradović, and Keith B. Burt, "Resilience in Emerging Adulthood: Developmental Perspectives on Continuity and Transformation," in *Emerging Adults in America: Coming of Age in the 21st Century*, ed. Jeffrey J. Arnett and Jennifer L. Tanner (Washington: American Psychological Association, 2006), 173–90.

The Demographics of Military Children and Families

Molly Clever and David R. Segal

Summary

Since the advent of the all-volunteer force in the 1970s, marriage, parenthood, and family life have become commonplace in the U.S. military among enlisted personnel and officers alike, and military spouses and children now outnumber service members by a ratio of 1.4 to 1. Reviewing data from the government and from academic and nonacademic research, Molly Clever and David R. Segal find several trends that distinguish today's military families. Compared with civilians, for example, service members marry younger and start families earlier. Because of the requirements of their jobs, they move much more frequently than civilians do, and they are often separated from their families for months at a time. And despite steady increases since the 1970s in the percentage of women who serve, the armed forces are still overwhelmingly male, meaning that the majority of military parents are fathers.

Despite these distinguishing trends, Clever and Segal's chief finding is that military families cannot be neatly pigeonholed. Instead, they are a strikingly diverse population with diverse needs. Within the military, demographic groups differ in important ways, and the service branches differ from one another as well. Military families themselves come in many forms, including not only the categories familiar from civilian life—two-parent, single-parent, and so on—but also, unique to the military, dual-service families in which both parents are service members. Moreover, military families' needs change over time as they move through personal and military transitions. Thus the best policies and programs to help military families and children are flexible and adaptable rather than rigidly structured.

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Molly Clever and David R. Segal

Since the transition to an all-volunteer force (AVF) in 1973, families have grown increasingly important to the military's personnel policy; since 9/11, military families have received greater attention in the media and from scholars. Recognizing the sacrifices and support that come from all whose lives are linked to military service members, President Barack Obama and the Joint Chiefs of Staff define the "military family" as active-duty service members, members of the National Guard and Reserve, and veterans, as well as members of their immediate and extended families and the families of those who lost their lives in service to their country.[1] This broad definition recognizes that the federal government and the nation have obligations to all who have served their country, as well as to those who have supported that service. However, researchers who study and collect data on military families and children tend to define military families as the spouses and dependent children (age 22 and younger) of men and women on active duty or in the National Guard and Reserve. In this issue of *The Future of Children*, we adopt this more limited definition. Military policy affects this population's daily lives; they change houses and schools, adopt new communities, take care of household responsibilities when their loved ones are deployed, and care for physically and psychologically wounded warriors when they return home.

Since the early days of the AVF, the military has recognized that whether service members decide to reenlist often depends on whether their families are happy with military life.[2] The military needs high-quality recruits who will stay long enough to make the expense of their recruiting and training worthwhile. Therefore, it must ensure that service members' spouses and children are satisfied enough with military life, despite its many challenges, to encourage and support their service member's decision to join and remain in the military. Of course, military life can be stressful. The stress that wartime deployment puts on families has been recognized since World War II, and military family members have long helped units function.[3] After World War II, military policy increasingly institutionalized family members' roles. Beginning in the 1960s, the military adapted the strong tradition of spousal voluntarism to develop a worldwide network of federally funded community organizations for service members called Family Centers.[4] Family Readiness Groups (FRGs) at the unit level, often staffed by spouses and immediate family members, offer training and social support to family members and disseminate information about issues such as deployment and moving.[5] Many institutionalized responses to the needs of family members have sprung from grass-roots advocacy by family members themselves.[6]

The military has long recognized that service members' families influence the strength and effectiveness of the fighting force. Obama recently made "the care and support of military families a top national security policy priority," highlighting the need to ensure that military children develop in healthy and productive ways.[7] To help the spouses and dependent children of military service members, military leaders and policy makers need good and timely data. They need to know who military family members are, what hardships they face, what strengths they bring to the military community, and how these factors change over time and across an increasingly diverse population. Data of this type come primarily from three sources.

- The Department of Defense (DoD) supplies data that are largely demographic in nature and administrative in function. DoD data sources show the diversity of military personnel and reveal important ways that service members and their families differ from their civilian counterparts.

- Nonacademic research organizations, such as the RAND Corporation and the Pew Research Center, provide important quantitative and qualitative data on issues that affect service members, veterans, and military families, as well as information on public perceptions of the military and knowledge of military needs.

- Academic scholarship is paying more attention to the military and military family members. The social science subfield of military sociology focuses extensively on the interactions between military and civil society, but scholars in other social science fields, as well as public policy and health, also study military families.

Military families are a diverse population whose needs vary over time and across demographic groups. No single story can encapsulate who military families are or what they need to flourish in military and civilian communities.

Drawing from these sources, this article provides the context to understand how military

families and children function. We begin by outlining the basic demographics of military families, comparing statistics on marriage and family formation across service branches and between service members and civilians. These data demonstrate that military families tend to marry and have children younger than civilians do, a trend that is influenced both by military policy and by the personal traits of people most likely to be drawn to military life. We then discuss the military family in the context of the military lifestyle, emphasizing how the "greedy" nature of both the military and the family places unique demands on military family members, including frequent moves and prolonged and repeated deployments. We discuss the pros and cons of these aspects of military life for children in military families, particularly in their educational and social development. For example, although frequent moves can disrupt a child's school progress, they can also help change bad habits and strengthen parent-child bonds.

Within each of these topics, we highlight areas where we need more data, research, and discussion. For example, although we know that children in military families tend to be relatively young, we don't know much about how young children and infants function in military families. In addition, because the military population is unique in many ways, comparing service members to civilians raises the question of how best to define an appropriate civilian comparison group. In another vein, comparisons between the active-duty and National Guard and Reserve populations highlight how little we know about the families of Guard and Reserve members. These comparisons also show the dynamic nature of the military population and the methodological challenges inherent in studying people who move among

active-duty, Guard and Reserve, and civilian communities over the course of their service.

Though certain trends distinguish military families from their civilian counterparts, our central finding is that military families are a diverse population whose needs vary over time and across demographic groups. No single story can encapsulate who military families are or what they need to flourish in military and civilian communities. Rather, the demographic context shows that military families and children need flexible policies that can adapt to their diverse and dynamic needs.

Demographics of Military Families

The relationship between the military and the families of its service members has changed substantially since the advent of the AVF. In the draft era, "military family" typically meant senior officers' wives and children, who were expected to play a supporting role in their husbands' or fathers' careers. Even as the force began to change, service members were typically young, unmarried men who served only briefly before rejoining the civilian world to begin their careers and start families. By the 1970s, the majority of soldiers were married, yet the adage "if the military wanted you to have a family, it would have issued you one" was common among military personnel managers into the 1980s.[8]

In today's AVF, however, service members are not expected to delay marriage and children until their service is complete; rather, marriage and parenthood are common across all ranks of service. Military family members now outnumber military personnel by 1.4 to 1, and they represent a range of family forms.[9] In 2011, 726,500 spouses and more than 1.2 million dependent children lived in active-duty families, and 409,801 spouses and 743,736 dependent children lived in Guard and Reserve families.[10] Table 1 provides basic demographic information about active-duty, Guard and Reserve, and comparable civilian populations. Comparing these groups raises important questions for research on military families. What constitutes an appropriate civilian comparison group? What do comparisons between active duty and the Guard and Reserve tell us about the differences between these populations?

As table 1 shows, the civilian population we selected for comparison consists of people aged 18 to 45 who are in the labor force. This restriction limits the comparison to populations who share certain similarities, namely, they are relatively young and they choose to work. Nonetheless, there are important differences between these military and civilian populations that restrict our ability to draw broad conclusions. Still, our comparisons provide important insight into how active-duty service members, the Guard and Reserve, and civilians differ.

The first major difference is in age distribution. The military population is relatively young compared with civilians in the labor force. Active-duty service members stay in the military for fewer than 10 years on average. And because service members can get retirement benefits after 20 years, the age distribution of active-duty service members is heavily skewed toward the under-40 population. Two-thirds of active-duty members are between the ages of 18 and 30.[11] The civilian working population, by contrast, is more evenly distributed by age; 45 percent of the civilian comparison group are between 18 and 30, and 55 percent are between 31 and 45. Restricting the civilian comparison group

Table 1. Selected Demographic Characteristics of Active-Duty, Guard and Reserve, and Civilian Populations, 2011

	Active Duty	Guard and Reserve	Civilian Workers, Aged 18–45
Total Population	1,411,425	855,867	91,208,300
Average Age	28.6	32.1	31.9
Sex			
Female	14.5%	18.0%	47.3%
Male	85.5%	82.0%	52.7%
Race			
White or Caucasian	69.8%	75.7%	72.2%
Black or African American	16.9%	15.0%	12.9%
Asian	3.8%	3.1%	5.7%
All other races and multiple races	9.6%	6.2%	9.2%
Ethnicity			
Hispanic	11.2%	9.8%	19.2%
Non-Hispanic	88.8%	90.2%	80.8%
Education (highest degree achieved)			
No high school diploma or GED	0.5%	2.4%	10.7%
High school diploma or GED	79.1%	76.8%	60.1%
Bachelor's degree	11.3%	14.3%	20.0%
Advanced degree	7.0%	5.5%	9.2%
Unknown	2.1%	1.0%	--
Marital Status			
Now married	56.6%	47.7%	43.0%
Divorced/separated	4.5%	7.3%	10.0%
Widowed/other	0.1%	0.2%	0.4%
Never married	38.8%	44.7%	46.1%
Children			
With dependent children at home	44.2%	43.3%	43.1%
Average number of children	2.0	2.0	2.0

Source: Active duty and Guard and Reserve data from Department of Defense, *2011 Demographics Profile of the Military Community*; civilian data from U.S. Census Bureau 2011 American Community Survey, obtained through www.ipums.org.

to people between 18 and 45 helps us create a better match between service members and civilians, because fewer than 9 percent of the active-duty force is over 40. However, the difference in age distribution is behind some of the differences we saw. For example, the civilian group, which skews older, is likely to have older children.

But if we keep in mind that the active-duty military population skews younger than the civilian comparison group, we can highlight some important differences. For example, although the active-duty population is younger on average than the civilians, they are more likely to be married and have children at home. Also, when families have children at home, the average number of children among active duty, Guard and Reserve, and civilians is identical at 2.0. Because the active-duty population skews much younger than the Guard and Reserve or the civilian

population, the fact that the average number of children is the same across these three groups suggests that active-duty personnel tend to form families at a younger age.
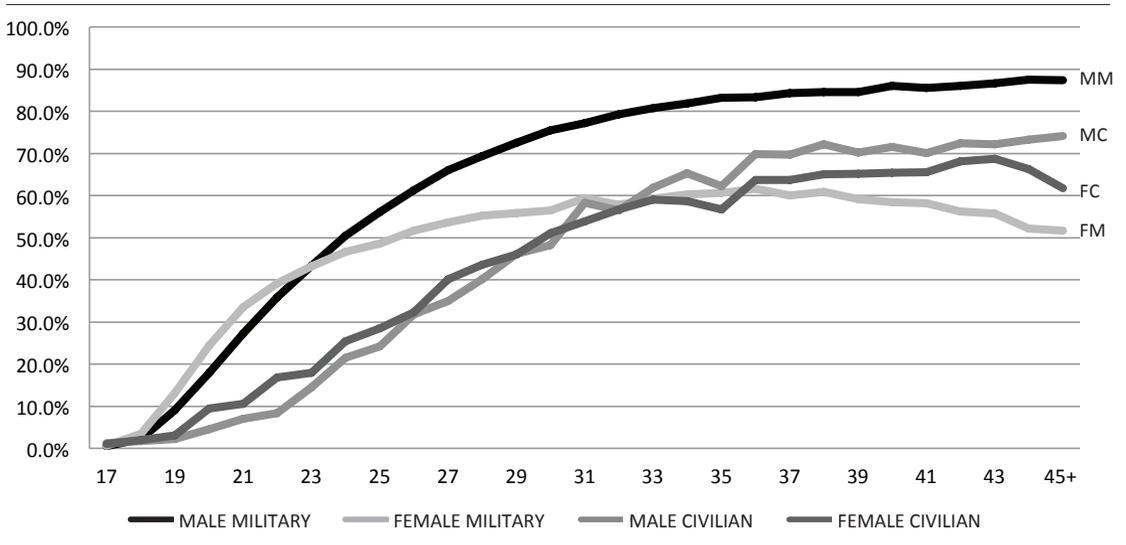
A second major difference across these groups is gender distribution. The proportion of women serving in the military has risen steadily since the 1970s, but women still make up only 14.5 percent of the active-duty force and 18 percent of the Guard and Reserve, compared with 47.5 percent of the civilian labor force. The larger proportion of women in the Guard and Reserve than in the active-duty force may reflect a belief among women that Guard and Reserve service is more compatible with family responsibilities.

A third factor to consider as we draw comparisons across these populations is the dynamic nature of the military population. The Guard and Reserve contain many people who formerly served on active duty. In addition, and particularly during wartime, people who have been called up from the Guard or Reserve are considered to be on active duty. When we directly compare these categories, then, we need to use caution and keep in mind the life-course trajectories of military personnel. We also have much less information about how military service affects the families of Guard and Reserve members than we do for active-duty personnel; until the recent conflicts in Iraq and Afghanistan, Guard and Reserve personnel were rarely called to active service for extended periods and so were typically left out of research. The military's increased reliance on the Guard and Reserve to supplement the active force in the past decade has brought into sharp relief the need for more data on the families of Guard and Reserve personnel.

Still, table 1 demonstrates some notable demographic differences among the active-duty, Guard and Reserve, and civilian populations. Both the active-duty and Guard and Reserve populations have a higher proportion of African Americans than does the civilian labor force, but a smaller proportion of Asian Americans. Research suggests that racial minorities, particularly African Americans (and especially African American women) are more likely to choose military service than their white counterparts because they see the military as a meritocratic institution that offers them greater opportunity than they would find in higher education or the civilian labor market.[12] On the other hand, although the proportion of Hispanics in the active-duty force has grown in recent years, from less than 4 percent in the 1970s to 11.2 percent in 2011, it has not risen as fast as the proportion of Hispanics in the civilian population. But this disparity may be due to the military's requirements for immigration status and education. Research suggests that if we count only military-eligible people, Hispanics are overrepresented relative to the general population.[13]

Thanks to the military's education requirements, relatively few people on active duty (0.4 percent) or in the Guard and Reserve (2.4 percent) lack a high school diploma or GED, compared with civilians in the labor force (10.7 percent). The military's minimum requirements are a college degree for officers and a high school diploma for enlisted personnel, and the military rarely makes exceptions; fewer than 5 percent of enlisted personnel have a GED rather than a standard high school diploma.[14] However, more people among the civilian labor force have a bachelor's degree or higher (29.2 percent) than among the active-duty force (18.3 percent) or the Guard and Reserve (19.8 percent). Much

Figure 1. Percentage Married by Age and Gender: Military Personnel vs. Civilians, FY2011

of this difference in educational attainment may be attributed to the younger age of the active-duty population, as well as the fact that many people join the military to receive educational benefits through the GI Bill and complete their college education after leaving the service.

Marriage and Divorce

Active-duty service members are more likely to be married and less likely to be divorced than their civilian counterparts overall, but there are differences by gender. Compared with their civilian counterparts, military men are more likely to be married at all ages. At ages 30 and under, military women are more likely than civilian women to be married, but at ages 33 and older, civilian women are more likely to be married (figure 1). This trend can be explained largely by the fact that women are more likely than men to leave the military once they get married or have children.[15]

As a whole, people in the military tend to marry younger than their civilian

counterparts. Among junior enlisted personnel (ranks E1 through E5, or private through sergeant in the Army, for example), 36 percent of men and 37 percent of women are married.[16] Among civilians aged 18 to 24 with comparable earnings, 24 percent of men and 33 percent of women are married.[17] These general trends, however, exhibit some variation by gender and race. In the military, women are less likely than their male rank peers to be married; 45 percent of enlisted women and 55 percent of enlisted men are married. In the officer ranks, this difference is even more pronounced: 52 percent of female officers and 72 percent of male officers are married. When married, women are far more likely than their male peers to be married to another service member; 48 percent of married active-duty women are in dual-service marriages, compared with only 7 percent of men.[18] While African American men and women and white men on active duty are less likely than their civilian counterparts to divorce, white women in the military are more likely to divorce than their

civilian counterparts.[19] And although African American civilian men are more likely to be divorced than white civilian men, this racial divorce gap nearly disappears in the military, a pattern that is likely due to the structure of the military environment, which tends to equalize the constraints faced by families of all races.[20]

Marriage and divorce patterns among service members reflect both push and pull factors in the military. Those who choose military service tend to have more conservative values regarding family and gender roles compared with the civilian population, and these conservative values may partly explain the fact that they are more likely than civilians to marry and have children, especially at younger ages. Indeed, civilians with conservative values are more likely than other civilians to be married. However, this association is small, and it is likely that military policy plays a larger role than values in driving service members' decisions to marry and form families.[21] To improve retention, the AVF has become increasingly family-friendly, with programs such as full family health coverage, family housing and accredited day care on base, and numerous programs and activity centers for children. For enlisted service members, marriage and parenthood mean higher off-base housing and moving allowances.[22] Service members move often (typically every two to three years), and moving presents them with an immediate context for making relationship decisions; when the change of duty station orders arrive, the couple must decide whether they will split up, maintain their relationship long-distance, or marry. When service members go to war, they may see marriage as an attractive option, because their spouses will receive military benefits if they are injured or killed. Because single service members receive far less in

moving and housing allowances than those who are married, and because many duty stations are in areas where off-base housing is scarce or unavailable, service members have little incentive to cohabit, an increasingly common choice among unmarried civilian couples. In one study, active duty men in relationships, and African American men in particular, were significantly more likely to choose marriage over cohabitation when compared with their civilian counterparts, controlling for income. The study indicated that among male service members, both personal and military environmental factors influenced decisions about whether to marry.[23]

Service members move often, and moving presents them with an immediate context for making relationship decisions; when the change of duty station orders arrive, the couple must decide whether they will split up, maintain their relationship long-distance, or marry.

Another fact points to the strong incentive to marry that military policy produces: although people in the military are more likely than their civilian counterparts to be married, people entering the military are more likely to be single than their civilian peers of the same age. Thus, "they enter single and marry young."[24] This is not to say that service members choose to marry and start families solely for the financial benefits. There is no reason to

think that service members' primary reasons for deciding to marry are different from those of civilian families. Financial considerations, including job security and health benefits, play a role in relationship decisions of civilians and military personnel alike. However, because of the military's unique structural context, there are differences between service members and civilians when it comes to such things as the timing of marriage or marital stability. Among 23- to 25-year-olds, for example, those who have served on active duty are three times as likely to be married as those who have never served.[25]

The divorce patterns of service members and veterans further highlight the support for families that the military provides. While they are in the military, couples are less likely to divorce than their civilian counterparts. Once they leave the military, however, this trend reverses. Veterans are three times as likely to be divorced as those who have never served.[26] Research indicates that the military environment protects families from the stresses that often lead to divorce, and that veterans' marriages become less stable once they leave this supportive military context.[27]

Children
In addition to broader factors that influence marriage and the formation of families in the military as a whole, cultural differences across the branches of service influence the presence and age distribution of children in military families. Figure 2 presents the age distributions of children in active-duty and Guard and Reserve families. Among the service branches, Marine Corps families are the youngest; 47 percent of children in these families are of preschool age, and only 11 percent are of high school age or older.

This is substantially younger than the rest of the active-duty force, in which 41 to 42 percent of children are of preschool age and 16 percent are of high school age and older. Because the Marine Corps places a premium on the youth of its service members, it isn't surprising that Marine families are younger than other military families. Among the Air Force and Navy, where the organizational culture emphasizes experience and advanced technological training, service members tend to stay in the military longer, and their children tend to be somewhat older. Compared with children in active-duty families, children in Guard and Reserve families are older; 28 percent are of preschool age and 44 to 45 percent are of primary school age. Because many people in the Guard and Reserve are former active-duty service members, the fact that their children are slightly older is to be expected. That is, many of the older children in Guard and Reserve families were once preschool-age children in an active-duty family.

Although we know that the distribution of children in active-duty families is skewed toward preschool age, most scholars who study children and military families have focused on school-age children and teenagers. This partly reflects a scholarly interest in children's education, and partly the logistical challenges of studying young children and infants. Available information on infants and toddlers in military families tends to focus on physical health. For example, one study found that military women have fewer preterm births than their civilian counterparts, and that some racial inequalities in preterm births between white and African American women disappear in the military.[28]

School-age children in military families live in both military and civilian communities.

Figure 2. Age Distribution of Children in Military Families, FY2011
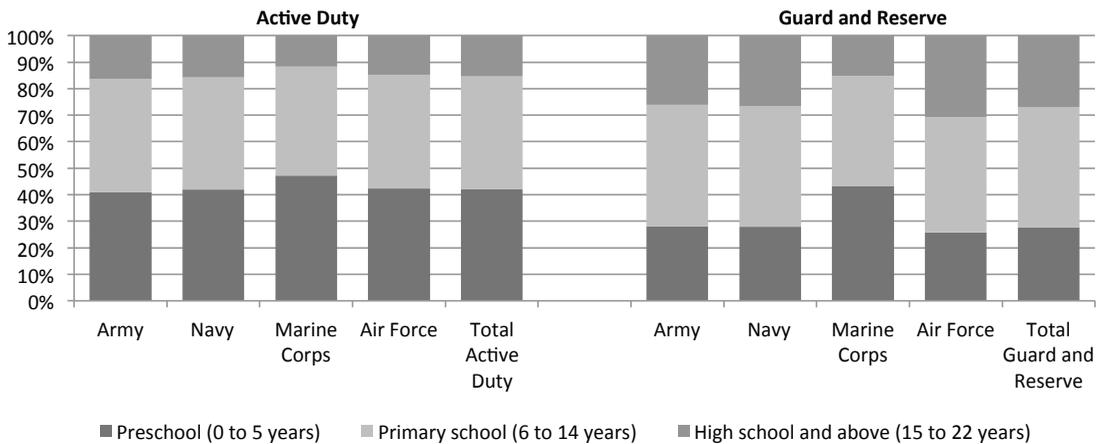
Note: Children over the age of 18 must live at home to be considered dependents. Those aged 21–22 years must be enrolled in college to be considered dependents.
Source: Department of Defense, *Demographics 2010: Profile of the Military Community.*

The Department of Defense Education Activity (DoDEA) school system operates 194 K–12 schools in seven states in the U.S., 12 foreign countries, Guam, and Puerto Rico. DoDEA schools enrolled approximately 86,000 students in 2011; 96 percent were children of active-duty service members, and 4 percent were children of DoD civilian employees.[29] DoDEA students represent less than 13 percent of school-age military children; the vast majority of military children attend civilian schools. Most children whose parents are on active duty attend schools in areas with a large military presence, where teachers, administrators, and civilian students alike may recognize the unique needs of military children. Moreover, evidence indicates that in the past decade, educators in these schools have become substantially more aware of the issues that military children face.[30] By contrast, children whose parents serve in an area without a large military base, or whose parents are in the Guard or Reserve, may attend schools that see very few military children, and other members of

the community may not know that military children attend their schools.

To understand how children function in military families, we must understand the context of their parents' life-course transitions, service branch, and rank. Though the military lifestyle certainly has its challenges, it also offers families advantages and opportunities. As members of a military family, children are guaranteed to have at least one parent with a steady, full-time paycheck. The military pay scale is determined by both rank and years of service, which are strongly correlated with the service member's age. Raising a family can be financially difficult for parents in the most junior enlisted ranks, but every unit offers financial counseling services, and in an emergency, FRGs can provide social and economic support. Table 2 shows the percentage of people in each rank category with dependent children, and their basic pay. Basic pay does not include other financial benefits that service members often receive, such as medical benefits and housing

Table 2. Percentage of Service Members with Dependent Children, by Pay Grade and Monthly Income

Pay Grade	With Dependent Children	Monthly Income Range
E1–E4	21.7%	$1,491–$2,363
E5–E6	60.5%	$2,123–$3,590
E7–E9	81.9%	$2,680–$5,524
W1–W5	78.6%	$2,765–$6,930
O1–O3	35.4%	$2,828–$6,136
O4–O6	76.7%	$4,289–$9,371
O7–O10	60.9%	$8,046–$15,647

Note: The Air Force does not have warrant officers, pay grades W1–W5.
Source: Department of Defense, *Demographics 2010: Profile of the Military Community.*

allowances. Among the most junior enlisted ranks, whose monthly basic pay ranges from $1,491 to $2,363, more than one-fifth of service members have dependent children. Among the senior enlisted ranks, 82 percent have dependent children. Most active-duty personnel (83.4 percent) are in the enlisted ranks, and 16.6 percent are officers. Officers typically must have a college degree, while enlisted personnel must have a high school diploma or equivalent. Given the differences in educational requirements, pay scale, and job responsibilities, the distinction between the enlisted and officer ranks is roughly comparable to the distinction between blue-collar and white-collar jobs in the civilian labor market. This means that the military is more blue-collar than the civilian labor force, where 61 percent of Americans hold blue-collar jobs and 39 percent hold white-collar jobs.[31]

Family Types

Like civilian families, military families take many forms. For example, military families may be nuclear, single-parent, blended, multi-generational, or dual-service. Moreover, many nontraditional military families—for example, cohabiting adults and same-sex partners—may go unrecognized due to military

regulations that govern family member dependent status. Military policy, then, must recognize that the military lifestyle affects different types of families differently. We discuss some aspects of the military lifestyle that affect families in more detail below; this section describes the basic demographics of family types in the military.

Table 3 details the structures of active-duty and Guard and Reserve families by sex and race. Because women are more likely to leave the force once they start a family, military men of all races are more likely than military women to have children at home. Black women are more likely than other military women to have children; 47.3 percent of black women on active duty have children, compared with 30.4 percent of white women and 37.4 percent of Hispanic women. This racial difference may be partly due to the fact that black women tend to stay in the military longer than white women do.[32] The data also suggest that women are more likely than men to transition to the Guard or Reserve when they have children; white, Hispanic, and non-Hispanic women of other races in the Guard and Reserve are more likely than their counterparts on active duty to have children,

Table 3. Family Status of Active-Duty and Guard and Reserve Personnel by Race/Ethnicity and Sex, FY2010

	**Race/Ethnicity**
	White, Non-Hispanic		Black, Non-Hispanic		All other races, Non-Hispanic		Hispanic, all races	
Family Status	Men	Women	Men	Women	Men	Women	Men	Women
Active Duty	**823,763**	**102,546**	**177,711**	**56,510**	**114,341**	**25,698**	**133,660**	**24,468**
With Children	*43.7%*	*30.4%*	*54.2%*	*47.3%*	*41.9%*	*32.3%*	*48.4%*	*37.4%*
Single	3.4%	7.7%	8.3%	20.5%	3.1%	9.0%	4.6%	12.1%
Married to civilian	38.8%	13.8%	42.2%	16.5%	37.2%	14.2%	42.2%	14.3%
Married, dual service	1.4%	8.9%	3.7%	10.3%	1.5%	9.1%	1.6%	10.9%
Without Children	*56.3%*	*69.6%*	*45.8%*	*52.7%*	*58.1%*	*67.7%*	*51.6%*	*62.6%*
Single	38.5%	44.1%	32.3%	37.5%	41.8%	45.0%	35.0%	39.9%
Married to civilian	15.7%	10.0%	10.2%	7.5%	14.4%	9.8%	14.6%	9.6%
Married, dual service	2.1%	15.5%	3.3%	7.6%	2.0%	12.9%	2.1%	13.2%
Guard and Reserve	**286,569**	**56,101**	**45,419**	**21,123**	**26,419**	**7,420**	**34,177**	**9,330**
With Children	*43.5%*	*35.1%*	*47.1%*	*45.9%*	*41.4%*	*38.2%*	*47.9%*	*40.2%*
Single	6.7%	12.7%	12.6%	26.2%	6.3%	18.6%	9.2%	17.8%
Married to civilian	36.1%	17.4%	33.4%	16.6%	34.3%	14.5%	38.0%	17.7%
Married, dual service	0.7%	5.0%	1.0%	3.1%	0.7%	5.0%	0.7%	4.7%
Without Children	*56.5%*	*64.9%*	*52.9%*	*54.1%*	*58.6%*	*61.8%*	*52.1%*	*59.8%*
Single	41.9%	46.9%	41.6%	44.2%	44.8%	44.8%	39.2%	44.3%
Married to civilian	14.1%	13.1%	10.7%	7.9%	13.2%	11.7%	12.4%	10.7%
Married, dual service	0.5%	4.9%	0.6%	2.1%	0.6%	5.3%	0.5%	4.9%

Source: Defense Manpower Data Center.

while there is little difference in the proportion of active-duty men who have children versus men in the Guard and Reserve.

Dual-service families are unique to the military. While many civilian families have two full-time employed parents, the military's demands, especially for deployment and frequent moving, present unique challenges to families where both parents are service members. Dual-service couples are less likely to have dependent children than are couples with only one parent in the service, and among married service members, women are far more likely to be in dual-service marriages than are men (48 percent vs. 7 percent).[33] This substantial gender difference in dual-service marriages reflects a number of complex factors, including the overall gender imbalance in the military, as well as individual and military contextual selection factors. Differences in the rates of dual marriage across branches of service themselves reflect differences in the gender composition and culture of the service branches. As figure 3 shows, dual-service marriages are most common in the Air Force, where 11 percent of enlisted personnel and 9 percent of officers are married to another service member, followed by the Army and the Navy,

Figure 3. Family Status of Officers and Enlisted Personnel, by Service Branch
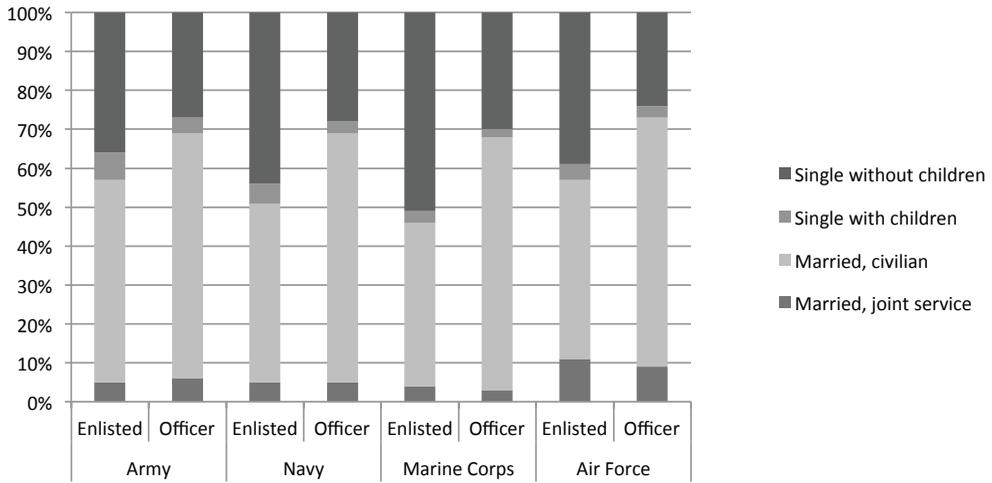
Source: Defense Manpower Data Center.

and they are least common in the Marine Corps. The military requires single parents and dual-service parents to have a plan for the care of their dependents should they be deployed. Though personnel managers consider requests from dual-service parents, and they try to keep families together, the military's staffing needs take precedence. Particularly for high-level officers and those who have highly specialized occupations, the military's staffing needs may require spouses to be separated from each other for extended periods, even when they are both stationed stateside. These dual-service parents must make difficult decisions about where their children will live.

Single-parent families also face unique challenges in the military. Though on-base day care is available for all parents, single parents must make arrangements for child care during extended training exercises and deployments. Because personnel cannot expect to be stationed close to their extended families, single parents in the military are often isolated from the kind of family networks that can greatly help single civilian parents. Nearly 76,000 single parents were on active duty in 2010. Although more than twice as many of these single parents are men than women, given the proportion of men and women on active duty, female service members are more likely to be single parents than are male service members.[34] Among active-duty service members, 4 percent of men and 12 percent of women are single parents; among the Guard and Reserve, 8 percent of men and 17 percent of women are single parents. Single parenthood also varies by rank and service branch. Across all branches of service, people in the enlisted ranks are more likely to be single parents than are officers. The rate of single parenthood is highest in the Army enlisted ranks, where 7 percent of service members are single parents (figure 3). The proportion of single parents in the military is higher than in the civilian population, where 2.3 percent of households are headed by a single male parent and 7.4 percent of households are headed by a single female parent.[35]

The Military Lifestyle

Prolonged separation and frequent moves are two of the best-known features of military life, but many others affect family satisfaction. Mady Segal suggests that both the military and the family are "greedy" institutions, in that both require intense commitment, time, and energy while seeking to limit participants' other roles.[36] The military's demands include the risk of injury or death, whether during training, while operating military equipment, or in wartime deployment; separations from family; frequent moves; living in foreign countries; long and unpredictable duty hours; pressure to conform to high standards of behavior; and a male-oriented culture. People in many occupations experience some of these demands, but service members and their families are likely to experience all of them, often in a relatively short time. Segal conceived the greedy institution model in the context of the peacetime AVF, but it has taken on new meaning in the post-9/11 era. The military's changing operational needs, as well as broader social changes to family structure and gender roles, have increased the potential for conflict between competing military and family demands.[37]

Despite the military lifestyle's many challenges, it also offers advantages to families. Next, we discuss both the challenges and opportunities that the military lifestyle presents to families and children in the context of frequent moves and family separations.

Geographic Location and Mobility

Active-duty families are typically tied to military installations, and they are therefore concentrated along the Eastern Seaboard and in the rural South, as well as in California, Alaska, and Hawaii. As of the end of September 2012, about 1.1 million people, or 82 percent of the active force, were stationed in the continental United States; 5 percent were stationed in Alaska, Hawaii, and U.S. territories, or were afloat; 5 percent were stationed in Europe; 4 percent in East Asia and Pacific regions; and less than 1 percent in North and Sub-Saharan Africa and Central and South America. Approximately 3 percent of the active force is classified as "undistributed," which includes sites in Afghanistan, Iraq, Kuwait, South Korea, and unknown or classified locations. When military personnel are sent overseas, even to noncombat areas, most family members stay stateside. Of the two million total military dependents, 94 percent reside in the continental United States and 5 percent in Alaska, Hawaii, and the U.S. territories. Only 1 percent of military dependents are in Europe, Africa, Asia, or Latin America.[38] Although at any given time most service members are stateside and not in a war zone, military life is dynamic. Nearly all military families experience a move outside the continental United States and deployment of a family member.

The geographic mobility that the military expects of active-duty families can be a source of both stress and excitement. Active-duty military personnel must move on average once every two to three years, meaning that military families move 2.4 times as often as civilian families. They are also more likely than civilian families to move long distances, across state lines, or to foreign countries. (Guard and Reserve families are typically not required to move, and their residence and relocation patterns are more similar to those of civilian families.)

Richard Cooney, Mady Segal, and Karin DeAngelis have said that military families are both "tied migrants" and "tied stayers."[39]

As tied migrants, spouses and children must move with the service member to keep the family together, despite the cost to their own schooling or employment chances. Once the family moves, they become tied stayers, bound to the site of their service member's assignment, which may limit their opportunities for jobs and education.

Not all families move with the military, however. A minority of married service members are "geographical bachelors or bachelorettes," whose spouses and children stay in one location while they move from place to place. The evidence indicates that such people represent a small minority of married service members—approximately 6 percent of those in first marriages and 7 percent of those in second marriages.[40] The information we have on this phenomenon, however, was collected in the 1990s, and we don't know whether, as the pace of deployment has increased in the post-9/11 era, more families have been choosing geographical bachelorhood to keep children in the same school, stay close to extended family, maintain a spouse's career, or meet mortgage obligations. We do know that the recent mortgage crisis affected many military families, who, when faced with orders to move, found themselves unable to sell their homes because of the slow housing market or because their houses were worth far less than they owed on their mortgages. Anecdotal evidence suggests that the mortgage crisis led many military families to choose living apart over taking a substantial loss on their home;[41] however, we have no research data to show how widespread this phenomenon is.

Military spouses pay a cost for their families' frequent moves. Cooney and his colleagues quantified the earnings penalty that military spouses pay for frequent moves; net of other factors, each move is associated

with a 2 percent decline in a spouse's annual earnings. Frequent moves also increase the likelihood of unemployment, particularly for African American spouses. For each year in the same location, the likelihood that a white spouse will have a job increases by 12.2 percent; for African American spouses, this figure is 56.5 percent.[42] Frequent moves also mean that military spouses earn less than their civilian counterparts. Among married women employed full time, for example, the wage gap between military and civilian wives ranged from 20 percent to 29 percent, depending on education.[43] These financial penalties may shape spouses' education and employment decisions in the long term.

Military spouses also face employment challenges caused by the contextual effect of a large military presence in the places where they are likely to live. In the labor markets surrounding military bases, civilian women experience unemployment rates that are 2.3 percentage points higher and earn wages that are 5 percent lower than those of women in other areas.[44] These employment and wage effects represent the confluence of several factors, including loss of seniority and other occupational privileges after a move; the fact that employers may be reluctant to hire military spouses because they are likely to move again soon; and the continuous flood of military family members into a local labor market with a limited number of employers and jobs. (For more about the economic prospects of military spouses, see the article in this issue by James Hosek and Shelley MacDermid Wadsworth.)

Because so many factors limit military spouses' employment opportunities, the military has set up the Spouse Education and Career Opportunities program, which

integrates education and training, career exploration, career readiness, and career connections. The Military Spouse Career Center and Military OneSource provide counseling to help spouses connect their education to career opportunities. The My Career Advancement Accounts program provides financial assistance to spouses to train for careers that can easily transfer to a new location; it also assists with licensure requirements for jobs such as nursing and accounting that have different requirements by state. The Military Spouse Employment Partnership links spouses with federal, regional, and local employers. Despite these helpful programs, military spouses experience higher levels of both unemployment and underemployment than their civilian counterparts. While fewer than 10 percent of civilian married women work in a job that is mismatched with their education level, nearly 40 percent of military wives do so.[45]

For children, frequent moves can disrupt education and bring periods of stressful acclimation to a new environment where they may not have any friends and may be disconnected from school and community activities. Because of differences among school districts in the timing and format of subjects and lessons, children may find some lessons repetitive, while they may miss other lessons entirely as they move from one school to the next. The delay in transferring school records, which can take weeks or months, may mean that students are placed in classes inappropriate to their previous experiences or ability level. Several public-private partnerships, such as the Student Online Achievement Resources program, help families identify and correct education gaps associated with frequent moves and keep deployed parents connected to their children's educational progress.

Although moving is often stressful, it can also offer excitement and adventure, particularly for families who have the opportunity to live in foreign countries, learn new languages, and experience different cultures.

Because the military lifestyle introduces many sources of stress that most civilian families do not experience, such as frequent moves, some counseling and psychological research in the 1970s began to describe a "military family syndrome." According to this idea, children in military families have more behavior problems and psychological disorders than their civilian peers.[46] The military family syndrome has since been refuted by other studies, which suggested that the early military family syndrome research was methodologically flawed, that children in military families are at no higher risk of behavioral problems than civilian children, and that frequent moves in particular can have positive outcomes by building family cohesion and resilience.[47] However, some evidence indicates that many helping professionals, particularly those who do not typically interact with military families, assume that children in military families are inherently prone to behavioral problems, leading to stigmatization.[48] The idea that military families' frequent moves cause behavioral problems in children does correspond with studies of civilian children, which often find that frequent moves

have detrimental effects.[49] However, the context in which military children experience frequent moves differs in important ways. For civilian children, frequent moves may happen because their parents change jobs, like military parents. But moves may also occur when parents lose their jobs, or they may be associated with poverty, homelessness, or abuse. The supportive military environment can alleviate some of the stresses associated with frequent moves by connecting children to other military children in their communities, and by helping parents understand the social strain their children are likely to face and recognize signs of behavioral problems early. Evidence suggests that as the number of moves among military families increases, parents are more likely to develop positive attitudes about moving, which increases their children's resilience.[50] Other factors may have a stronger impact on military children's well-being than how frequently they move; one study found that family cohesiveness, relationships with their mothers, and the length of time they had lived at their current residence—but not the total number of moves they had experienced—predicted whether children said they were lonely, had poor peer relationships, feared negative evaluations, and had low self-esteem.[51]

Although moving is often stressful, it can also offer excitement and adventure, particularly for families who have the opportunity to live in foreign countries, learn new languages, and experience different cultures.[52] For "third culture kids," who spend a significant portion of their childhood in foreign countries, frequent moves and separations from friends and familiar places is a source of both grief and strength; these children often report a strong sense of self and comfort with the unfamiliar, and they develop strong relationships with their parents.[53] Children may also

see moving as an opportunity to change their behavior and do better in school.[54]

Guard and Reserve families, who are typically not attached to a military base and are more dispersed than active-duty families, may struggle with isolation from the military community. The Citizen Soldier Support Program, which analyzes geographic data on service members and veterans for the Veterans Administration and civilian healthcare providers, has found that all but 12 counties in the United States were home to at least one of the 1.3 million Reserve members serving in 2012. Moreover, the approximately 650,000 Reserve members who have deployed in support of the wars in Iraq and Afghanistan live in all but 27 counties.[55] This wide geographic dispersion means that the families of these service members are typically more isolated from military resources than are families who live near large installations.

Family Separations

Family separations due to training exercises and deployment are another stressful feature of military life. Children whose parents are sent on repeated and extended deployments may have more problems than children whose parents are deployed for shorter periods. Grade-school children whose parents were cumulatively deployed 19 months or longer over a three-year period did worse in school than did military children whose parents had either not deployed or deployed less than 19 months during the same three years.[56] Similar results were found among children who attend DoDEA schools.[57] This finding has different implications for different branches of service. In the recent conflicts in Iraq and Afghanistan, the Army has experienced the greatest deployment

burden of all service branches. For example, although the Army contained only 39 percent of the active-duty force in 2009, it carried 52 percent of troop deployments. In contrast, the Air Force made up 23 percent of the active-duty force but carried only 15 percent of troop deployments.[58] Navy deployments operate on a very different tempo from those of the other services; sailors typically spend six months at sea and then six on land. The military has activated Guard and Reserve members to a far greater extent in Iraq and Afghanistan than in previous conflicts; Guard and Reserve members have accounted for one-third of all deployments.[59]

Most studies that examine how parents' deployment affects children have looked at children of elementary school age. Few researchers have studied the effects of parents' deployment on infants or high school-aged children. What information we have, however, suggests that despite many similarities, there are important differences in how deployment affects older children. At all ages, the wellbeing of the parent who isn't deployed is strongly associated with children's wellbeing. Cumulative length of deployment affects older children much as it does younger children; teenagers have more behavioral problems as the cumulative length of parental deployment increases.[60] However, the sources of stress that teenage children face are somewhat different, and may require different responses. While young children typically experience confusion, loss, and grief when a parent is deployed, and look to the remaining parent for support and care, older children better understand the dangers the deployed parent faces as well as the challenges that the remaining parent must deal with at home.

For teenage children, a parent's deployment means taking on more responsibilities at home, including housework and caring for younger siblings. Teenage children also feel that they must support the remaining parent emotionally, and they have to renegotiate their role in the household. When the deployed parent returns home, there is more renegotiation, and a teenager who has had greater responsibility for running the household may have to relinquish some elements of control and status. At a summer camp for teens with a deployed parent, 68 percent said that helping the remaining parent cope was the most difficult problem they faced; 54 percent said that when deployment ended, fitting the returning parent back in the home routine was their most difficult problem.[61]

Just as older children face different sources of stress than younger children, children in Guard and Reserve families face different stresses than those in active-duty families. Because Guard and Reserve families typically don't move as frequently, these children less often have to change schools and make new friends. However, Guard and Reserve families are more likely to face isolation from the military community. A child may be the only one in his or her school with a deployed parent, and teachers and other community members may not know the issues that families of a deployed service member face. Because Guard and Reserve families are less likely to live near a base, they may not be aware of or be able to access the resources and support services that active-duty families can take for granted. Parents in Guard and Reserve families whose spouse is deployed report lower wellbeing and more behavioral problems among their teenage children than do their active-duty counterparts.[62] Also, because Guard and Reserve forces have never been used as extensively as they have in the post-9/11 era, many Guard and Reserve

family members had not experienced deployment and were not prepared for it.

Because activated Guard and Reserve members are considered to be on active duty, it's difficult to disentangle data about these families from data about regular active-duty service members, making it hard to see how their experiences differ. Ideally, a longitudinal study would follow military families through their various transitions—not only relocations and deployments, but also as they move through the active-duty, Guard and Reserve, and veteran communities. Such a longitudinal study would help researchers, policy makers, and service providers to better understand the dynamic nature of military life.

Veteran Families

Although people tend to serve longer now than they did during the draft era, most service members do not serve a full career of 20 years or more. The average length of service is seven years. In 2011, approximately 184,000 people left the military; with 1.4 family members per service member, this means that more than 250,000 military family members became veteran family members.[63] As they move into civilian communities, veteran families face new challenges and opportunities. Most veteran families remain for a while in the area of their last duty station, meaning that veteran families are concentrated in the rural South, the Eastern Seaboard, and California.[64]

Most service members are not wounded during service and have no long-lasting health problems. The majority of veteran families will transition into civilian employment, will receive their health care through private insurance, and will not access VA benefits.

However, because warfare has changed in recent decades, military personnel, veterans, and their families face different physical and mental health problems. Improved weapons and armor mean that service members are more likely to survive serious injuries than in the past; however, the reduction in combat fatalities has been accompanied by a corresponding rise in the number of amputations and serious physical injuries that require lifelong care.[65] Long-term caretaking often falls to the spouses, parents, and, later, the adult children of the veteran, who often faces multiple sources of emotional, financial, and family stress. Since Vietnam, the military has paid greater attention to the invisible wounds of war, that is, post-traumatic stress disorder (PTSD) and traumatic brain injuries, which have both short-term and long-term effects on veterans and their families. Among personnel who served in Iraq, reports of depression, anxiety, and PTSD symptoms increased between three and 12 months after returning from deployment.[66] For many service members, therefore, the invisible wounds may not emerge until months or years after they have returned from deployment and left military service. Furthermore, evidence indicates that symptoms of PTSD can be transferred to family members.[67] Therefore, programs that seek to help with PTSD and other mental health problems should take a family-centered approach and should continue to reach out to veterans and their families after they have left service, even if they did not report mental health problems when they came home from war.

For most veterans, the transition to civilian communities means looking for a civilian job. Observers disagree about whether veterans face discrimination or gain an advantage in the civilian labor market.

But the long recession and the continuing stagnation of the U.S. labor market, combined with the drawdown from Iraq and Afghanistan, ensure that veterans will struggle in the civilian job market for years to come.[68] Veteran unemployment is highest among males aged 18 to 34, and both male and female veterans aged 18 to 34 are less likely than their civilian peers to have a job. This trend reverses for veterans at age 35 and above; male and female veterans in this age group are more likely to have a job than are their civilian peers.[69] This may mean that veteran unemployment is transitional, that is, veterans experience higher levels of unemployment when they first leave the military, but not later in life. On the other hand, this trend may result from a cohort effect, in which veterans of the wars in Iraq and Afghanistan are having more trouble finding civilian jobs than are veterans of previous generations. Further research, informed by a life-course perspective, would help us resolve this question.

Educational benefits are a primary reason that many young people join the military, and limited prospects in the civilian labor market spur many veterans to use their GI Bill education benefits when they leave service, rather than immediately entering the labor market. In 2009, Congress made significant changes to the GI Bill, including a provision to allow some service members to transfer their education benefits to spouses and children; this change allowed greater flexibility for those who planned to stay in service for longer periods and did not plan to go to college after separation. In the coming years, we need to keep track of military children who use their parent's GI Bill benefits so that we can understand how this policy change affects them.

Conclusions

Military policies and programs have increasingly seen family wellbeing as central to the overall health of the force. Spouses and children who are happy with military life are more likely to support a service member's decision to stay in the military. To continue improving the military's programs and services for families, policy makers and service providers must understand the social context and needs of military spouses and children. This article has provided background information to help them do so, drawing from data and research from public, private, and academic sources. Because a relatively small proportion of the American population serves in the all-volunteer force, public knowledge about the needs of service members and their families is not likely to come from personal experience and interaction with service members, but rather from surveys, interviews, and other kinds of data. Those who collect and interpret this data must understand the social context in which military families live, as well as the diverse and dynamic nature of the military lifestyle. Because military families come in many forms, and because they move often and transition among the active-duty, Guard and Reserve, and civilian communities, longitudinal research that follows individual families through these transitions would be best suited to capture the kind of data we need. In the all-volunteer era, such data has yet to be collected. This effort should be a primary focus of military family research as the drawdown from Iraq and Afghanistan continues.

As research on military families continues, several areas need more study and more data. First, we know that children in military families skew relatively young, yet past research has tended to focus on school-age children,

leaving large gaps in knowledge about infants and toddlers in military families. In this issue, Joy D. Osofsky and Lieutenant Colonel Molinda M. Chartrand tackle some of these gaps. Yet we need to know more about young children in military families, including how they react to frequent moves and what their educational pathways look like. Second, the unprecedented post-9/11 use of the Guard and Reserve has put a spotlight on the unique challenges faced by families who do not move with the military and typically don't live in communities with a large military presence. Past research on military families has tended to exclude Guard and Reserve families, because there was no expectation that these families would face widespread deployment. This oversight has severely limited what we know about differences between active-duty and Guard and Reserve families. Finally, research on military families and veteran families is not well integrated. Past research has tended to see these populations as distinct groups, limiting our ability to understand family transitions among the active-duty, Guard and Reserve, and veteran populations. Research on military families should adopt a dynamic, life-course perspective to better understand how military service affects children who move from one population to another at different stages of development.

We need research on military families not only to improve the wellbeing of military children. This research can also contribute to the wellbeing of all children. The military presents a unique environment in which to understand how various stresses and support systems affect children's resilience and development. In addition, the wellbeing of military families and children is integral to the successful functioning of our military forces, and policy makers need accurate and timely data to respond to these families' needs and

develop solutions to the problems they face. Military family members make substantial sacrifices to support their family member's service, and they make important contributions to the military and civilian communities they inhabit. As a diminishing share of the U.S. population serves in the military and shoulders the burdens of war, all military family members need to know that, in the words of first lady Michelle Obama, "they do live in a grateful nation."[70]

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How might such gratitude be expressed in policies and programs? The demographic research we have reviewed documents the diversity of our military families, by age, race, ethnicity, and cultural background. In particular, we have emphasized how the family, its forms, and its position within the military community has changed over time, suggesting that we need a programmatic and policy approach that is flexible enough to adapt to the diversity of military families and to their continual transformations. We

should not compel diverse military families to fit into a fixed and rigidly structured set of programs; rather, we should make support programs accessible to families from all backgrounds and at all stages of the life course. For instance, parents and children have very different needs, and we need programs pertinent to the particular lives that are linked across generations within any family.

In addition, family needs will continue to change. As more military roles open to women, for example, more women may choose to serve and to stay in the military longer, meaning that more male civilian spouses will need to navigate policies and programs related to moving and spousal employment training that have been designed largely to meet the needs of military wives. Family Readiness Groups and other family community service

organizations, which have traditionally been staffed and operated by the female spouses of service members, have already begun to include male spouses, but the repeal of Don't Ask Don't Tell and the increasing legal recognition of same-sex marriages mean that these groups will need to include spouses from same-sex families as well.

Creating such nuanced policies and programs is challenging. But many programs designed for diverse nonmilitary families have been well studied and evaluated, and the research on these programs should help design of the sort of adaptive and flexible policies we are calling for. In turn, future evaluation of adaptive programs for military families will provide information that can be used to enhance the lives of all American children and families.

ENDNOTES

1. Office of the President of the United States, "Strengthening Our Military Families: Meeting America's Commitment," January 2011, http://www.defense.gov/home/features/2011/0111_initiative/strengthening_our_military_january_2011.pdf; "Keeping Faith with Our Military Family," Office of the Joint Chiefs of Staff, accessed January 28, 2013, http://www.jcs.mil/page.aspx?ID=57.

2. Mady Wechsler Segal, "The Military and the Family as Greedy Institutions," *Armed Forces & Society* 13, no. 1 (1986): 9–38, doi: 10.1177/0095327X8601300101; Chris Bourg and Mady Wechsler Segal, "The Impact of Family Supportive Policies and Practices on Organizational Commitment to the Army," *Armed Forces & Society* 25, no. 4 (1999): 633–52, doi: 10.1177/0095327X9902500406.

3. Reuben Hill, *Families under Stress* (New York: Harper and Brothers, 1949).

4. Sondra Albano, "Military Recognition of Family Concerns: Revolutionary War to 1993," *Armed Forces & Society* 20, no. 2 (1994): 283–302, doi: 10.1177/0095327X9402000207.

5. "Getting the Most from Your Family Readiness Group," Military OneSource, accessed August 1, 2012, http://www.militaryonesource.mil.

6. Jay Stanley, Mady Wechsler Segal, and Charlotte Jeanne Laughton, "Grassroots Family Action and Military Policy Responses," *Marriage & Family Review* 15, nos. 3–4 (1990): 207–23.

7. Office of the President of the United States, "Strengthening."

8. Ryan Kelty, Meredith Kleykamp, and David R. Segal, "The Military and the Transition to Adulthood," *The Future of Children* 20, no. 1 (2010): 181–200.

9. Department of Defense, *2011 Demographics Profile of the Military Community* (Washington: Office of the Deputy Under Secretary of Defense, 2012), http://www.militaryonesource.mil/12038/MOS/Reports/2011_Demographics_Report.pdf.

10. Ibid.

11. Ibid.

12. David R. Segal, *Recruiting for Uncle Sam: Citizenship and Military Manpower Policy* (Lawrence, KS: University Press of Kansas, 1989); Jay Teachman, Vaughn R. Call, and Mady Wechsler Segal, "The Selectivity of Military Enlistment," *Journal of Political and Military Sociology* 21, no. 2 (1993): 287–309; Jennifer Hickes Lundquist, "Ethnic and Gender Satisfaction in the Military: The Effect of a Meritocratic Institution," *American Sociological Review* 73, no. 3 (2008): 477–96, doi: 10.1177/000312240807300306.

13. Mady Wechsler Segal, Meridith Hill Thanner, and David R. Segal, "Hispanic and African American Men and Women in the U.S. Military: Trends in Representation," *Race, Gender & Class* 14, nos. 3–4 (2007): 48–64.

14. Office of the Secretary of Defense, Personnel and Readiness, *Population Representation in the Military Services: Fiscal Year 2011,* Appendix B, Table B-19, http://prhome.defense.gov/rfm/MPP/ACCESSION%20POLICY/PopRep2011.

15. Angela R. Febbraro and Ritu M. Gill, "Gender and Military Psychology," in *Handbook of Gender Research in Social Psychology*, *Volume 2: Gender Research in Social and Applied Psychology*, ed. John C. Chrisler and Donald R. McReary (New York: Springer, 2010), 671–96.

16. Office of the Secretary of Defense, Personnel and Readiness, *Population Representation in the Military Services.*

17. U.S. Bureau of the Census, Current Population Survey, *America's Families and Living Arrangements: 2010,* Table A-1, http://www.census.gov/population/www/socdemo/hh-fam/cps2010.html.

18. Department of Defense, *2011 Demographics Profile*.

19. Kelty et al., "The Military and the Transition."

20. Jennifer Hickes Lundquist, "The Black-White Gap in Marital Dissolution among Young Adults: What Can a Counterfactual Scenario Tell Us?" *Social Problems* 53, no. 3 (2006): 421–41, doi: 10.1525/sp.2006.53.3.421.

21. Volker C. Franke, "Generation X and the Military: A Comparison of Attitudes and Values between West Point Cadets and College Students," *Journal of Political and Military Sociology* 29, no. 1 (Summer 2001): 92–120; Jennifer Hickes Lundquist, "When Race Makes No Difference: Marriage and the Military," *Social Forces* 83, no. 2 (2004): 731–57.

22. Jennifer Hickes Lundquist, "Family Formation among Women in the U.S. Military: Evidence from the NLSY," *Journal of Marriage and the Family* 67 (2005): 1–13, doi: 10.1111/j.0022-2445.2005.00001.x.

23. Jay Teachman, "Military Service, Race, and the Transition to Marriage and Cohabitation," *Journal of Family Issues* 30, no. 10 (2009): 1433–54, doi: 10.1177/0192513X09336338.

24. Kelty et al., "The Military and the Transition."

25. Paul F. Hogan and Rita Furst Seifert, "Marriage and the Military: Evidence That Those Who Serve Marry Earlier and Divorce Earlier," *Armed Forces & Society* 36, no. 3 (2010): 420–38, doi: 10.1177/0095327X09351228.

26. Ibid.

27. Kelty et al., "The Military and the Transition"; Benjamin R. Karney and John A. Crown, "Families under Stress: An Assessment of Data, Theory, and Research on Marriage and Divorce in the Military" (Arlington, VA: RAND Corporation, MG-599-OSD, 2007).

28. Jennifer Lundquist, "Racial Disparities in Preterm Births: A Protective Effect of Military Affiliation?" University of Massachusetts–Amherst, February 10, 2013.

29. "Demographics," U.S. Department of Defense Education Activity, accessed January 29, 2013, http://dodea.edu/aboutDoDEA/demographics.cfm.

30. Military Child Education Coalition, *Education of the Military Child in the 21st Century: Current Dimensions of Educational Experiences for Army Children* (Harker Heights, TX: MCEC, 2012), http://www.militarychild.org/public/upload/images/EMC21-Full_Report.pdf.

31. "United States: Workers by Occupational Categories," Kaiser Family Foundation, accessed August 1, 2012, http://www.statehealthfacts.org/profileind.jsp?ind=748&cat=1&rgn=1.

32. David R. Segal and Mady Wechsler Segal, "America's Military Population," *Population Bulletin* 59, no. 5 (2004).

33. Department of Defense, *2011 Demographics Profile*.

34. Ibid.

35. "America's Families and Living Arrangements," U.S. Census Bureau, accessed August 1, 2012, http://www.census.gov/hhes/families/data/cps2011.html.

36. Segal, "The Military and the Family"; also see Lewis A. Coser, *Greedy Institutions: Patterns of Undivided Commitment* (New York: Free Press, 1974).

37. Karin De Angelis and Mady Wechsler Segal, "Transitions in the Military and the Family as Greedy Institutions: Original Concept and Current Applicability," in *Military Families on Mission, Comparative Perspectives*, ed. Rene Moelker, Manon Andres, Gary L. Bowen, and Philippe Manigart (London: Routledge, forthcoming).

38. Department of Defense, "Active Duty Military Personnel by Service by Region/Country: Total DoD— September 30, 2012" (Defense Manpower Data Center, 2012), http://siadapp.dmdc.osd.mil/personnel/ MILITARY/miltop.htm.

39. Richard Cooney, Mady Wechsler Segal, and Karin DeAngelis, "Moving with the Military: Race, Class, and Gender Differences in the Employment Consequences of Tied Migration," *Race, Gender & Class* 18, nos. 1–2 (2011): 360–84.

40. Francesca Adler-Baeder et al., *Marital Transitions in Military Families: Their Prevalence and Their Relevance for Adaptation to the Military* (West Lafayette, IN: Military Family Research Institute, Purdue University, 2005).

41. "Help for Military Homeowners," National Military Family Association, accessed January 29, 2012, http://www.militaryfamily.org/speak-up/policy-issues/updates/help-for-military-homeowners.html.

42. Cooney et al., "Moving with the Military."

43. Mary K. Kniskern and David R. Segal, "Mean Wage and Labor Force Participation Differences between Civilian and Military Wives," briefing prepared for the White House Joining Forces Initiative, August 19, 2011.

44. Bradford Booth, "Contextual Effects of Military Presence on Women's Earnings," *Armed Forces & Society* 30, no. 1 (2003): 25–51, doi: 10.1177/0095327X0303000102.

45. Nelson Lim and David Shulker, *Measuring Underemployment among Military Spouses* (Santa Monica, CA: RAND Corporation, MG-918-OSD, 2010), http://www.rand.org/content/dam/rand/pubs/monographs/2010/ RAND_MG918.pdf.

46. D. A. LaGrone, "The Military Family Syndrome," *American Journal of Psychiatry* 135 (1978): 1040–3.

47. Peter S. Jensen et al., "The 'Military Family Syndrome' Revisited: By the Numbers," *The Journal of Nervous and Mental Disease* 179, no. 2 (1991): 102–7; Amy Reinkober Drummet, Marilyn Coleman, and Susan Cable, "Military Families under Stress: Implications for Family Life Education," *Family Relations* 52, no. 3 (2003): 279–87; Stephen J. Cozza, Ryo S. Chun, and James A. Polo, "Military Families and Children During Operation Iraqi Freedom," *Psychiatric Quarterly* 76, no. 4 (2005): 371–78; Cale Palmer, "A Theory of Risk and Resilience Factors in Military Families," *Military Psychology* 20, no. 3 (2008): 205–17.

48. Drummet et al., "Military Families."

49. David Wood et al., "Impact of Family Relocation on Children's Growth, Development, School Function, and Behavior," *Journal of the American Medical Association* 270, no. 11 (1993): 1334–8, doi: 10.1001/ jama.1993.03510110074035; Russell W. Rumberger and Katherine A. Larson, "Student Mobility and the Increased Risk of High School Dropout," *American Journal of Education* 107, no. 1 (1998): 1–35; Tim Jelleyman and Nick Spencer, "Residential Mobility in Childhood and Health Outcomes: A Systematic Review," *Journal of Epidemiological and Community Health* 62 (2008): 584–92, doi: 10.1136/ jech.2007.060103.

50. Eve Graham Weber and David Kevin Weber, "Geographic Relocation Frequency, Resilience, and Military Adolescent Behavior," *Military Medicine* 170, no. 7 (2005): 638–42.

51. Michelle L. Kelley, Lisa B. Finkel, and Jayne Ashby, "Geographic Mobility, Family, and Maternal Variables as Related to the Psychosocial Adjustment of Military Children," *Military Medicine* 168 (2009): 1019–24.

52. Ibid.; Kathleen A. Finn Jordan, "Identity Formation and the Adult Third Culture Kid," in *Military Brats and Other Global Nomads: Growing Up in Organization Families*, ed. Morten G. Ender (Westport, CT: Praeger, 2002), 211–28.

53. Ibid.

54. Karen H. Marchant and Frederic J. Medway, "Adjustment and Achievement Associated with Mobility in Military Families," *Psychology in the Schools* 24 (2007): 289–94.

55. Lt. Col. William R. Abb (Ret.), "Citizen Soldier Support Program: CSSP Mapping and Data Center," presentation to the Veterans, Reservists, and Military Families Data and Research Workshop, Washington, September 26, 2012.

56. Amy Richardson et al., *Effects of Soldiers' Deployment on Children's Academic Performance and Behavioral Health* (Santa Monica, CA.: RAND Corporation, MG-1095-A, 2011), http://rand.org/content/dam/rand/pubs/monographs/2011/RAND_MG1095.pdf.

57. Rozlyn C. Engel, Luke B. Gallagher, and David S. Lyle, "Military Deployments and Children's Academic Achievement: Evidence from Department of Defense Education Activity Schools," *Economics of Education Review* 29 (2010): 73–82, doi: 10.1016/j.econedurev.2008.12.003.

58. Timothy M. Bonds, Dave Baiocchi, and Laurie L. McDonald, "Army Deployments to OIF and OEF" (Santa Monica, CA: RAND Corporation, DB-587-A), http://rand.org/content/dam/rand/pubs/documented_briefings/2010/RAND_DB587.pdf.

59. Lawrence J. Korb and David R. Segal, "Manning and Financing the Twenty-First Century All-Volunteer Force," *Daedalus* 140, no. 3 (Summer 2011): 75–87; Michael Waterhouse and JoAnne O'Bryant, "National Guard Personnel and Deployments: Fact Sheet" (Washington: Congressional Research Service, 2008).

60. Anita Chandra et al., *Views from the Homefront: The Experiences of Youth and Spouses from Military Families* (Santa Monica, CA: RAND Corporation, TR-913-NMFA), http://www.rand.org/content/dam/rand/pubs/technical_reports/2011/RAND_TR913.pdf.

61. Ibid.

62. Ibid.

63. Department of Defense, *2011 Demographics Profile*.

64. National Center for Veterans Analysis and Statistics, "Veteran Population by State," accessed August 1, 2012, http://www.va.gov/vetdata/docs/Maps/VetPop_State.pdf.

65. Anne Leland and Mari-Jana "M-J" Oborocenau, *American War and Military Operations Casualties: Lists and Statistics* (Washington: Congressional Research Office, 2010), http://www.fas.org/sgp/crs/natsec/RL32492.pdf.

66. Terri Tanielian and Lisa H. Jaycox, *The Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (Santa Monica, CA: RAND Corporation, MG-720-CCF, 2008), http://rand.org/content/dam/rand/pubs/monographs/2008/RAND_MG720.pdf.

67. Tara Galovski and Judith A Lyons, "Psychological Sequelae of Combat Violence: A Review of the Impact of PTSD on the Veteran's Family and Possible Interventions," *Aggression and Violent Behavior* 9, no. 5 (August 2004): 477–501, doi: 10.1016/S1359-1789(03)00045-4; Rachel Dekel and Hadass Goldblatt, "Is There Intergenerational Transmission of Trauma? The Case of Combat Veterans' Children," *American Journal of Orthopsychiatry* 78, no. 3 (July 2008): 281–89, doi: 10.1037/a0013955.

68. Meredith Kleykamp, "A Great Place to Start? The Effect of Prior Military Service on Hiring," *Armed Forces & Society* 35, no. 2 (January 2009): 266–85, doi: 10.1177/0095327X07308631.

69. Bureau of Labor Statistics, "Employment Situation of Veterans—2011," news release, March 20, 2012, http://www.bls.gov/news.release/pdf/vet.pdf.

70. Office of the First Lady, "Remarks by the First Lady and Dr. Biden at the Joining Forces Anniversary Event," news release, April 11, 2012, http://www.whitehouse.gov/the-press-office/2012/04/11/remarks-first-lady-and-dr-biden-joining-forces-anniversary-event.

Economic Conditions of Military Families

James Hosek and Shelley MacDermid Wadsworth

Summary

For military children and their families, the economic news is mostly good. After a period of steady pay increases, James Hosek and Shelley MacDermid Wadsworth write, service members typically earn more than civilians with a comparable level of education. Moreover, they receive many other benefits that civilians often do not, including housing allowances, subsidized child care, tuition assistance, and top-of-the-line comprehensive health care. Of course, service members tend to work longer hours than civilians do, and they are exposed to hazards that civilians rarely, if ever, face. The extra pay they receive when they are deployed to combat zones helps their families cope financially but cannot alleviate the stress.

Though service members are relatively well paid, the military lifestyle takes a toll on the earnings of their spouses. Chiefly because the military requires service members to move frequently, spouses' careers are regularly interrupted, and employers are hesitant to offer them jobs that require a large investment in training or a long learning curve. More military spouses than comparable civilian spouses are either unemployed or work fewer hours than they would like, and military spouses overall tend to earn less than their civilian counterparts.

Despite the military's relatively high pay, some service members and their families—particularly among the junior enlisted ranks—report financial distress, and a handful even qualify for food stamps. Moreover, precisely because military pay tends to be higher than civilian pay, families may see a drop in income when a service member leaves the armed forces. Finally, the pay increases of recent years have slowed, and force cutbacks are coming; both of these factors will alter the financial picture for service members, possibly for the worse.

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James Hosek and Shelley MacDermid Wadsworth

In this article, we find that the economic circumstances of military families are good, certainly much improved compared with even a decade ago. But the military context is nonetheless challenging, with long hours, dangerous work, frequent transfers, and stressful absences during deployment. Service members receive relatively high pay and have steady work, but military life can exact a price from their spouses: frequent moves disrupt spouses' employment, and military spouses' wages are lower than those of comparable civilians. Yet the military offers important services to families in the form of noncash benefits. For example, on-base child-care centers are renowned for high-quality care (see the article in this issue by Major Latosha Floyd and Deborah Phillips). Similarly, military dependents receive health care at little or no cost through the TRICARE system, and the military contributes to local school districts to ensure that school-age military children have access to quality education. Despite these noncash benefits, some families, especially large families of junior service members, have trouble making ends meet, just like families in the civilian world.

To depict the economic conditions of military families, we describe the elements of military compensation and how it has changed over the past decade, and we discuss a range of topics including health-care costs, the possibility of being on food stamps, pay in the reserve forces, military spouses' earnings, deployment and deployment-related pay, and selected benefits that affect military families with children. We compare military pay with minimal self-sufficiency budgets, and we assess financial stress among military families. Finally, we recognize that military service can have consequences that extend into civilian life, and we examine postservice earnings,

unemployment, and homelessness among veterans, and how these things are associated with service-related disabilities, including posttraumatic stress disorder (PTSD).

As a point of departure, table 1 illustrates how many service members have children in their homes at different points in the military life cycle; table 2 breaks down the types of households these children live in: single-parent, one military parent and one civilian, or dual-service. The tables use data from 2010, but military population dynamics are stable enough that these data offer a good approximation of current conditions. In 2010, 44 percent of active-duty service members had children. Of service members with children, 11 percent were single, 82 percent were married to a civilian, and 7 percent were in dual-service marriages. (Although the tables don't include them, the corresponding percentages for the Guard and Reserve are similar. Forty-three percent of Guard and Reserve members had children, and of those with children, 21 percent were single, 75 percent were married to a civilian, and 3 percent were married to another service member.)

The longer people stay in the military, the more likely they are to have children. Among active-duty service members, 22 percent of junior enlisted personnel (pay grades E1–E4) had children, compared with 60 percent of midcareer personnel (pay grades E5–E6) and 82 percent of senior personnel (pay grades E7–E9). Thirty-six percent of junior officers (pay grades O1–O3) had children, compared with 76 percent of midcareer officers (pay grades O4–O6). The highest officer grades, generals and admirals (pay grades O7–O10), count fewer than 1,000 members and are not shown in the table. Because of attrition and failure to reenlist, only about

Table 1. Number and Percentage of Active-Duty Personnel with Children

	Enlisted personnel, by pay grade			Officers, by pay grade		
	E1–E4	E5–E6	E7–E9	O1–O3	O4–O6	Total
Total active-duty personnel	627,628	420,222	134,807	127,997	86,549	1,397,203
Active-duty personnel with children	136,043	251,150	110,571	45,936	66,074	609,774
Percentage with children	22%	60%	82%	36%	76%	44%

Source: Department of Defense, *2010 Demographics Profile of the Military Community.*

35 percent of an entering cohort of active-duty enlisted personnel will have a second term of service, and about 14 percent will attain the 20 or more years of service that will qualify them for military retirement benefits. Among officers, approximately half of an entering cohort will depart between their fifth and 10th year of service as their initial obligation ends, and 34 percent will reach 20 years of service.

Service Members' Pay and Benefits

Perhaps the best way to compare military compensation to civilian earnings is to begin with "regular military compensation," or regular compensation for short.[1] Regular compensation consists of basic pay, a subsistence allowance, a housing allowance, and, because the two allowances aren't taxable, a tax advantage as well. Basic pay and the housing allowance increase with pay grade and years of service. The housing allowance goes to the 65 to 70 percent of service members who don't live in government housing. It increases with family size and with the cost of rentals for civilians with comparable income who live in the same area.[2] On average, regular compensation accounts for about 90 percent of military cash compensation. Special pay and incentive pay, as well as other allowances, contribute much of the remainder and serve to differentiate pay by

circumstance and occupation. Some examples are the family separation allowance ($250 per month), hardship duty pay ($100 per month for duty in Afghanistan, for example), bonuses for enlistment and reenlistment, and allowances for moving.

In addition, service members receive healthcare coverage—free for themselves and at low cost for their families—and they earn 30 days of paid vacation each year. They can also receive "special leave" for reasons that include deployment, morale, convalescence, maternity, paternity, or adoption, as well as emergency unpaid leave.[3] Members who complete 20 years of military service qualify for retirement benefits and lifetime health benefits. Active-duty service members begin receiving these benefits as soon as they leave the military, and reservists start receiving them at age 60 (or somewhat earlier, depending on how often they were deployed). Retirement benefits equal roughly 50 percent of basic pay after 20 years of service and 75 percent after 30 years; retirement benefits for reservists reflect only the time they spent on active duty or in training and drills. After leaving the military, new veterans can receive unemployment compensation while they look for civilian jobs, though benefit levels vary by state.

Table 2. Active-Duty Personnel with Children, Percentage by Marital Status

	Enlisted personnel, by pay grade			Officers, by pay grade		
	E1–E4	E5–E6	E7–E9	O1–O3	O4–O6	Total
Single-parent	18%	10%	10%	7%	5%	11%
Married to civilian	77%	82%	81%	87%	91%	82%
Dual-service	6%	9%	9%	7%	5%	7%

Source: Department of Defense, *2010 Demographics Profile of the Military Community.*

Through a tuition assistance program and various versions of the GI Bill, service members can get help with college expenses. When they're deployed, the Servicemembers Civil Relief Act protects them from high mortgage interest rates and foreclosures, termination of leases, and eviction, among other things. Further legal protections include the Uniformed Services Employment and Reemployment Rights Act, which preserves the jobs of deployed Guard and Reserve members, and the Family and Medical Leave Act, which includes special provisions for military families. The families of service members who die on active-duty receive a death gratuity of $100,000. The Survivor Benefit plan also provides an annuity to one or more surviving family members, although military retirees must pay premiums for this benefit. For the most part, active-duty service members receive these forms of compensation and others at all times, and reservists receive them while they're on active duty.

Military Cash Compensation since 2000

Service members receive well above the median wage of civilian workers of comparable age and education. Military service can be difficult and dangerous, and paying well helps the all-volunteer force meet its staffing requirements. In fact, when military pay

has been allowed to fall relative to civilian pay, the service branches have had trouble recruiting and retaining personnel. For example, the military shrank after the Cold War, and military pay increases did not keep up with civilian pay. By 1999, the Army and Marines had difficulty finding enough high-quality recruits, and they had a hard time retaining personnel who were trained in technical specialties. Congress responded by increasing basic pay by 6.2 percent for fiscal year 2000, and it committed to increasing basic pay by half a percentage point more than usual through fiscal year 2006; it also mandated an increase in the housing allowance, to be phased in over the next few years. Later, with the wars in Iraq and Afghanistan under way, Congress continued the higher-than-usual increases in basic pay to fiscal year 2010. The basic pay increase returned to its usual adjustment—which is tied to the U.S. Department of Labor's lagged Employment Cost Index—for fiscal years 2011 and 2012, and it was half a percentage point lower than usual for fiscal year 2013.

From 2000 to 2010, the average increase in regular compensation, adjusted for inflation, was 40 percent for enlisted members and 25 percent for officers. Over the same period, inflation-adjusted civilian pay fell by between 4 and 8 percent.[4]

In 2013, an Army sergeant living near Fort Hood, Texas, who had nine years of service, a spouse, and two children received regular compensation of $4,355 a month ($2,620 basic pay, a $325 subsistence allowance, a $1,017 housing allowance, and a $393 tax advantage), or $52,263 annually. A captain (junior officer) living in similar circumstances received $7,243 a month ($5,189 basic pay, $224 subsistence, $1,365 housing, and $465 tax advantage), or $86,915 annually. In an area with high housing costs like Honolulu, for example, the housing allowance was more than twice as much.

The higher-than-usual increases in basic pay over the past decade, along with the increase in the military housing allowance, buoyed military pay relative to civilian pay. For instance, for 23- to 27-year-old enlisted soldiers with only a high school diploma, median weekly regular compensation grew from $566 in 2000 to $771 in 2009 (both in 2010 dollars), while wages of comparable civilian workers decreased slightly. Military pay of $771 placed a young soldier at the 80th percentile of the civilian wage distribution, that is, at a wage level higher than eight out of ten comparable civilian workers. For 28- to 32-year-old Army officers with a bachelor's degree, median weekly regular compensation was $1,279 in 2000 and $1,527 in 2009, and the 2009 figure put them at the 84th percentile of comparable civilian workers.

In civilian life, women and minorities tend to earn less than white men do. In 2009, for example, a 23- to 27-year-old woman or Hispanic man with a high school diploma, working full time, earned, on average, 83 percent of the salary of a white male with the same attributes; a black man earned 86 percent. But military pay, based on pay tables for enlisted personnel and officers

alike, is the same regardless of race and gender. For women and minorities, then, military pay looks even better relative to civilian pay. By the same token, women and minorities who leave the military and take a civilian job are likely to see their wages fall even more than white men would, and the change in their families' economic circumstances might be more marked. But this is not to assert that women and minorities in the military have the same promotion and retention rates as white men do. The Military Leadership Diversity Commission recently reported that, among enlisted personnel, men are more likely than women to reenlist, and blacks, Hispanics, and Asians and Pacific Islanders are more likely than whites to re-enlist. Among officers, women are less likely than men to continue their service when their initial term is up; black and Hispanic officers are more likely than whites to continue, and Asians and Pacific Islanders are less likely. Also, black men and women have lower promotion rates than do white men, although white women have higher rates. The commission also found that officers who belong to minority groups have lower promotion rates at midcareer pay grades (major to colonel) than do white officers.[5]

The relatively higher pay for women and minorities makes the military more attractive for these groups. However, the percentage of female recruits has not changed much in the past 20 years. This might reflect a preference not to join, a limited demand by the military for women, the fact that not all military occupations have been open to women, or other factors. Moreover, low scores on the military aptitude exam and lower high school graduation rates screen out many members of minority groups, and those with high aptitude scores might aspire to attend college and might receive financial aid to do so.[6]

Among youth who qualify to enlist, recruits often mention patriotism, adventure, travel, few local job opportunities, and educational opportunities, as well as pay, as reasons that led them to join the military.

The military also offers steady employment, while firms in the private sector face competition and cyclical pressure that can lead to job cuts. When the national unemployment rate rose above 8 percent in 2008–10, military retention and recruiting were in great shape.

Military Health Care

Health-care costs in the civilian world have grown rapidly since 2000. For civilian workers, the average annual health insurance premium more than doubled from 2000 to 2010, going from $1,619 to $3,997.[7] And that's only the worker's share. A health plan with broad coverage cost about $14,000 in 2010, and employers generally paid the remainder.

But for military families, the cost of health care has remained low; they have, in effect, been sheltered from the cost increases in the private sector.[8] Military personnel receive health care at no cost, and their families can enroll in TRICARE at three levels of coverage: Prime, Standard, or Extra. Prime has no enrollment fees and no network copayments; Standard (out-of-network provider) and Extra (network provider) have fees ranging from $15 to $25 per visit or copays of 20 percent.

Food Stamps

In 2010, fewer than 1,000 active-duty military families participated in the Social Security Administration's Supplemental Nutrition Assistance Program, popularly known as food stamps, down from 2,100 families in 2002 and 19,400 in 1991; probably as a consequence of the recession,

this number rose to 5,000 in 2012.[9] Yet as military salaries have risen, why are any military families on food stamps at all? The answer lies in the eligibility criteria for food stamps, particularly a gross income standard that excludes most noncash income and in-kind benefits. A household can get food stamps if its monthly gross income is below 130 percent of the poverty line ($2,389 for a family of four in fiscal year 2010). Depending on military pay schedules and the service member's rank, a family of four headed by a married private (rank E4) with three years of service who was the sole earner might have qualified for about $200 of food stamps per month in fiscal year 2010.

In 2001, however, Congress created the Family Subsistence Supplemental Allowance (FSSA), aiming to increase service members' income enough that they wouldn't be eligible for food stamps. If service members' gross family income, as defined by the Supplemental Nutrition Assistance Program, makes them eligible for food stamps, they can receive an FSSA payment that brings them up to 130 percent of the poverty line. Congress set the maximum monthly FSSA payment at $500; in 2010, it was increased to $1,100 and made nontaxable. Relatively few families have applied for and received FSSA payments: 510 in 2010 and 245 in 2009.

Pay in the Guard and Reserve

In 2010, the Guard and Reserve encompassed 857,000 people, compared with 1,417,000 active-duty service members. Reservists drill one weekend per month and have 14 days of training in the summer, and they may be activated for domestic or national security reasons. Their annual regular compensation for drilling and training totals $5,000 to $15,000, depending on rank. For example,

in 2010, a Reserve sergeant (pay grade E5) with nine years of service and dependents received $6,845, and a captain (pay grade O3) with similar attributes received $12,541. This military pay added 15 to 20 percent to their annual earnings, on average. Reserve families also have access to affordable health coverage. When a reservist is activated for 30 days or more, his or her family is eligible for the same TRICARE benefits that active-duty families receive. When a reservist deactivates, he or she qualifies for 180 more days of TRICARE coverage if the activation was in support of a contingency operation. Otherwise, reservists may purchase the TRICARE Reserve Select health-care plan, which in 2012 charged about $2,300 to cover a reservist and his or her family.[10]

Compared with civilian wives with similar characteristics, … military wives are less likely to work and more likely to be unemployed; they work fewer weeks each year and fewer hours each week; they are paid less; and they move more frequently. They are more likely to work part time when they would prefer full-time work, and they are more likely to be overeducated for the job they hold.

It is often thought that reservists who are deployed take a cut in pay. But about 90 percent of reservists see their pay rise during deployment, because military compensation is typically higher and more stable than civilian pay.[11] However, people who are self-employed, or professionals such as lawyers, may see their pay fall.

Military Spouses' Earnings

A service member may be on duty any day at any hour, and may be at home or away. The demands of military duty mean that a service member's spouse has less flexibility when it comes to work schedules, which can affect the spouse's earnings. This is true whether the spouse is a man or a woman, and in dual-service marriages as well.

Compared with civilian wives with similar characteristics, for example, military wives are less likely to work and more likely to be unemployed; they work fewer weeks each year and fewer hours each week; they are paid less; and they move more frequently.[12] They are more likely to work part time when they would prefer full-time work, and they are more likely to be overeducated for the job they hold.[13] Similarly, military husbands are more likely to be unemployed, earn less, and move more frequently than comparable civilian husbands.[14]

Analyzing data from the American Community Survey for 2005–11, we find that the annual earnings of female military spouses who are married to active-duty service members and who worked during any given year were about 14 percent less than those of comparable civilian spouses. This 14 percent difference remains nearly constant when we compare the two groups by number of weeks worked or hours of work per week.

Statistical analyses indicate that female military spouses were 9 percent less likely than their civilian counterparts to participate in the labor force during a year, 10 percent less likely to work full time (30 or more hours a week), and 14 percent less likely to work 33 or more weeks a year; on average, they worked 6.4 fewer weeks per year. Average annual earnings (in 2010 dollars) among female military spouses working part time and full time were $9,037 and $31,167, respectively; about one-fourth worked part time and three-fourths worked full time, implying an overall average of $25,900.

Earlier studies have also found that military wives earned less than civilian wives, and that military husbands earned less than civilian husbands.[15] However, the earnings differential was on the order of 25 percent for military wives and 20 percent for military husbands. The differential we found for military wives, 19 percent, may indicate a relative gain, though we don't yet know why this apparent gain has occurred.

To some degree, higher military pay offsets military spouses' lower earnings. To illustrate, in Hawaii in 2009, active-duty personnel had a median income of $74,900, and full-time civilian workers had a median income of $50,400. Yet median family incomes, which include spouses' earnings, were much closer together: $87,300 for active-duty families and $85,000 for civilian families with at least one full-time worker.[16]

Studies of military spouses' earnings suggest that their work opportunities, time constraints, and willingness to work have been much the same for the past 20 years. But spouses are less likely to work when a service member is deployed. If male service members were deployed more than 30 days in the past year, for example, their wives were about 3 percent less likely to participate in the labor force, and 4.9 percent less likely to do so if they had children under age six.[17] Moreover, spouses' participation in the labor force fell several months before deployment and did not rise again until several months after. However, if spouses continued to work during deployment, they saw almost no change in wages and hours.

Deployment and Related Pay

Deployed service members can receive additional pay in many forms, including a combat zone tax exclusion, hostile fire pay, hardship duty pay, and a family separation allowance. This additional pay adds up to roughly $1,000 per month for a Marine corporal (pay grade E4) with dependents, for example. At the same time, they may have higher expenses at home; spouses may need to pay for more child care, hire people to do repairs around the house, or eat more often in restaurants.

The operations in Iraq and Afghanistan have been manned on a rotating basis, meaning that units and their personnel often deployed, returned, and deployed again. The length of deployment varies. Marines have often been deployed for seven months at a time, soldiers for 12 to 15 months, sailors for six months, and airmen for three or four months. But sailors and airmen could be detailed to other services and thus be deployed longer. In 2006, perhaps the year when the military needed the most troops on the ground, about two-thirds of soldiers and Marines who were reenlisting for the first time had been deployed at least once.

Cumulative length of deployment affected service members' willingness to reenlist. Soldiers who spent 12 or more months in Iraq

or Afghanistan were less likely to reenlist than those who spent one to 11 months; the Marine Corps saw similar results.[18] Deployment also increased both personal and work stress.[19] For one thing, duty days were longer than normal; other causes of stress included dangerous missions, terrorist attacks, lack of privacy, limited communication with home, and traumatic events. When individuals and units were well prepared, and when units were well led and well equipped, stress decreased.

By 2005, a high proportion of soldiers and Marines had experienced many months of deployment, pushing down reenlistment rates. The services responded by offering service members more and larger reenlistment bonuses.

Military Benefits for Children

Military families are eligible for more non-cash benefits and support programs than we can list here. Some are provided by the Department of Defense (DoD), some by individual service branches or the Guard and Reserve, and some by federal and state governments. For the sake of brevity, we will focus only on the DoD's offerings, collectively called Quality of Life programs, in particular those with financial implications. All Quality of Life programs are summarized annually in a report to Congress and every four years in the Quadrennial Quality of Life Review.[20]

In July 2012, the DoD issued an instruction on "Military Family Readiness," replacing several earlier directives in an effort to redefine and consolidate DoD programs that support military families.[21] The instruction, which pertains to all service branches and other components of the DoD, directs support services to help military families in three areas—readiness to mobilize and deploy, finances and moving, and personal and family wellbeing. It also calls for an explicit move away from delivering services solely through military facilities.

Given that almost half of active-duty service members are 25 or younger, it isn't surprising that military families include more than 700,000 children younger than five.[22] In this issue of *The Future of Children*, Major Latosha Floyd and Deborah Phillips discuss military child care in depth. What's relevant here are the cash and noncash benefits that military families with children receive. For example, the military subsidizes care in on-base child development centers on a sliding scale, according to family income. At the low end, families who earn $29,400 or less pay as little as $46 per child per week, while families with incomes of more than $125,000 pay $139 per week.[23] The military also subsidizes care in off-base child-care centers that meet DoD standards.

For older children, the DoD operates 194 schools in 12 foreign countries and seven states, and in other areas where local schools are either unavailable or lack the capacity to serve military children. But most military children attend civilian schools. Because military installations don't pay property taxes, and because some military families pay income taxes in a different state, the military often gives local schools "impact aid" to help cover the additional costs they incur from having military children on their rolls.[24]

Historically, military families have had to access most support programs on-base. In the past decade, however, the military has significantly expanded the resources available to families either where they live or online, which is especially important for Guard

and Reserve families. For example, Military OneSource, created in 2002, offers round-the-clock access to information, counseling, and referrals, both by telephone and on the web. Guard and Reserve families now have full commissary benefits, and trucks bring on-site sales to local armories. Child Care Aware works with the DoD to help military families find and afford community-based child care; family life counselors who specialize in children's issues have been sent around the country; and the military has added resources to state family programs, usually through the National Guard.[25]

Self-Sufficiency Budgets and Consumption Patterns

We lack complete data about military families' income and expenditures, and we have no clear external standard against which to compare their economic circumstances, making it hard to determine exactly what financial hardships they face. However, research on the affordability of child care can give us a partial picture.

The 1999 Survey of Active Duty Personnel was the last military-wide survey conducted before the current conflicts began that included questions about income and expenditures. One of us, Shelley MacDermid Wadsworth, along with several colleagues, selected a subsample of respondents to this survey that comprised 2,526 service members in enlisted pay grades E3–E6 and officer pay grades O2–O3 who were stationed in the continental U.S.; they lived in both one- and two-parent families, and they had either one or two children younger than six.[26] MacDermid Wadsworth and her colleagues compared this group with a group of 968 civilian families drawn from the 1999 Consumer Expenditure Survey who were

similar in family structure and income. They also consulted data about living expenses from the 1999 Permanent Change of Station Costs Survey and the 1999 Living Patterns Survey, as well as civilian self-sufficiency budgets, which estimate the minimum income a family would need to live free of government assistance, for three places in the U.S. with a low, medium, and high cost of living. Using all of these data, they estimated how much money civilian and military families would have left for child care after all other expenses were paid.

Military families overall were more likely to be able to afford child care than were comparable civilian families.

Military families spent less than civilian families did for health care, food, household or personal items, and taxes. But they paid more for child care (and considerably more for transportation). Although military families received subsidized child care, they tended to purchase more types of care than civilians did, perhaps because of long duty days.

Still, most of the civilian families had a moderate to high risk of not being able to afford child care, but military families who lived in military housing had only a low to moderate risk, no matter how many children they had or how many earners were in the family. The low cost of military housing and the savings available at military commissaries and exchanges probably gave these families a financial cushion. On the other hand, military

families who lived in civilian housing experienced low risk if they had two earners but high risk if they had only one (including, of course, all single-parent families). Families of enlisted personnel were generally at greater risk than officers' families. Despite these variations, military families overall were more likely to be able to afford child care than were comparable civilian families.

MacDermid Wadsworth and her colleagues then compared the self-sufficiency budgets with data about military families in the E4, E6, and O3 pay grades. Self-sufficiency budgets are generally austere, including no funds for savings, loan payments, entertainment, restaurant meals, or vacations. They assume that families will use public transportation in cities or buy a used vehicle elsewhere. They also assume that families will purchase child care, setting the estimated cost high enough to ensure adequate quality.

The self-sufficiency budgets showed that shelter, child care, and taxes cost about twice as much in areas with a high cost of living as they did in areas with a low cost of living. Health-care costs varied less, and the cost of food and transportation varied relatively little. Military families spent at least twice as much on transportation as the self-sufficiency budgets allocated, and somewhat more on housing, but about one-third less on child care. Overall, the researchers found that most military families would meet self-sufficiency standards where the cost of living was low, but that almost none would meet the standards where the cost of living was high.

Taken as a whole, MacDermid Wadsworth's analyses suggested that military families were less likely to be able to afford child care if they had more children or fewer earners, lived in civilian housing, or lived in areas with

a high cost of living. But since the analyses were conducted, the military has done quite a bit to help military families financially. By 2005, the housing allowance had risen to the median rental cost of adequate housing in each community, and from 2000 to 2010 inflation-adjusted regular compensation grew by 40 percent for enlisted personnel (nearly 50 percent for junior personnel) and 25 percent for officers.[27]

Financial Stress among Military Families

Indebtedness can cause financial stress for military families. And service members may be taking on more debt than in the past. For example, data from one military installation show that the proportion of entering trainees who were already in debt rose from 26 percent to 42 percent between 1997 and 2003; about half of their indebtedness came from vehicle loans.[28] But indebtedness is not necessarily a sign of financial stress. Debt can smooth consumption over time and increase wellbeing. When the burden of servicing the debt is greater than expected, however, debt can become a source of stress. A family's debt burden may grow too high if its expectations were naïve in the first place, or if it experiences shocks such as loss of a job. Moreover, "predatory" lenders have tried to entice young service members into taking on short-term loans with hidden high fees that they are unlikely to be able to repay.[29] Federal legislation passed in 2007 set limits on such loans, which include payday loans, vehicle title loans, and tax refund loans. More than 70 percent of service members now live in states where these statutes can be enforced (in some states, statutes at the state level do not grant the authority that financial regulators need to enforce the federal statute).[30]

The military's 2011 Family Readiness report to Congress presented data about financial stress in junior military families.[31] Among junior enlisted families in pay grades E1 through E4, the proportion of service members who reported serious financial trouble was 25 percent in 2002 and 17 percent in 2010, although the figure had dipped even lower, to 15 percent, in 2005 and 2009. Service members in the Air Force were least likely to report financial difficulties; those in the Army were most likely.

The report also examined the proportion of service members who had one or more problems related to paying bills, including bouncing two or more checks, failing to make a minimum payment on a credit card or other account, falling behind on rent or mortgage, being pressured to pay bills by creditors or collectors, or having utilities shut off. The prevalence of these problems fell substantially across all branches of service, from about 47 percent in 2002 to 26 percent in 2010, with the largest single decline—almost 15 percentage points—occurring between 2009 and 2010. Thus service members improved their financial management even as the increase in their overall financial health appeared to have stalled.

Which military families are most at risk for financial trouble? We analyzed 2008 data from the Family Life Project to find the characteristics of families who were most and least likely to report moderate to serious financial strain. Families were at least 20 percent more likely to report financial strain when:

- the service member's pay grade was lower than O4 (those at pay grades lower than E7 were more than three times as likely to report financial strain);

- the service member's spouse was unemployed;

- the service member had been wounded, particularly in a way that interfered with his or her ability to participate in the family;

- someone in the family had special medical or educational needs;

- the family had a hard time readjusting to the service member's presence after he or she returned from deployment; or

- the family had used financial counseling services.

On the other hand, military families were at least 20 percent less likely to report financial strain when:

- they put money aside each month;

- they had $500 or more in emergency savings;

- they had more social support than average;

- they were enrolled in the Exceptional Family Member Program (see the article by Major Latosha Floyd and Deborah Phillips in this issue); or

- the service member's spouse was male.

Earnings, Unemployment, and Homelessness among Veterans

When service members leave the military, they must find a job and often resettle their families. Most will earn less in their new job than they did in the military, and it may take a while to find a job at all. A small percentage of veterans ultimately fare poorly enough that they become homeless.

Earnings

Evidence suggests that enlisted personnel who leave the armed services and rejoin the civilian world can expect to earn about what they would have earned if they had never joined the military. David S. Loughran and his colleagues followed over time a group of Army applicants who met the qualifications to enlist. Many of the applicants enlisted, but others decided not to do so. During their years in the military, those who enlisted earned considerably more than those who didn't, which is not surprising, given that wages are higher in the military for people with similar backgrounds. Ten years after the study began, roughly 80 percent of those who enlisted had left the Army and become workers in the civilian economy. Overall, these veterans' annual earnings were about the same as those of the applicants who didn't enlist. When the two groups were compared according to their scores on the Armed Forces Qualification Test, however, some differences cropped up. Fourteen years after enlisting, for instance, veterans with low to middling scores on the test earned slightly more than those with similar scores who had never enlisted. But veterans with higher test scores earned slightly less, possibly because they were less likely than their counterparts who didn't enlist to ever earn a college degree.[32]

Still, any differences in civilian-world earnings between comparable groups were small—no more than 5 percent in either direction. However, because of the military's high wages, those who enlisted often experienced a significant drop in earnings when they left the Army, and the decrease was steeper the longer they served. Four years after the study began, enlistees who remained in the Army earned about $12,000 more annually than enlistees who had left;

after 10 years, enlistees who remained in the Army earned about $25,000 more.[33] Veterans' families may be able to make up at least some of the difference because their spouses can earn more once they leave military life, but we know of no study that tests this theory.

Because of the military's high wages, those who enlisted often experienced a significant drop in earnings when they left the Army, and the decrease was steeper the longer they served.

We need to know a lot more about how posttraumatic stress disorder (PTSD) and traumatic brain injury affect post-service earnings. One study of reservists with self-reported PTSD symptoms is under way at the RAND Corporation. The researchers have found that reservists with PTSD symptoms tended to have lower earnings not only after deployment, but also *before* they ever went to war. In fact, before their deployment, reservists who would later report PTSD symptoms earned 17 percent less, on average, than those who would not go on to report PTSD symptoms. Controlling for this effect, the researchers found that PTSD symptoms are associated with a postdeployment drop in earnings of only 1 to 2 percent, on average.[34] These findings may have implications for policy. They suggest that to help veterans with symptoms of PTSD succeed in the civilian labor market, we should focus on building their capacity to earn, rather than on mental health treatment alone.

Many veterans have disabilities that they incurred in the military. The Department of Veterans Affairs (VA) counts more than 1.6 million veterans who are eligible for VA disability compensation. Richard Buddin and Bing Han linked VA records to Social Security earnings records and found that veterans with a high disability rating had lower annual earnings in the labor market.[35] For most disabled veterans, however, VA disability benefits offset most or all of this earnings gap. There is an exception: people who were discharged from the military because of a service-connected disability, a group that makes up less than 10 percent of the VA's roster of disabled veterans. These veterans are less likely to work than other disabled veterans, and their civilian earnings are lower, especially among older veterans. The VA benefit does not offset their diminished earnings, which can be several thousand dollars less annually for enlisted veterans and more than $10,000 for officers. Conversely, VA benefits substantially reduce the odds that veterans are living in poverty, although black and female veterans are much less likely to receive benefits.[36]

Unemployment

Many people who serve in Iraq or Afghanistan don't have a civilian job when they leave the military (or, if they are reservists, when they return from deployment), and veterans have a higher unemployment rate than nonveterans, although this effect diminishes significantly with age.[37] Statistics from the Department of Labor show, for example, that in the second quarter of 2012, 22.3 percent of male veterans aged 18–24 who had served in the military at some point since 9/11 were unemployed, compared with 16.7 percent of male nonveterans in the same age range. Similarly, 11.7 percent

of veterans aged 25–34 were unemployed, compared with 7.7 percent of nonveterans. But among people aged 35–44, veterans and nonveterans had nearly identical unemployment rates, 6.1 percent and 6.3 percent, respectively.[38] However, the calculations behind these statistics do not control for important differences between veteran and nonveteran populations. For instance, fewer than two percent of male post-9/11 veterans have less than a high school education, compared with 18.5 percent of male nonveterans. Controlling for such factors, the 2010 unemployment rate of post-9/11 veterans is estimated to be 10.4 percent, versus 9.9 percent for nonveterans.[39] The difference in unemployment rates is thus considerably less than in comparisons without fine control.

Research has not definitively established why veterans are more likely than nonveterans to be unemployed. Possible causes include the need to establish a network of contacts, the difficulty of searching for a new job while on active duty, disappointment with the humdrum nature of civilian jobs compared to the excitement of military missions, and conditions such as PTSD and traumatic brain injury. Also, veterans are eligible for Unemployment Compensation for Ex-Servicemembers, a program administered by state employment offices and paid for by the military, and the receipt of unemployment compensation could be a factor that prolongs veterans' unemployment. Recent studies of National Guard members after deployment have found that returnees with mental health problems were just as likely to find work as were other returning Guard members, but they were less likely to work full time and more likely to perform poorly at work.[40]

Congress has acted to promote the hiring of veterans. For example, listings of public sector jobs often include a veteran preference; the Work Opportunity Tax Credit (WOTC) program extensions in 2007 and 2008 offered financial incentives (up to $4,800) to hire certain veterans with service-connected disabilities; and the VOW to Hire Heroes Act (2011) includes additional credits for employers. The WOTC increased veterans' employment by about 32,000 jobs annually, at a cost of about $10,000 per job.[41] However, the estimated effect of the incentive was not statistically different from zero for those under age 40.

Homelessness

A federal report estimates that 76,000 homeless veterans were living in sheltered housing on a given night in January 2010, and that 145,000 were doing so at some point in the 12 months from October 1, 2009, to September 30, 2010.[42] Most of the 145,000 (98 percent) were individuals living alone without a dependent child, and about half of them were homeless before they entered the shelter. About 1 in 150 veterans were homeless, and veterans were more likely than nonveterans to become homeless. Fifty-one percent of the veterans in homeless shelters were disabled, versus 35 percent of nonveterans in homeless shelters. Also, 22,000 veterans lived in permanent supportive housing (and were no longer homeless), nearly all of them unaccompanied individuals. Interestingly, no study we found told us what the veterans' family status was before they became homeless. Because nearly all the homeless veterans who used shelters were unaccompanied individuals, it seems likely that if they had children, they were no longer caring for or materially supporting those children, nor were their children caring for them.

Conclusions

What lessons can we take from this article? First, service members earn more, not less, than comparable civilian workers. The military also provides a housing allowance and health care, and those who complete 20 years of service can receive retirement benefits immediately and health care for life. The military helps support local schools with high numbers of military children, helps spouses find and keep jobs, provides child care both directly and through subsidies, and more. In addition, the post-9/11 GI Bill covers tuition at state universities and at private colleges and universities that participate in the Yellow Ribbon program, and allows benefits to transfer to dependents if a member has served for six years and commits to four more. Also, military compensation is high enough that relatively few military families are on food stamps—about 5,000 in 2012, mostly junior enlisted service members with several children and a nonworking spouse.

Second, military spouses' earnings are less than those of comparable civilian spouses. This reflects lower labor force participation, fewer weeks and hours of work, and lower wages whether they work full or part time. Perhaps the chief barrier to military spouses' employment is frequent moves; military families move about three times as often as comparable civilian families. As long as the military services perceive these moves as necessary for military readiness, this structural difference will not disappear. For military spouses who want to work, the frequent moves create an incentive to accept readily available jobs, and for employers they create an incentive not to offer jobs with long learning curves and costly investment in job-specific training.

Third, a critical difference between military and civilian employment is that the military has virtual primacy over the member's availability and hours; the family must adapt to, or at least cope with, the member's duties and deployments. The frequent, persistent deployments throughout the military operations in Iraq and Afghanistan put stress on service members and their families. Deployment-related pay—along with increases in the overall level of military pay—helped to compensate for some of this stress, but of course higher pay cannot make stress disappear. Nondeployed personnel working to support the deployments also experienced stress, as did their families.

Fourth, junior service members and their families experience some degree of financial difficulty. This comes in part from the need to "learn on the job" about how to handle personal finances and avoid taking on too much debt. The military services recognize that service members need financial literacy, and they offer training and counseling. But still, about one in seven junior military families reported financial stress, for example, having trouble making ends meet in a given month.

Both congressional and military policy makers have paid considerable attention to the economic conditions of military families in recent years. Resources have been directed toward increasing military compensation, reducing the cost of housing, improving

employment prospects for spouses, and increasing the financial literacy of military personnel. Evidence suggests that these efforts have improved economic conditions for families but have not eradicated financial problems. In particular, junior enlisted personnel are at risk, as are families dealing with combat injuries, special medical or educational needs, readjustment problems, or a spouse's unemployment. In addition to the programs and policies already in place, it might be useful to offer special outreach and training to families who experiencing these risk factors, to ensure that their difficulties are not compounded by financial problems. We should also continue efforts to encourage employers to hire military spouses.

Just like their civilian counterparts, some service members experience financial hardship as a result of their own decisions. But it is also clear that military service comes with unique financial challenges. Over the past decade and longer, policy makers have implemented strategies to minimize these challenges by increasing financial support across the military population. These efforts have met with considerable success. But the pay increases of recent years have slowed, and, barring a new outbreak of hostilities, the military will reduce the size of the force in the coming years. In light of these circumstances, we must keep a careful eye on the economic conditions of military families.

ENDNOTES

1. Information about military pay and benefits is available in Under Secretary of Defense for Personnel and Readiness, "Compensation Elements and Related Manpower Cost Items: Their Purposes and Legislative Backgrounds," *Military Compensation Background Papers,* 7th ed. (Arlington, VA: U.S. Department of Defense, 2011), http://www.loc.gov/rr/frd/pdf-files/Military_Comp-2011.pdf; military pay tables are available at http://militarypay.defense.gov.

2. Under Secretary of Defense for Personnel and Readiness, *Selected Military Compensation Tables* (Arlington, VA: U.S. Department of Defense, 2003), http://militarypay.defense.gov/REPORTS/GREENBOOKS/docs/greenbook_fy2003.pdf.

3. U.S. Department of Defense, *Instruction 1327.06: Leave and Liberty Policy and Procedures* (Arlington, VA: U.S. Department of Defense, 2011), http://www.dtic.mil/whs/directives/corres/pdf/132706p.pdf.

4. The discussion of military pay is based on James Hosek, Beth Asch, and Michael Mattock, *Should the Increase in Military Pay Be Slowed?* (Santa Monica, CA: RAND Corporation, 2012).

5. Military Leadership Diversity Commission, "Decision Paper #3: Retention" (Washington: U.S. Department of Defense, Office of Diversity Management and Equal Opportunity, 2011), http://diversity.defense.gov/Resources/Commission/docs/Decision%20Papers/Paper%203%20-%20Retention.pdf; Military Leadership Diversity Commission, "Decision Paper #4: Promotion" (Washington: U.S. Department of Defense, Office of Diversity Management and Equal Opportunity, 2011), http://diversity.defense.gov/Resources/Commission/docs/Decision%20Papers/Paper%204%20-%20Promotion.pdf.

6. Beth J. Asch et al., *Military Enlistment of Hispanic Youth: Obstacles and Opportunities* (Santa Monica, CA: RAND Corporation, 2009).

7. The Kaiser Family Foundation and Health Research & Educational Trust, *Employer Health Benefits: 2011 Summary of Findings* (Menlo Park, CA: Kaiser Family Foundation, 2011).

8. Assistant Secretary of Defense (Health Affairs), *Evaluation of the TRICARE Program: Access, Cost, and Quality, Fiscal Year 2012 Report to Congress* (Arlington, VA: U.S. Department of Defense, 2012).

9. Esa Eslami, Kai Filion, and Mark Strayer, *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2010,* report prepared for U.S. Department of Agriculture Food and Nutrition Service (Alexandria, VA: U.S. Department of Agriculture, September 2011); Mark Strayer, Esa Eslami, and Joshua Leftin, *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2011,* report prepared for U.S. Department of Agriculture Food and Nutrition Service (Alexandria, VA: U.S. Department of Agriculture, September 2011); Tom Philpott, "Popping the Myth of Military Families on Food Stamps," *Military.com Reader Letters* (June 25, 2010), accessed September 7, 2012, http://www.military.com.

10. Assistant Secretary of Defense (Health Affairs), *Evaluation of the TRICARE Program.*

11. David S. Loughran, Jacob Alex Klerman, and Craig W. Martin, *Activation and the Earnings of Reservists* (Santa Monica, CA: RAND Corporation, 2006).

12. James Hosek et al., *Married to the Military: The Employment and Earnings of Military Wives Compared with Those of Civilian Wives* (Santa Monica, CA: RAND Corporation, 2002); Margaret C. Harrell et al., *Working around the Military: Challenges to Military Spouse Employment and Education* (Santa Monica, CA: RAND Corporation, 2004); Deborah Payne, John T. Warner, and Roger D. Little, "Tied Migration and Returns to Human Capital: The Case of Military Wives," *Social Science Quarterly* 73 (1992): 324–39.

13. Nelson Lim and David Schulker, *Measuring Underemployment among Military Spouses* (Santa Monica, CA: RAND Corporation, 2010).

14. Nelson Lim, Daniela Golinelli, and Michelle Cho, *"Working around the Military" Revisited* (Santa Monica, CA: RAND Corporation, 2007).

15. Ibid.

16. James Hosek, Aviva Litovitz, and Adam C. Resnick, *How Much Does Military Spending Add to Hawaii's Economy?* (Santa Monica, CA: RAND Corporation, 2011).

17. Lim and Schulker, *Measuring Underemployment*; Bogdan Savych, "Effects of Deployments on Spouses of Military Personnel" (PhD dissertation, Pardee RAND Graduate School, 2008).

18. James Hosek and Francisco Martorell, *How Have Deployments during the War on Terrorism Affected Reenlistment?* (Santa Monica, CA: RAND Corporation, 2009).

19. James Hosek, Jennifer Kavanagh, and Laura Miller, *How Deployments Affect Service Members* (Santa Monica, CA: RAND Corporation, 2006).

20. U.S. Department of Defense, *Annual Report to Congress on Plans for the Department of Defense for the Support of Military Family Readiness: Fiscal Year 2011* (Arlington, VA: U.S. Department of Defense, 2012); U.S. Department of Defense, *Report of the 2nd Quadrennial Quality of Life Review* (Arlington, VA: U.S. Department of Defense, 2009).

21. Under Secretary of Defense for Personnel and Readiness, *Department of Defense Instruction 1342.22: Military Family Readiness* (Arlington, VA: U.S. Department of Defense, 2012).

22. U.S. Department of Defense, *2nd Quadrennial Quality of Life Review*.

23. U.S. Government Accountability Office, *Military Child Care: DoD Is Taking Actions to Address Awareness and Availability Barriers* (Washington: U.S. Government Accountability Office, 2012).

24. National Association of Federally Impacted Schools, *Getting a Grip on the Basics of Impact Aid* (Washington: National Association of Federally Impacted Schools, 2009).

25. U.S. Department of Defense, *2nd Quadrennial Quality of Life Review*.

26. Shelley M. MacDermid et al., *The Financial Landscape for Military Families of Young Children* (West Lafayette, IN: Military Family Research Institute, Purdue University, 2005).

27. U.S. Department of Defense, Defense Travel Management Office, *A Primer on Basic Allowance for Housing (BAH) for the Uniformed Services: 2011* (Arlington, VA: U.S. Department of Defense, 2011), http://www.defensetravel.dod.mil/Docs/perdiem/BAH-Primer.pdf.

28. MacDermid et al., *Financial Landscape*.

29. U.S. Department of Defense, *Report on Predatory Lending Practices Directed at Members of the Armed Forces and Their Dependents* (Arlington, VA: U.S. Department of Defense, 2006).

30. U.S. Department of Defense, *Family Readiness: Fiscal Year 2011*.

31. Ibid.

32. David S. Loughran et al., *The Effect of Military Enlistment on Earnings and Education* (Santa Monica, CA: RAND Corporation, 2011).

33. Ibid.

34. Paul Heaton and David S. Loughran, *Post-Traumatic Stress Disorder and the Earnings of Military Reservists* (Santa Monica, CA: RAND Corporation, forthcoming).

35. Richard Buddin and Bing Han, *Is Military Disability Compensation Adequate to Offset Civilian Earnings Loss from Service-Connected Disabilities?* (Santa Monica, CA: RAND Corporation, 2012).

36. Maureen Murdoch et al., "Mitigating Effect of Department of Veterans Affairs Disability Benefits for Post-Traumatic Stress Disorder on Low Income," *Military Medicine* 170, no. 2 (2005): 137–40.

37. Jennifer L. Humensky et al., "How Are Iraq/Afghanistan-Era Veterans Faring in the Labor Market?" *Armed Forces and Society* 39, no. 1 (2013): 158–83, doi: 10.1177/0095327X12449433.

38. U.S. Department of Labor, Bureau of Labor Statistics, *Labor Force Statistics from the Current Population Survey,* table E-19, "Employment Status of Persons 18 Years and Over by Veteran Status, Age, and Sex," http://www.bls.gov/web/empsit/cpsee_e19.pdf.

39. Paul Heaton and Heather Krull, *Unemployment among Post-9/11 Veterans and Military Spouses after the Economic Downturn* (Santa Monica, CA: RAND Corporation, 2012).

40. Inger Burnett-Zeigler et al., "Civilian Employment Among Recently Returning Afghanistan and Iraq National Guard Veterans," *Military Medicine* 176, no. 6 (2011): 639–46; Christopher R. Erbes et al., "Mental Health Diagnosis and Occupational Functioning in National Guard/Reserve Veterans Returning from Iraq," *Journal of Rehabilitation Research and Development* 48, no. 10 (2011): 1159–70, doi: 10.1682/JRRD.2010.11.0212.

41. Paul Heaton, *The Effects of Hiring Tax Credits on Employment of Disabled Veterans* (Santa Monica, CA: RAND Corporation, 2012).

42. Libby Perl, *Veterans and Homelessness* (Washington: Congressional Research Service, 2011).

Military Children from Birth to Five Years

Joy D. Osofsky and Lieutenant Colonel Molinda M. Chartrand (U.S. Air Force)

Summary

Because most research on military families has focused on children who are old enough to go to school, we know the least about the youngest and perhaps most vulnerable children in these families. Some of what we do know, however, is worrisome—for example, multiple deployments, which many families have experienced during the wars in Iraq and Afghanistan, may increase the risk that young children will be maltreated.

Where the research on young military children is thin, Joy Osofsky and Lieutenant Colonel Molinda Chartrand extrapolate from theories and research in other contexts—especially attachment theory and research on families who have experienced disasters. They describe the circumstances that are most likely to put young children in military families at risk, and they point to ways that families, communities, the military, and policy makers can help these children overcome such risks and thrive. They also review a number of promising programs to build resilience in young military children.

Deployment, Osofsky and Chartrand write, is particularly stressful for the youngest children, who depend on their parents for nearly everything. Not only does deployment separate young children from one of the central figures in their lives, it can also take a psychological toll on the parent who remains at home, potentially weakening the parenting relationship. Thus one fundamental way to help young military children become resilient is to help their parents cope with the stress of deployment. Parents and caregivers themselves, Osofsky and Chartrand write, can be taught ways to support their young children's resilience during deployment, for example, by keeping routines consistent and predictable and by finding innovative ways to help the child connect with the absent parent. The authors conclude by presenting 10 themes, grounded in research and theory, that can guide policies and programs designed to help young military children.

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Infants and young children develop, grow, and thrive in the context of their families and relationships, and children in military families are no exception. Today's military service members are young and likely to be married, and more than half have young children. Of almost two million children living in military families (including active-duty, National Guard, and Reserve) in 2012, the largest proportion— approximately 37 percent, or 730,000 children—were zero to five years old.[1]

Since 9/11, military families have experienced the longest and most frequent deployments since the advent of the all-volunteer force in the 1970s. And with continuing hostilities in Afghanistan and other volatile parts of the world, military families will likely experience repeated deployments into the foreseeable future.[2] Probably because of their strong sense of commitment to their country and the supportive environment on military installations, most military families and children adjust well most of the time to the stresses of military life, including deployment, changes in work responsibilities with little notice, and separation from one another.[3] But several factors affect children's resilience. For example, military children are most likely to show resilience when they have positive and stable relationships with adults.[4] (For further discussion of resilience and military children, see the article in this issue by Ann Easterbrooks, Kenneth Ginsburg, and Richard Lerner.) It is important to recognize that young children, who depend on their parents for almost everything, thrive in predictable, routine environments. Thus they may experience more stress than older children do when deployment and unexpected changes disrupt the family, and especially when changes and adjustments become part of everyday life.[5]

Studies of military families since 9/11 show that wartime deployments bring increased stress for military families in general. Rates of marital conflict and domestic violence have risen, along with the risk that children will be neglected or maltreated.[6] Military families have also experienced more spousal depression, anxiety, and parenting stress, as well as a heightened sense of ambiguous loss. All of these may limit a parent's emotional availability, putting children at greater risk for emotional and behavioral problems.[7]

We know from studies in other contexts that separating young children from their parents can disrupt the attachment relationship and contribute to anxiety and behavioral problems.[8] But only a few studies have focused specifically on the youngest and perhaps most vulnerable children in military families. These studies suggest that three- to five-year-old children with a deployed parent were more likely to develop behavioral and emotional problems than were children without a deployed parent, particularly if the parents themselves exhibited signs of stress.[9]

Research on older, school-age children in military families connects children's emotional and behavioral problems to the cumulative length of a parent's deployments, as well as to children's past experiences of trauma and loss.[10] On the other hand, when parents prepare children for deployment by talking to them and reassuring them, and when parents are emotionally available and supportive, children are significantly more likely to adjust to deployment well.[11] Therefore, parents, providers, and support personnel need training to prepare children for separations and support them during deployment.

Overview

Though relatively little research has been done on young children in military families, we highlight ways to understand these children as their families grow, change, and experience various kinds of stress, with an overall focus on how to optimize young children's development, bearing in mind their unique needs. To accomplish this, we first discuss developmental theories that are relevant for understanding young children in military families, particularly attachment theory, which helps us see how change, disruption, and loss affect young children. We then turn to parenting, including parents' mental health and its effects on young children. We examine how increased stress in the family is related to child maltreatment and domestic violence, and how these factors affect pregnant women in military families. We also describe interventions and support programs for military families with young children, including those that are still being developed. Finally, we conclude with recommendations, based on research and theory, that can guide policy and programs for young children in military families.

Developmental Theory and Attachment

Developmental theory, when applied to early attachment, can help us understand how stressful events affect young children and their families, particularly when those events lead to changes in routines and the absence of a family member.[12] Consistent relationships are essential to children's social and emotional growth; they may lead to a sense of trust, and may facilitate the development of later relationships. Young children can experience many intense emotions when their attachment relationships are disrupted, and again when those relationships are renewed. The threat of losing an important relationship may create anxiety, and actual loss of the relationship may give rise to sorrow. Each of these situations can make attachment less secure and may contribute to behavior problems and expressions of anger.

Separating young children from their parents can disrupt the attachment relationship and contribute to anxiety and behavioral problems.

The experience of attachment develops during the first year of a child's life. Babies become more socially responsive by beginning to smile, following people with their eyes, cooing, interacting, and playing. They start to behave differently with familiar and unfamiliar people, and they may seem more comfortable with their primary caregiver. Still, they may not show a consistent preference for one person until about seven to nine months, when significant changes occur. By this time, babies often have a hierarchy of preferred caregivers, start to look wary if approached by a stranger, and begin to protest when separated from their primary attachment figure. By 12 months, most babies are clearly attached.

In their second year, children usually like to stay close to their primary caregiver. When they feel secure, they may slowly begin to experiment with moving farther away to explore their world, using their primary attachment figure as a secure base to whom they return when distressed or frightened.

If their development goes well, with sensitive and responsive parenting, between two and four years children begin using language to maintain their attachment, and they may become aware that their attachment figures have conflicting goals and agendas. Toddlers must learn to negotiate and cooperate, and they begin to show more autonomy, even though they still need to be close to their caregivers. By now, they are able to hold their parents' images in their minds (if they have not been separated for long periods, for example, by deployment); they know that their caregivers will be there for them predictably; and they can feel secure venturing away from their primary caregivers.

During the early years, babies continuously learn what they can expect from their attachment figures. They may learn that some caregivers are sensitive and available most of the time, but others can sometimes be insensitive, intrusive, depressed, angry, neglectful, or absent. The quality of interaction between parent and young child may form a basis for a secure pattern of attachment or an anxious and insecure one, and it may influence how the child negotiates other relationships later in life. Intact and secure attachment may also help parents keep their children's emotions in mind during behavioral interactions.[13] If this ability is disrupted, as when parents are depressed or exposed to trauma, children may exhibit behavior problems or altered development.

Attachment theory leads to several important principles that can help us understand how separation and loss in military families may affect young children:

- Human relationships are essential to children's wellbeing and development.

- Infants have a fundamental need for consistent caretaking.

- Young children and adults perceive the world very differently.

Even 60 years later, adults who had been separated from their parents as children during the Blitz were more likely to have an insecure attachment style and to report lower levels of psychological wellbeing.

Change, Disruption, and Loss

As attachment theory suggests, when young children face significant changes, those who lack supportive caregivers may be more vulnerable.[14] During deployment, military children are separated from at least one parent, and they may experience other changes in caregivers and living situations. Most children will be resilient and cope well, especially with support from their caregivers and the military community. For some, however, disruptions in primary relationships and support systems can hamper social and emotional development.

Studies of young British children during World War II's London Blitz provide an example. Children showed regressive behaviors, aggression, and withdrawal or depression when they were separated from their primary caregivers and left with inconsistent or emotionally unavailable alternative caregivers. Even 60 years later, adults who had

been separated from their parents as children during the Blitz were more likely to have an insecure attachment style and to report lower levels of psychological wellbeing.[15]

Emotional Availability and Depression
The risk factors that are most likely to affect young children's development are stressful events that change daily routines, stressful events that take place often and over a long period of time, and the emotional availability of parents or caregivers. These factors are all connected, because the at-home caregiver's stress level and mental health are affected by many of the same events that are stressful for children, from moves and separations to a returning service member's psychological trauma and combat injuries.

One important barrier to addressing young children's psychological needs is the pervasive but mistaken impression that young children are immune to the effects of early adversity and trauma because they are inherently resilient and "grow out of" behavioral problems and emotional difficulties.[16] Toddlers and preschoolers are likely to be aware of deployment separations and are also likely to have the psychological capacity to mourn the deployed parent's absence. They are able to read and feel the emotional tones of sadness, anger, and anxiety from the adults in their lives, and they are beginning to understand the potential danger to their deployed parent.[17] The ability of infants and young children to manage a parent's deployment successfully is highly contingent on the available parent's ability to cope with the additional stress and to negotiate changes in roles and responsibilities. Deployment may disrupt the attachment relationship unless at-home caregivers can maintain some semblance of daily routines, protect children

from stress, maintain their own mental health, and, if possible, communicate with the deployed service member. Consistent support for children will lead to fewer problems and better adjustment. This is particularly important for younger children, who depend on their primary caregivers the most.

Several studies show that deployment can increase stress and contribute to higher levels of depression in military spouses.[18] For example, a study of 300,000 Army wives found that wives with a deployed spouse were more likely to be diagnosed with a variety of psychological disorders, including depression, anxiety, and sleep problems; 36.6 percent of wives with a deployed husband had at least one mental health diagnosis during the study period, compared with 30.5 percent of women whose husbands were not deployed. Moreover, the risk that wives would be diagnosed with any of these disorders increased when deployments extended past 11 months.[19] Because young children are so dependent on the emotional availability and support of their caregivers, helping deployed service members' spouses cope with stress is a key way to help their young children. Ideally, extended family, community services, military support services, and child-care providers will work together to help military families anticipate the problems that can arise with deployment and separation and provide support before, during, and after deployment.

As military spouses' responsibilities increase during deployment, they also need to care for their own mental health, whether by taking some time off from caring for their children even though the other parent is away, doing things they find relaxing and rejuvenating, or keeping a routine for themselves.[20] They may also practice focusing on positive emotions; in one training program to enhance soldier

readiness that emphasized maintaining positive emotions, spouses reported less stress and fewer depressive symptoms.[21]

When we help military spouses cope with stress, communication within the family improves, and we help their young children as well. Good family communication increases understanding and empathy between parent and child, and studies have shown that young children who experience understanding and empathy from their caregivers are less likely to exhibit problem behaviors or require mental health services during deployment.[22]

Child Maltreatment and Domestic Violence

A recent study suggests that multiple and prolonged deployments increase the risk for child neglect and maltreatment, especially in families with younger children.[23] For many young couples, deployment may be the first time they have to negotiate separation and their first experience of increased stress, particularly when repeated deployment and reintegration require the family to continually reorganize, changing the caregivers and routines that are so important for younger children. In this situation, support for the at-home parent is crucial.

A study that compared substantiated reports of child maltreatment in civilian families and U.S. Army families can help us understand the strengths and weaknesses of each group.[24] From 1995 to 1999 (between the first Gulf War and 9/11), the overall rate of child maltreatment in the civilian population (11.8–14.7 cases per 1,000) was approximately twice the rate among Army families (6.0–7.6 per 1,000).[25] However, this difference can be explained primarily by the

higher rate of neglect (as opposed to physical or sexual abuse) in the civilian group, which was about three times that among the Army families. The higher rate of neglect among civilian families can probably be traced to factors such as poverty, substance use, and homelessness that are much less likely to affect military families. However, the stress of deployment may make child maltreatment more likely. Several post-9/11 studies of military populations found that rates of child maltreatment are greater when service members are deployed, and that children under the age of five have the highest risk for neglect or maltreatment.[26] These studies were conducted only among Army families, however, so we cannot say whether the findings apply to all the armed services. But the trend is worrying, and further empirical research is needed.

Studies of domestic violence have also produced mixed results, but they suggest that some military families may experience increased rates of severe domestic aggression. One survey compared reasonably representative samples of U.S. Army and civilian couples.[27] Men in the Army reported moderate husband-to-wife spousal aggression at about the same rate that their civilian counterparts did. However, there was a small but statistically significant increase in the reports of severe aggression in the Army sample compared with the civilian sample, though the authors concluded that this difference was connected to factors other than military service, such as differences in age. Three other studies found that the military population had higher rates of physical spouse abuse or more severe husband-to-wife aggression.[28]

Overall, we need to better understand child maltreatment and spousal abuse in military

families, particularly when they occur together, so that we can determine how military support systems can do more to help. For the sake of military children from zero to five, this work is urgent: based on data from civilian populations, young children are the most likely to be the targets of child maltreatment.[29] Domestic violence during pregnancy can also affect fetal development, a subject we turn to next.

Pregnancy in a Military Population

Stress during pregnancy can affect the fetal brain.[30] Though some researchers have studied stress and the fetal brain in human populations, no research in this area has focused on military populations specifically, and the best-controlled studies have been done with animals. But we know that developing brains are exquisitely sensitive to stress hormones such as adrenaline and cortisol. Research on both animals and humans has demonstrated that sustained or frequent activation of the stress hormonal systems can have serious developmental consequences.[31] Prenatal stress can alter the structure and function of areas of the brain that are involved in memory, learning, and emotional regulation.[32] It should be noted, however, that in humans, the effects of prenatal stress can be exacerbated or ameliorated by the mother's level of family support, individual resistance factors, diet, mental illness, use of alcohol and drugs, infection, and other factors.

In humans, prenatal stress correlates with an increased likelihood of physical, cognitive, behavioral, and emotional problems in the child. Prenatal stress increases the rate of spontaneous abortions, fetal malformations, and preterm birth, and it has been linked to an increase in disorders such as autism and ADHD.[33] Toddlers born to stressed mothers

tend to have poorer general intellectual and language functioning.[34]

Research indicates that pregnant women whose spouse is deployed report higher levels of stress than do other pregnant women. They also are susceptible to depression both during and after pregnancy. And the homecoming period, though much anticipated, is also stressful for spouses.[35] Everything we know about prenatal stress suggests that increased stress and depression during deployment and reintegration may put the developing brain of the fetus at risk, but this is an area where we need further research in military populations specifically.

Preparing Young Children for Stress

How well young children adjust to the stressful events that can occur in military families depends to a great extent on their primary caregivers' stability and emotional availability. Children's ability to show resilience in the face of stress depends on the support and other protective factors that their parents and the community provide, as well as the adults' previous experiences and current perceptions of their own capacity to deal with stress.[36] In one study, for example, children whose parents reported better mental health (and who were therefore more emotionally available) were better able to cope with the stress of deployment.[37]

Though older children also receive support at school and from their peers, parents play the key role for younger children. Deployment not only means that one primary caregiver is absent, but also that the parent who remains at home may be inattentive and emotionally unavailable because of stress. However, military parents can take steps to prepare

their young children for deployment and to help them cope during the deployed parent's absence. These steps vary somewhat according to the children's age.

To help infants and toddlers, parents should:

• Keep routines consistent and predictable.

• Use innovative ways to stay connected to the deployed parent. For example, social networking and online video services offer opportunities to communicate in ways that both children and parents are likely to enjoy. Parents can also make audio or video recordings before deployment so that their young children can regularly see them and hear them.

• Help children connect their feelings to specific events and behaviors.

• Be emotionally and physically available to children, take time to listen to them, and respond to whatever worries the children are experiencing.

To prepare preschoolers for deployment, parents should:

• Talk to children about what is happening and what to expect in language they can understand.

• Listen to their concerns and answer in simple language.

• Acknowledge both their own feelings and the children's, while emphasizing that the children will be cared for and kept safe.

• Work with children to develop a plan to stay connected to the deployed parent. In addition to social networking, Internet and phone communication, children and

deployed parents can exchange meaningful objects—the child might give a treasured stuffed animal, the service member might share a rank insignia or patch—and then share pictures electronically or through the mail of those objects in each other's daily lives.

• Create a daily ritual that children can perform while the parent is away. For example, children might include the absent parent when saying prayers at night, listen every day to a recording that the deployed parent has made, or look at pictures of the deployed parent while reading a bedtime story.

• Identify and match feelings with behaviors so that the young child recognizes that behavior (good and bad) has meaning.

• Let children adjust to separation and loss in their own way, listen to their feelings, and provide support.

• Create an environment to appropriately share emotions. For example, a mother crying in front of her child because she is sad or under stress might explain it in a way the child can understand: "Mommy is sad because Daddy is gone. I cry when I am sad, but when I am done, I do the things I need to do." This gives the preschooler a model of sharing emotion in a constructive way.

Lessons from Disaster Work

Many researchers have studied child development in the context of disasters, and their work may help us understand and respond to the needs of children in military families.[38] Though the stress of military deployment cannot be equated to the experience of disaster, certain similarities exist—for example, heightened family distress, disruption of

family support systems and schedules, and an impact on parenting. Considering the dearth of research on young children in military families specifically, the consistent findings from disaster situations can be applied to work with military children and their families, offering help in preparing families for disruptions, changes in routines, and deployments.

Research on disasters indicates that children of all ages find it hardest to recover when disasters are more severe and prolonged, involving children's direct exposure to or participation in extreme difficulties and cumulative traumatic experiences. Children exposed to multiple disasters experience particularly high rates of both depression and posttraumatic stress symptoms. Separation from caregivers during a disaster can affect children's responses and recovery. So can the wellbeing of primary caregivers; for example, the reactions of preschool children directly exposed to the 9/11 attacks in lower Manhattan were more negative if their mothers had symptoms of depression or PTSD.[39] Other studies show that children who experience disaster and its aftermath in the context of war, poverty, or family violence have less ability to adapt and recover.[40]

The consistent findings from disaster situations can be applied to work with military children and their families, offering help in preparing families for disruptions, changes in routines, and deployments.

Children's responses to disaster also vary by gender, age, and individual differences in coping skills. For example, girls are more likely to report negative emotional responses such as feelings of depression, and they are more likely to seek support; boys may underreport the symptoms they experience.[41] In addition, children of different ages have different resources and vulnerabilities. For example, older children may have greater direct exposure to certain traumatic experiences in disasters and are better able to grasp the implications. At the same time, unlike younger children, older children can draw on more effective coping strategies and a broader set of social supports during recovery. The communities and community services on which families with children rely also help to foster recovery. Resuming usual routines of school and play in a supportive community setting makes a significant difference.

The lessons from disaster work indicate that:

- Preparation is important even if there is uncertainty about what might happen.

- Preparation for changes and disruptions should include recognition of the needs of young children.

- Prior exposure to stress may make current stress more difficult for some members of the military and their children.

- Both military and civilian communities need to mobilize family and others in the community to protect young children and families and plan ways to provide support.

- Resources should be made available in advance to support families with young children and help parents learn to communicate what is happening in ways that the

children can understand. Young children often misunderstand or misconstrue what they are seeing and hearing. It is important that adults use developmentally appropriate language and other methods to help them understand. For example, this may include play, drawing, and other activities that can help young children make sense of their experiences.

Programs for Young Children in Military Families

Several programs and interventions have been developed to support young children in military families. Some of these programs are covered in depth elsewhere in this issue, and we will touch on them only briefly. For example, in their article, Major Latosha Floyd and Deborah Phillips discuss the Family Advocacy Program (FAP), which is designed to prevent partner violence, child abuse, and neglect by improving family functioning, easing the kinds of stress that can lead to abusive behavior, and working to create an environment that supports families. Floyd and Phillips also describe the FAP's New Parent Support Program, which helps military families with young children adapt to parenthood. Similarly, Harold Kudler and Colonel Rebecca Porter discuss Families OverComing Under Stress (FOCUS), an evidence-based program that enhances parent, child, and family resilience. The programs we outline in the remainder of this section focus on civilian training, assistance, and support for young children in military families and their parents.

Zero to Three

Since the start of the wars in Iraq and Afghanistan, Zero to Three: National Center for Infants, Toddlers, and Families (ZTT), a nonprofit organization that teaches, trains, and supports professionals, policy makers,

and parents in their efforts to improve the lives of infants and toddlers, has worked to spread the word about the needs of young children in military families, help military parents, and build collaborations with the military community. In 2009, the Department of Defense contracted with ZTT to increase awareness—both on military installations and in communities where Guard and Reserve families live—of how trauma, grief, and loss affect very young children of service members. The resulting program, Coming Together around Military Families (CTAMF), offered specialized training and support for professionals and organizations that assist military families in and around military communities, with a focus on the stress of deployment; the program was implemented in 65 communities.

CTAMF training modules took an integrated, systemic approach to advancing the social and emotional health and wellbeing of military infants and toddlers. The first module, Duty to Care I, strengthened individual and community capacity to care for infants and toddlers facing stress, trauma, and loss; the second, Duty to Care II, helped professionals who care for military infants and toddlers attend to their own emotional health and wellbeing. An evaluation of CTAMF found that participants gained significant knowledge across key areas. Posttraining assessment also showed an increase in collaboration among professionals who took part. Participants said that the materials distributed at the trainings were very helpful to their work supporting military families with young children; most of these materials remain available free through Zero to Three's website.[42]

Through its Military Family Projects, ZTT also promotes awareness and understanding of military parents' experiences through

materials that give community-based professionals the tools they need to help these families and their young children promote the social and emotional skills necessary for optimal development and intergenerational resilience. And with a pilot initiative in Los Angeles, Coming Together around Veteran Families, Military Family Projects is focusing on veterans' families who are coping with reintegration of deployed service members. The initiative seeks to build community capacity to respond to the evolving needs of veterans' families and their infants and toddlers, and to promote collaboration among veteran, community, and military agencies. An evaluation indicated that participants felt the program gave them helpful tools and methods to support resilience in young children and families as they transition to civilian life.[43]

Talk, Listen, Connect

Recognizing that hundreds of thousands of preschoolers are separated from a parent serving in the U.S. military, in 2006 the Sesame Workshop partnered with Wal-Mart to create Talk, Listen, Connect: Helping Families During Military Deployment (TLC 1), a multiphase initiative to help young children during deployment that includes a video, storybooks, and workbooks featuring the characters Elmo and Elmo's Daddy. In the video, Elmo's Daddy explains that he has to go away for a long time to do important work.[44] This short film helps toddlers and preschoolers relate to a familiar figure (Elmo) as he goes through a long-term separation from a parent. The supplemental materials give parents a script for talking with their young children about what to expect during deployment, and they offer concrete activities and techniques to maintain the deployed service member's

parenting connection. Two more videos and their accompanying materials —Talk, Listen, Connect: Deployments, Homecomings, Changes (TLC 2) and Talk, Listen, Connect: When Families Grieve (TLC 3)—address combat-related injuries and the death of a loved one. All of these materials are provided free. Over the course of the initiative, more than 2.5 million Talk, Listen, Connect kits have been distributed, three critically acclaimed TV specials have been aired, a series of public service announcements in support of military families has been created, and Sesame Street's Muppets have performed for nearly 200,000 families at USO installations around the world. Evaluations of the project indicate that preschoolers who viewed the materials exhibited fewer problem behaviors and greater social competence, and that their parents felt significantly less socially isolated and less depressed.[45] Caregivers overwhelmingly agreed that the outreach materials helped their children cope with a family member's injury or gave them more appropriate language to discuss death with their children.[46]

Child-Parent Psychotherapy

Child-parent psychotherapy (CPP) is a relationship-based family treatment that therapists use when young children experience behavioral, attachment, or mental health problems following a traumatic event, such as long separation from a primary caregiver. CPP's primary goal is to support and strengthen the relationship between the child and his or her parent or caregiver. Through CPP, the child's sense of safety can be restored, the attachment relationship can be supported, and the young child's cognitive, emotional, behavioral, and social functioning can be improved. For infants, the treatment focuses on helping the parent understand

how the child's and parent's experiences affect the child's functioning and development. Toddlers play a more active role in CPP, as the therapist facilitates communication between child and parent.

The evidence base for CPP among civilian populations—primarily for maltreated young children and those exposed to domestic violence—is robust. In several studies of preschool children exposed to domestic violence, children in the CPP group had significantly fewer behavior problems and PTSD symptoms than did children in a comparison group.[47] In Louisiana, mental health clinicians from Louisiana State University Health Sciences Center have collaborated with the military at the Naval Air Station/Joint Reserve Base in Belle Chase to adapt CPP for families whose children are experiencing significant disruptions and problem behaviors related to deployment. CPP has helped military parents respond more sensitively to their children's emotional cues, anticipate situations that might cause distress for both parent and child, and build empathy in the relationship. The Louisiana team conducts sessions with young children and parents to help them either talk about experiences during and after deployment or help parents understand young children's conflicts and concerns. These interventions have taken place not only in clinical settings, but also on the installation in military-supported child-development centers and in homes. Working on the base and becoming part of the service and support structure there has helped reduce the stigma of seeking mental health services and increase coordination with other military support services. At this writing, several projects are under way to expand the use of CPP with military families.

Conclusions and Policy Implications

With the increase in military operations and deployments over the past decade, it has become evident that we need to pay more attention to the needs of young children in military families. Infants and young children depend on their primary caregivers for their wellbeing, and the disruptions of military life place increased stress on the attachment relationship. Yet we have the least information about how the stresses of military life affect the most numerous and most vulnerable children in military families. Still, we can make inferences from scientific research in other contexts. For example, studies of child-parent separation in civilian populations or during disasters show that separation can disrupt attachment relationships, leading to behavioral problems and anxiety. We also know that the presence of an emotionally available and supportive caregiver is the key to building resilience in young children in stressful situations.

To ensure young children's optimal development in military families, we need more research on how the stresses of military life affect them and whether the support programs already in place are effective. In the meantime, the research and theoretical principles we discuss in this chapter suggest several themes that can guide policies and programs for young children in military families. We need to:

- Better understand the effects of stress, including lengthy and multiple deployments, on young children and military families.

- Prepare families and young children for disruptions in family life by focusing on supporting the attachment relationship.

- Support normalizing routines and activities for children before, during, and after disruptions like deployment, including opportunities for them to play and learn from their experiences.

- Stabilize and fortify at-home caregivers to enhance their emotional availability and consistency as they interact with their young children.

- Develop and assess effective, relationship-based interventions and treatments to optimize young children's development.

- Develop more parenting programs and support strategies that are specific to the experiences that confront military families, and integrate these into the support services on installations.

- Train those who work with children in military families about the range of developmental responses to separation and loss that can be expected from children of different ages.

- Recognize that children and families need additional, developmentally appropriate support when service members return home with posttraumatic symptoms and combat-related traumatic injuries, and teach personnel how to communicate difficult information to children of all ages.

- Bolster cultural and community practices that support families and their children and promote resilience.

- Learn more about child maltreatment and family violence in all branches of the military to develop the most effective prevention and intervention strategies.

With their commitment to serve their country, military families face disruptions for which they cannot plan. For these families, being in the military is not just a job, but a way of life. Clinicians and scientists who work with these families need to engage more fully in the process of developing and applying evidence-based knowledge to help ease the transitions that are part of military life and to support young children's resilience.

ENDNOTES

1. Department of Defense, *Demographics 2009: Profile of the Military Community* (Washington: Office of the Under Secretary of Defense, 2010), http://www.militaryonesource.mil/12038/MOS/Reports/2009_Demographics_Report.pdf.

2. James Hosek, Jennifer Kavanagh, and Laura Miller, *How Deployment Affects Service Members* (Santa Monica, CA: RAND Corporation, 2006).

3. Peter S. Jensen et al., "The 'Military Family Syndrome' Revisited: 'By the Numbers,'" *Journal of Nervous and Mental Disease* 179 (1991): 102–7; Peter S. Jensen, David Martin, and Henry Watanabe, "Children's Response to Parental Separation during Operation Desert Storm," *Journal of the American Academy of Child & Adolescent Psychiatry* 35 (1996): 433–41, doi: 10.1097/00004583-199604000-00009.

4. Shelley M. MacDermid et al., *Fathers on the Front Lines* (West Lafayette, IN: Military Family Research Institute at Purdue, 2005), https://www.mfri.purdue.edu/publications/reports.aspx.

5. Afterdeployment.org, *Families with Kids* (Joint Base Lewis-McChord, WA: National Center for Telehealth and Technology, 2012), http://www.afterdeployment.org/media/elibrary/families/index.html; Jensen, Martin, and Watanabe, "Children's Response"; Leora N. Rosen, Joel M. Teitelbaum, and David J. Westhuis, "Children's Reactions to the Desert Storm Deployment: Initial Findings from a Survey of Army Families," *Military Medicine* 158 (1993): 465–69.

6. Ayelet Meron Ruscio et al., "Male War-Zone Veterans' Perceived Relationships and Their Children: The Importance of Emotional Numbing," *Journal of Traumatic Stress* 15 (2002): 351–57, doi: 10.1023/A:1020125006371; Deborah A. Gibbs et al., "Child Maltreatment in Enlisted Soldiers' Families During Combat-Related Deployments," *Journal of the American Medical Association* 298 (2007): 528–35, doi: 10.1001/jama.298.5.528; E. Danielle Rentz et al., "Effect of Deployment on the Occurrence of Child Maltreatment in Military and Non-Military Families," *American Journal of Epidemiology* 165 (2007): 1199–1206, doi: 10.1093/aje/kwm008.

7. Alyssa J. Mansfield et al., "Deployment and the Use of Mental Health Services among U.S. Army Wives," *New England Journal of Medicine* 362 (2010): 101–9, doi: 10.1056/NEJMoa0900177; Anthony J. Faber et al., "Ambiguous Absence, Ambiguous Presence: A Qualitative Study of Military Reserve Families in Wartime," *Journal of Family Psychology* 22 (2008): 222–30; Eric M. Flake et al., "The Psychosocial Effects of Deployment on Military Children," *Journal of Developmental and Behavioral Pediatrics* 30 (2009): 271–78, doi: 10.1097/DBP.0b013e3181aac6e4; Anita Chandra et al., "Children on the Homefront: The Experience of Children from Military Families," *Pediatrics* 125 (2010): 16–25, doi: 10.1542/peds.2009-1180; Patricia Lester et al., "Families Overcoming Under Stress: Implementing Family-Centered Prevention for Military Families Facing Wartime Deployments and Combat Operational Stress," *Military Medicine* 176 (2011): 9–25; Gregory H. Gorman, Matilda Eide, and Elizabeth Hisle-Gorman, "Wartime Military Deployment and Increased Pediatric Mental and Behavioral Health Complaints," *Pediatrics* 126 (2010): 1058–66, doi: 10.1542/peds.2009-2856.

8. John S. Murray, "Helping Children Cope with Separation during War," *Journal for Specialists in Pediatric Nursing* 7 (2002): 127–30, doi: 10.1111/j.1744-6155.2002.tb00163.x; Stephen J. Cozza and Margaret M. Feerick, "The Impact of Parental Combat Injury on Young Military Children," in *Clinical Work with Traumatized Young Children*, ed. Joy Osofsky (New York: The Guilford Press, 2011), 139–54.

9. Molinda M. Chartrand et al., "Effect of Parents' Wartime Deployment on the Behavior of Young Children in Military Families," *Archives of Pediatric and Adolescent Medicine* 162 (2008): 1009–14, doi: 10.1001/archpedi.162.11.1009; Lisa H. Barker and Kathy D. Berry, "Developmental Issues Impacting Military Families with Young Children during Single and Multiple Deployments," *Military Medicine* 174 (2009): 1033–40; Flake et al., "Psychosocial Effects"; Murray, "Helping Children Cope."

10. Patricia Lester et al., "The Long War and Parental Combat Deployment: Effects on Military Children and At-Home Spouses," *Journal of the American Academy of Child & Adolescent Psychiatry* 49 (2010): 310–20, doi: 10.1016/j.jaac.2010.01.003.

11. Diane Levin, Carol Daynard, and Beverly Ann Dexter, *The "SOFAR" Guide for Helping Children and Youth Cope with the Deployment and Return of a Parent in the National Guard and Other Reserve Components* (Cambridge, MA: SOFAR, 2008), http://www.sofarusa.org/downloads/SOFAR_2008_Final.pdf.

12. John Bowlby, *Attachment and Loss*, vol. 1, *Attachment* (New York: Basic Books, 1969); Jude Cassidy and Phillip R. Shaver, *Handbook of Attachment*, 2nd ed., *Theory, Research and Clinical Applications* (New York: Guilford, 2008).

13. Arietta Slade, "Representation, Symbolization, and Affect Regulation in the Concomitant Treatment of a Mother and Child: Child Attachment Theory and Child Psychotherapy," *Psychoanalytic Inquiry* 19 (1999): 797–830.

14. John Bowlby, *Attachment and Loss*, vol. 3, *Loss, Sadness and Depression* (New York: Basic Books, 1980); John Bowlby, "Attachment and Loss: Retrospect and Prospect," *American Journal of Orthopsychiatry* 52: 664–78, doi: 10.1111/j.1939-0025.1982.tb01456.x; Cassidy and Shaver, *Handbook*.

15. Anna Freud and Dorothy Burlingham, *Infants without Families* (London: G. Allen and Unwin, 1943); Bowlby, *Attachment and Loss*, vol. 1, *Attachment*; James Robertson, "Some Responses of Young Children to Loss of Maternal Care," *Nursing Care* 49 (1953): 382–86; Diane Foster, Stephen Davies, and Howard Steele, "The Evacuation of British Children during World War II: A Preliminary Investigation into the Long-Term Psychological Effects," *Aging & Mental Health* 5 (2003): 398–408.

16. Joy D. Osofsky and Alicia F. Lieberman, "A Call for Integrating a Mental Health Perspective into Systems of Care for Abused and Neglected Infants and Young Children," *American Psychologist* 66 (2011): 120–28.

17. Ruth Paris et al., "When a Parent Goes to War: Effects of Parental Deployment on Very Young Children and Implications for Intervention," *American Journal of Orthopsychiatry* 80 (2010): 610–18, doi: 10.1111/j.1939-0025.2010.01066.x.

18. Kenneth S. Kendler, Laura M. Kawkowski, and Carol A. Prescott, "Causal Relationship between Stressful Life Events and the Onset of Major Depression," *American Journal of Psychiatry* 156 (1999): 837–41; Ronald C. Kessler, "The Effects of Stressful Life Events on Depression," *Annual Review of Psychology* 48 (1997): 191–214, doi: 10.1146/annurev.psych.48.1.191.

19. Mansfield et al., "Deployment and Army Wives."

20. "Early Experience Matters," Zero to Three: National Center for Infants, Toddlers, and Families, 2012, http://www.zerotothree.org/.

21. Kathryn E. Faulk et al., "Depressive Symptoms among US Military Spouses during Deployment: The Protective Effect of Positive Emotions," *Armed Forces and Society* 38 (2012): 373–90, doi: 10.1177/0095327X11428785.

22. Chartrand et al., "Parents' Wartime Deployment"; Barker and Berry, "Developmental Issues"; Gorman, Eide, and Hisle-Gorman, "Wartime Military Deployment."

23. Gibbs et al., "Child Maltreatment."

24. James E. McCarroll et al., "Trends in U.S. Army Child Maltreatment Reports: 1990–2004," *Child Abuse Review* 17 (2008): 108–18, doi: 10.1002/car.986; E. Danielle Rentz et al., "Occurrence of Maltreatment in Active Duty Military and Nonmilitary Families in the State of Texas," Military Medicine 173 (2008): 515–22.

25. James E. McCarroll et al., "Comparison of U.S. Army and Civilian Substantiated Reports of Child Maltreatment," *Child Maltreatment* 9 (2004): 103–10.

26. Gibbs et al., "Child Maltreatment"; Rentz et al., "Occurrence of Maltreatment"; McCarroll et al., "Trends"; Rentz et al., "Child Maltreatment"; Rentz et al., "Effect of Deployment."

27. Murray Arnold Strauz and Richard J. Gelles, *Physical Violence in American Families: Risk Factors and Adaptions to Violence in 8,145 Families* (New Brunswick, NJ: Transaction, 1990).

28. Rentz et al., "Occurrence of Maltreatment."

29. U.S. Department of Health and Human Services, *Child Maltreatment 2010* (*Washington: Children's Bureau,* 2011), http://archive.acf.hhs.gov/programs/cb/pubs/cm10/cm10.pdf.

30. Suzanne King and David P. Laplante, "The Effects of Prenatal Maternal Stress on Children's Cognitive Development: Project Ice Storm," *Stress* 8 (2005): 35–45, doi: 10.1080/10253890500108391; Suzanne King et al., "Prenatal Maternal Stress from a Natural Disaster Predicts Dermatoglyphic Asymmetry in Humans," *Development & Psychopathology* 21 (2009): 343–53, doi: 10.1017/S0954579409000364; David P. Laplante et al., "Stress During Pregnancy Affects General Intellectual and Language Functioning in Human Toddlers," *Pediatric Research* 56 (2004): 400–10; David P. Laplante et al., "Project Ice Storm: Prenatal Maternal Stress Affects Cognitive and Linguistic Functioning in 5½-Year-Old Children," *Journal of the American Academy of Child & Adolescent Psychiatry* 47 (2008): 1063–72, doi: 10.1097/CHI.0b013e31817eec80; Nicole M. Talge, Charles Neal, and Vivette Glover, "Antenatal Maternal Stress and Long-Term Effects on Child Neurodevelopment: How and Why?" *Journal of Child Psychology and Psychiatry* 48 (2007): 245–61; David Q. Beversdorf et al., "Timing of Prenatal Stressors and Autism," *Journal of Autism and Developmental Disorders* 35 (2005): 471–78, doi: 10.1007/s10803-005-5037-8; Dennis K. Kinney et al., "Autism Prevalence following Prenatal Exposure to Hurricanes and Tropical Storms in Louisiana," *Journal of Autism and Developmental Disorders* 38 (2008): 481–88, doi: 10.1007/s10803-007-0414-0; Dennis K. Kinney et al., "Prenatal Stress and Risk for Autism," *Neuroscience & Biobehavioral Reviews* 32 (2008): 1519–32, doi: 10.1016/j.neubiorev.2008.06.004; Natalie Grizenko et al., "Relation of Maternal Stress during Pregnancy to Symptom Severity and Response to Treatment in Children with ADHD," *Journal of Psychiatry and Neuroscience* 33 (2008): 10–16; Li Jiong et al., "Attention-Deficit/Hyperactivity Disorder in the Offspring following Prenatal Maternal Bereavement: A Nationwide Follow-Up Study in Denmark," *European Child & Adolescent Psychiatry* 19 (2010): 747–53, doi: 10.1007/s00787-010-0113-9; Karen Markussen Linnet et al., "Maternal Lifestyle Factors in Pregnancy Risk of Attention Deficit Hyperactivity Disorder and Associated Behaviors: Review of the Current Evidence," *American Journal of Psychiatry* 160 (2003): 1028–40, doi: 10.1176/appi.ajp.160.6.1028; David E. McIntosh, Rosemary S. Mulkins, and Raymond S. Dean, "Utilization of Maternal Prenatal Risk Indicators in the Differential Diagnosis of ADHD and UADD Children," *International Journal of Neuroscience* 81 (1995): 35–46; Alina Rodriguez and Gunilla Bohlin, "Are Maternal Smoking and Stress During Pregnancy Related to ADHD Symptoms in Children?" *Journal of Child Psychology and Psychiatry* 46 (2005): 246–54.

31. National Scientific Council on the Developing Child, *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper No. 3* (Cambridge, MA: National Scientific Council on the Developing Child, 2005), http://www.developingchild.net/reports.shtml.

32. Arnaud Charil et al., "Prenatal Stress and Brain Development," *Brain Research Reviews* 65 (2010): 56–79.

33. Morton Hedegaard et al., "Do Stressful Life Events Affect Duration of Gestation and Risk of Preterm Delivery?" *Epidemiology* 7 (1996): 339–45; Thomas G. O'Connor et al., "Maternal Antenatal Anxiety and Behavioral/Emotional Problems in Children: A Test of a Programming Hypothesis," *Journal of Child Psychology and Psychiatry* 44 (2003): 1025–36.

34. Laplante et al., "Stress During Pregnancy."

35. David M. Haas and Lisa A. Pazdernik, "Partner Deployment and Stress in Pregnant Women," *Journal of Reproductive Medicine* 52 (2007): 901–6; Daniel T. Robrecht et al., "Spousal Military Deployment as a Risk Factor for Postpartum Depression," *Journal of Reproductive Medicine* 53 (2008): 860–64; Denise C. Smith et al., "Effects of Deployment on Depression Screening Scores in Pregnancy at an Army Military Treatment Facility," *Obstetrics and Gynecology* 116 (2010): 679–84, doi: 10.1097/AOG.0b013e3181eb6c84.

36. Hill, *Families under Stress*; Ann Masten, "Ordinary Magic: Resilience Processes in Development," *American Psychologist* 56 (2001): 227–38, doi: 10.1037/0003-066X.56.3.227.

37. Chandra et al., "Children on the Homefront."

38. Ann S. Masten and Joy D. Osofsky, "Disasters and Their Impact on Child Development: Introduction to the Special Section," *Child Development* 81 (2010), 1029–39, doi: 10.1111/j.1467-8624.2010.01452.x.

39. Claude M. Chemtob et al., "Impact of Maternal Posttraumatic Stress Disorder and Depression following Exposure to the September 11 Attacks on Preschool Children's Behavior," Child Development 81 (2010): 1129–41, doi: 10.1111/j.1467-8624.2010.01458.x.

40. Claudia Catani et al., "Tsunami, War, and Cumulative Risk in the Lives of Sri Lankan School Children," *Child Development* 81 (2010): 1176–91, doi: 10.1111/j.1467-8624.2010.01461.x; Mindy E. Kronenberg et al., "Children of Katrina: Lessons Learned about Post-Disaster Symptoms and Recovery Patterns," *Child Development* 81 (2010): 1241–59, doi: 10.1111/j.1467-8624.2010.01465.x.

41. Kronenberg et al., "Children of Katrina."

42. "Duty to Care Training Evaluation," Zero to Three: National Center for Infants, Toddlers, and Families, 2012, http://www.zerotothree.org.

43. "Coming Together Around Veteran Families: Training Evaluation," Military Family Research Institute at Purdue University, August 2012, http://www.cfs.purdue.edu/mfri.

44. "Military Families," Sesame Street Workshop, http://www.sesameworkshop.org/what-we-do/our-initiatives/military-families.

45. Sesame Workshop, *Big Results, Immense Rewards* (2010), http://www.sesameworkshop.org/assets/918/src/OutreachBrochure_Results.pdf; David Ian Walker et al., "Effectiveness of a Multimedia Outreach Kit for Families of Wounded Veterans," (West Lafayette, IN: Purdue University, Military Family Research Institute, 2013).

46. "Military Families"; *Talk, Listen, Connect (TLC-III) Kit Evaluation Findings* (Bethesda, MD: Center for the Study of Traumatic Stress, Uniformed Services University of the Health Sciences, 2011).

47. Alicia Lieberman, Chandra Ghosh Ippen, and Patricia Van Horn, "Child-Parent Psychotherapy: 6-Month Follow-up of a Randomized Controlled Trial," *Journal of the American Academy of Child and Adolescent Psychiatry* 45 (2006): 913–18; Sheree L. Toth et al., "The Relative Efficacy of Two Interventions in Altering Maltreated Preschool Children's Representational Models: Implications for Attachment Theory," *Development and Psychopathology* 14 (2002): 877–908.

Child Care and Other Support Programs

Major Latosha Floyd (U.S. Army) and Deborah A. Phillips

Summary

The U.S. military has come to realize that providing reliable, high-quality child care for service members' children is a key component of combat readiness. As a result, the Department of Defense (DoD) has invested heavily in child care. The DoD now runs what is by far the nation's largest employer-sponsored child-care system, a sprawling network with nearly 23,000 workers that directly serves or subsidizes care for 200,000 children every day. Child-care options available to civilians typically pale in comparison, and the military's system, embedded in a broader web of family support services, is widely considered to be a model for the nation.

The military's child-care success rests on four pillars, write Major Latosha Floyd and Deborah A. Phillips. The first is certification by the military itself, including unannounced inspections to check on safety, sanitation, and general compliance with DoD rules. The second is accreditation by nationally recognized agencies, such as the National Association for the Education of Young Children. The third is a hiring policy that sets educational and other requirements for child-care workers, and the fourth is a pay scale that not only sets wages high enough to discourage the rapid turnover common in civilian child care but also rewards workers for completing additional training.

Floyd and Phillips sound a few cautionary notes. For one, demand for military child care continues to outstrip the supply. In particular, as National Guard and Reserve members have been activated during the wars in Iraq and Afghanistan, the DoD has sometimes struggled to provide child care for their children. And force reductions and budget cuts are likely to force the military to make difficult choices as it seeks to streamline its child-care services in the years ahead.

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The U.S. Department of Defense (DoD) receives wide acclaim for offering accessible, affordable, high-quality child care to military service members and their families. The military sees child care as an essential element of combat readiness and effectiveness, so it places a high premium on the quality of children's experiences in military child-care facilities, and on assuring families that their children are well cared for. From former President Bill Clinton to the Carnegie Corporation to the National Research Council and the Institute of Medicine, high-ranking officials, prominent foundations, and leading research organizations alike have called the DoD's child-care system a model for the nation.[1]

This military child-care system stands in stark contrast to the mixed bag of child-care options and spotty subsidies for civilians. "The best chance a family has to be guaranteed affordable and high-quality care in this country is to join the military," child-care advocate Ann Crittenden said in 1997, and her statement remains true today.[2] The contrast between military and civilian child care is posing new challenges to the DoD as the proportion of service members who rely on civilian child care grows, raising questions about inequities in the child-care options available to military families.

In this article, we describe the military's approach to providing high-quality, reliable, and affordable child care to military families as a means to promote combat readiness and retain personnel. We also discuss how the DoD is coping with the challenge of providing child care to families who face multiple deployments, and to the growing share of military families who live in civilian communities. Finally, we argue that the military's experience with revamping its child-care system could be used as a template to improve child care for the nation as a whole.

History of Military Child Care

Military child care has not always had such a positive reputation. Indeed, the dramatic transformation of military child care from a system in distress to a model for the nation has been called "a Cinderella story."[3] A 1982 report found that many DoD child-care programs did not meet fire and safety codes, that the inspection system was weak and lacked sanctions, and that teachers' training and pay were woefully inadequate. The hourly wage for child-care workers was less than that for people who collected trash on military bases and stocked commissary shelves, and the low pay fueled high turnover rates.[4] There was virtually no oversight of families who cared for others' children in their homes. Long waiting lists and high costs also plagued the system, making child care inaccessible for many military families. Allegations of child abuse at the Presidio Army base in 1986 lent a note of alarm and became the catalyst for congressional hearings in 1988.

This negative attention to military child care coincided with post–Vietnam War changes in the military's demographics. With the advent of the all-volunteer force, service members increasingly became career-oriented professionals with families, and the number of women in the military service branches (Army, Navy, Air Force, Marine Corps) grew steadily. Between 1973 and 1989, the share of enlisted women on active duty rose from barely 2 percent to almost 11 percent.[5] Today, women constitute 14 percent of active-duty personnel.[6] The number of dual-service military couples—spouses who are both service members, with at least one on active

duty—has also been growing. And 5.4 percent of service members are single parents, about two-thirds of them men.[7]

These pressures led to the Military Child Care Act (MCCA) of 1989, which became the driving force for change. The MCCA focused attention on assuring high-quality services by establishing comprehensive standards, setting accreditation requirements, and aggressively enforcing licensing; it also expanded access through subsidies for families. These initiatives primarily targeted military child-development centers, which remain the centerpiece of the military child-care system. The MCCA called for the military to establish comprehensive, cross-system regulations; substantially improve training and pay for the centers' workers; provide specialists to support training and curriculum development; create an effective inspection system, including regular unannounced visits and strong sanctions for noncompliance; and implement a sliding fee schedule based on family income. To support these changes, the act directed the DoD to give each service branch more money for child care. The MCCA thus produced a broad and transparent system of high-quality, highly accountable, affordable child care that is now widely viewed as the best the nation has to offer.

Further Steps

In 1992, the DoD developed a comprehensive plan to expand the inadequate supply of child care, although the MCCA, which prioritized quality of child care over quantity, had not directed it to do so. The 1992 plan involved building centers, expanding the supply of hourly and drop-in care, increasing the capacity (as well as the quality and oversight) of family child-care homes, and expanding the role of resource and referral agencies as central clearinghouses for military families seeking DoD-sponsored or civilian child care. By 1997, the military child-care system was serving more than 200,000 children, up from 52,000 in 1988.[8]

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Amendments to the MCCA in 1996 directed the DoD to establish accreditation standards for the child-development centers. The DoD responded aggressively; by 2000, 95 percent of its child-development centers had received accreditation from the National Association for the Education of Young Children (NAEYC).[9] At this writing, about 98 percent of child-development centers and school-age centers are accredited, and the rest are in the process of obtaining or renewing their accreditation.[10]

In 2000, Congress for the first time authorized the DoD to subsidize civilian child-care programs, as long as they increased the supply of child care for military families and complied with DoD regulations, standards, and policies. These requirements mean, for example, that only state-licensed civilian providers who have been inspected in the past 12 months can receive DoD child-care funds. By contrast, civilian families can use federal child-care subsidies for any legal, but not necessarily licensed, child-care arrangement.[11]

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New Collaborations

As of 2010, after nine years of continuous fighting overseas, more than two million service members had been deployed to combat zones, putting a tremendous strain on DoD child care. President Barack Obama, in an effort to make caring for military families a national priority, directed his cabinet to study the most pressing issues that military families face. Their report, issued in 2011, named improving the availability and quality of civilian child care for military families living off-installation as one of four goals to improve military families' lives. (The other three were to enhance overall wellbeing and psychological health, to ensure excellence in military children's education and development, and to develop career and education opportunities for military spouses.)[12] The report found that the military needed 37,000 more child-care slots.

To meet this need, the administration established the Military Family Federal Interagency Collaboration between the DoD and the Department of Health and Human Services. The collaboration aims to increase the availability and quality of civilian child care for military families. A pilot program has placed military child-care liaisons in 13 states that have large numbers of military families. The liaisons are helping to determine local needs, set goals, and coordinate the efforts of state and local governments, military officials, and community partners to increase child-care quality and use child-care resources effectively.

Over the course of this initiative, which began in February 2011, the 13 participating states have tried to improve military families' access to high-quality child care through both regulatory changes and laws, which have

varied from state to state. New regulations have included requiring annual inspections of licensed programs, requiring background checks and fingerprinting of employees, adding computer and TV time limits and physical activity requirements for children, approving online training, and increasing the number of required annual training hours. New laws have strengthened background check requirements, set or increased penalties for illegal unlicensed care, specified what credentials people need to train early education providers, and required that child-care staff be trained to recognize and prevent child abuse and maltreatment. In addition, military child-care liaisons have worked to deliver the training that states request, whether face-to-face or online. The liaisons take steps, when possible, to ensure that teachers can get professional development credit and that the state land grant university's cooperative extension system can provide public domain resources.

Overview of DoD Child Care

The DoD child-care system consists of 900 child-development centers and school-age programs at more than 300 sites, along with more than 4,500 family child-care homes (called child-development homes in the Navy). Together, this network employs nearly 23,000 child-care workers, 7,300 of whom are military spouses, and it constitutes the largest employer-sponsored child-care program in the nation. The DoD's network provides and subsidizes daily care for more than 200,000 children from shortly after birth through 12 years of age, or approximately 21 percent of all active-duty military children in that age range.[13]

Parents who are eligible for DoD-sponsored child care include active-duty service members, DoD civilian employees, National

Table 1. Primary DOD-Subsidized Child-Care Programs

Program	Setting	Purpose
Child-Development Center	On-installation child-care centers certified, inspected, and operated by the DOD and the services.	Provides high-quality full-time or part-time child care.
Family Child Care	On- and off-installation care in military housing. Providers—usually military spouses—are trained and certified by the services, and the homes are inspected according to DOD and service requirements.	Provides an alternative to CDC care if CDCs are full or if families' needs are not met by CDCs. Some Family Child Care may offer overnight, emergency, or infant care, for example.
School-Age Care	On-base or off-base providers, including CDCs, Family Child Care, youth centers, community-based nonprofits, or schools. Providers must be certified or licensed, and inspected, by the DOD or the state.	Provides before-school, after-school, and summer/holiday care.
Operation Military Child Care and Military Child Care in Your Neighborhood	Off-installation child-care providers licensed and inspected by the state, including child-care centers and family child-care homes. Military Child Care in Your Neighborhood providers must be accredited to ensure quality comparable to a CDC. In practice, service branches may waive this requirement if no accredited provider is available.	Subsidizes the cost of off-installation care if on-installation facilities are full or there is no installation nearby. Operation Military Child Care is intended for short-term care, primarily during deployment.

Source: U.S. General Accounting Office

Guard and Reserve members who are on active duty or attending personnel training, and DoD contractors. Base commanders can establish a priority system when demand for child care exceeds the supply, but they must abide by DoD guidelines that give top priority to active-duty service members and to DoD civilian employees who are single parents or whose spouse works full time outside the home.

Table 1 describes the four main components of the military child-care system: child-development centers, family child-care homes, school-age child-care programs, and subsidized civilian child care. Child-

development centers serve approximately 44 percent of the children in DoD-funded child care, family child-care homes serve 14 percent, school-aged child-care programs serve 21 percent, and subsidized civilian child care serves 21 percent.[14] Just over half the children in child-development centers are infants and toddlers. DoD-subsidized civilian child-care providers are in limited supply, primarily because of the DoD's stringent licensing and accreditation requirements.[15]

The child-development centers, which encompass school-age programs, care for children up to 12 years old. Child-development centers offer a range of options: full day, partial day,

Table 2. DoD Weekly Child-Care Fees (2011–12)

Family Income	Fees
Below $29,400	$46–$59
$29,401–$35,700	$62–$74
$35,701–$46,200	$77–$90
$46,201–$57,750	$93–$105
$57,751–$73,500	$108–$121
$73,501–$85,000	$124–$130
$85,001–$100,000	$133
$100,001–$125,000	$136
More than $125,000	$139

Source: U.S. Department of Defense

and drop-in care; partial-day preschool programs; before- and after-school programs; and extended care, including nights and weekends. Because so many military children are under the age of five, child-development centers at each military installation offer pretoddler (12 to 24 months) and preschool programs. Both pretoddler and preschool programs focus on young children's social, emotional, physical, and cognitive growth. In addition, preschool programs work to prepare children for school through enrichment activities that build the knowledge, skills, abilities, and attitudes they'll need. Children from six weeks to five years old can receive full-day care. For parents who need child care intermittently, the centers also offer hourly programs. Some installations place a cap on how much hourly care a family may use per month; other installations charge a small fee for hourly care ($3–$4 per hour, in some cases).

School-age care programs, for six- to 12-year-olds, take place in child-development centers, youth centers, and other suitable facilities. They offer care before and after school, during holidays, and during summer vacations. Many military school-age care programs transport children to and from their schools.

The family child-care home program cares for children as young as four weeks and up to age 12. The homes are operated predominantly by military spouses who live on military installations. People who live in civilian housing near a base may also provide DoD-subsidized care. Unlike most child-development centers, many family child-care homes are equipped to care for mildly ill children. Though family child-care homes must be licensed and inspected annually, they are rarely accredited.[16]

The service branches run several more child-care programs. The Air Force's Extended Duty Care and the Navy's Child Development Group Homes offer child care during nontraditional hours. The Marine Corps' Enhanced Extended Child Care program offers child care to family members who can't use regularly scheduled child care because of extended duty, family illness, family emergency, etc. Each branch of service, and each installation, can determine the types and levels of child care that best meet the needs of its military families.

Parents on military installations seek child care through Resource and Referral offices,

which work closely with civilian agencies. If on-base child care is not available, the Resource and Referral offices help families find child care in the surrounding community. The military is working to increase the capacity of this network of child-care support.

Parents who find themselves on a waiting list for DoD child care, as well as parents who live far from a military base, may seek DoD-subsidized care through Child Care Aware, a nonprofit agency that helps parents find high-quality child care in their communities. Subsidies are available through two programs: Operation Military Child Care and Military Child Care in Your Neighborhood.

Operation Military Child Care subsidizes care for children of deployed service members, or children of service members who are mobilized away from home, for example, by the Guard or Reserve. Providers must be licensed by the state and inspected annually, but they need not be accredited by a nationally recognized body. Because the program doesn't require national accreditation, it allows Guard and Reserve families, who often live in areas where accredited providers are few or nonexistent, to benefit from a child-care subsidy.

The Military Child Care in Your Neighborhood program provides subsidies for families of active-duty service members and DoD civilians who are unable to access on-base child care, usually because they've been placed on a waiting list. Providers enrolled in this program must be nationally accredited.

Administration and Fees
The defense secretary's Office of Children and Youth is in charge of military child care. It establishes who is eligible for subsidized

child care and provides oversight and guidance to the service branches, each of which administers its own child-care program. Each branch of service issues child-care regulations and sets fees based on the defense secretary's policies.

Funding for military child care comes from two sources: appropriated funds, which Congress authorizes each year, and fees that parents pay for child care. The National Defense Authorization Act of 1996 directed that, in a given fiscal year, the amount of funds Congress appropriates for military child-development centers must equal or exceed the amount that parents pay in fees.[17] As table 2 illustrates, parents pay for care on a sliding scale, based on nine income categories; the cost is the same regardless of a child's age. On average, subsidies cover about 64 percent of the cost of on-base care, but all parents pay something. Fees can range from $46 per week for the lowest-income families to $139 per week for the highest-income families.[18] The weekly fee covers 50 hours of care, with two meals and two snacks each day.

When families use civilian child care, the military generally sets a cap on the subsidy; families are responsible for costs that exceed the cap. Across all service branches, on average, military families pay about $108 per week for DoD-subsidized civilian child care, which constitutes 8.7 percent of the average military family's income.[19] By contrast, civilian families spend, on average, 25 percent of their income for care of children under five years old and 9.9 percent of their income for care of school-age children.[20] Yet military child care costs more to operate. A recent Government Accountability Office study reported that, on average, it costs 7 percent more per child to run military child-care centers than it does to run private child-care

facilities that receive DoD subsidies.[21] The higher costs come from the higher wages that staff in military centers receive; the expense associated with accreditation; and the significantly higher proportion of infants and toddlers, whose care is more expensive than that of older children (53 percent in military centers vs. 26 percent in civilian centers).[22]

Ensuring High-Quality Child Care

Four facets of the DoD child-care system, embedded in the Military Child Care Act, work together to promote high-quality child care: certification and inspection, accreditation, hiring, and training and pay.

Certification and Inspection

The DoD's certification standards ensure that programs and providers who receive DoD funds meet basic requirements for health, safety, and program administration. Moreover, the DoD requires yearly unannounced inspections, which include:

- a comprehensive health and sanitation inspection;

- a fire and safety inspection, and;

- a DoD compliance inspection conducted by a multidisciplinary team.

Each inspection team includes a parent representative; each service branch's headquarters also conducts an annual inspection. Inspection teams must be qualified in early childhood development and meet the NAEYC accreditation system's other qualifications.

The military gives child-care programs substantial guidance to prepare for and comply with its standards. As a result, the compliance rate is 100 percent. In stark contrast to the military system, only 81 percent of federal child-care subsidies now go to licensed or registered child-care providers (rates in each state vary from 29 to 100 percent), and the vast majority of states do not require annual, let alone unannounced, inspections.[23]

Accreditation

The military requires that all centers be accredited by a nationally recognized body. This sets a higher bar than the certification standards alone, ensuring that military children receive care that meets nationally recognized criteria for quality, including staff-child interactions, learning environments, and curriculum content. By 2002, all child-care centers on military installations were either accredited by the NAEYC or in the process of obtaining or renewing their accreditation. The DoD also offers strong incentives for family child-care homes to become accredited by paying the costs of accreditation and giving parents higher stipends for accredited homes. Unfortunately, no research has examined how accreditation affects DoD child care specifically. But a 1994 report from the RAND Corporation found that accreditation increases the overall quality and functioning of military child-care centers.[24]

When it comes to civilian child-care providers, Operation Military Child Care requires that, at a minimum, they be licensed and annually inspected by their states. The Military Child Care in Your Neighborhood program requires that civilian providers be nationally accredited. But only about 10 percent of civilian child-care centers and 1 percent of civilian family child-care homes in the U.S. are accredited.[25] Faced with such low rates of accreditation among civilian providers, the DoD is increasingly trying to coordinate with providers and state licensing

officials to improve child-care standards across the United States. In the interim, the military service branches may waive the accreditation requirement if they determine that no accredited provider is available to meet parents' needs. Child Care Aware has also agreed, on a case-by-case basis, to inspect some licensed providers annually so that military parents who use them can receive DoD subsidies.

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Hiring

At child-development centers, staff members must have at least a high school diploma or GED, and must be able to speak, read, and write English. These education requirements help to ensure that employees can handle the required training. Outside the military, by contrast, only 16 states require lead teachers at child-care centers to have a high school diploma or GED.[26] Additionally, all military child-care workers must pass comprehensive background checks; only 10 states require such background checks for civilian child-care center workers.[27]

Training and Pay

Compensation for child-care workers reflects the value that the military places on its child-care system. The compensation system rewards training, decreases turnover, and helps to ensure that the people who care for military children are qualified and motivated. And it breaks the connection between child-care workers' pay and parent fees through a DoD-subsidized pay schedule that is linked to training, as are all military salaries.

Child-care staff salaries are a well-documented correlate of child-care quality.[28] DoD salaries for child-development center workers who have achieved the required level of education and experience average $15 an hour, compared with $9.73 an hour in the civilian sector.[29] (In places where the cost of living is high or living conditions are difficult, the military service branches may receive waivers to charge higher child-care fees so that child-care workers can be paid more.[30]) Under the DoD's structured compensation system, child-care workers' pay is equivalent to that of other DoD employees with similar experience, training, and seniority.[31] Under normal budgetary conditions, their salaries are adjusted annually for inflation, just like those of all federal employees. Military child-care workers also receive a benefit package that includes medical, dental, life, and long-term care insurance; a flexible spending account; retirement benefits; sick leave; and military installation privileges (including fitness centers, recreation programs, child care, etc.).

Like other DoD employees, child-care staff receive extensive training, which is linked to promotion and pay raises. Newly hired child-care workers must complete six to eight hours of orientation training before

they start, and an additional 36 hours of training within six months. This training includes courses on child development, age-appropriate activities and discipline, CPR and other emergency medical procedures, nutrition, and preventing and reporting child abuse. Continued training is a condition of employment. Each military child-development center must have at least one training and curriculum specialist to oversee both programming for children and training for workers.

An estimated 75 percent of military child-care workers are married to service members, and they usually have to move when their spouse is transferred.[32] When these workers transfer to a new military installation, their training, pay grade, and salary go with them, saving on hiring and training costs and protecting the military's investment in its child-care staff.

Child Care in the Broader Family Support System

Military families are facing unprecedented challenges. As overseas conflicts continue, most service members experience multiple deployments, and frequent and stressful separations have become the norm for many families. As this issue of *The Future of Children* makes clear, these conditions affect military children profoundly.

Studies show that the stress of multiple deployments can compromise the mental health of service members' spouses. A recent study found that almost 40 percent of non-deployed spouses showed levels of anxiety and depression that were comparable to or higher than the levels of returning service members.[33] Parents with mental health disorders may have trouble supporting their children's wellbeing, whether by spending quality time with them—so necessary for buffering deployment's negative effects on children—or by taking advantage of beneficial resources, programs, and activities for themselves and their children.[34]

A nondeployed parent's physical and mental health have a tremendous effect on the amount of stress that children experience at all stages of deployment.[35] And when a parent returns from war with mental health problems, children may also suffer.[36] The DoD recognizes that frequent deployments have placed a huge strain on families, and that this strain can affect readiness. As a result, it has expanded the Family Readiness System (FRS) so that it can better respond to military families' needs. The FRS comprises the network of programs, services, people, and agencies (including collaborations among them) that promotes readiness and quality of life among service members and their families.

Wherever they live, families can seek help in many ways. Each branch of service maintains a family readiness resource for both active-duty and reserve forces. The service branches' resources are augmented by programs available to all service members, such as the Joint Family Support Assistance Programs (JFSAP) and Military OneSource, as well as by community organizations. Table 3 illustrates the range of FRS programs. Families can access these programs online, by phone, and through social media; they provide a wide range of services, including:

- Child abuse prevention and response services

- Child-development programs

Table 3. Components of the Military Family Readiness System

All Services			
Military OneSource/Joint Family Support Assistance Programs Community Organizations			

Army and Air Force			
National Guard Family Program			

Army	Air Force	Navy	Marines
Army Community Service	Airman and Family Readiness Center	Navy Fleet and Family Support Center	Marine Corps Community Services
Army Reserve Family Program	Air Force Reserve Family Program	Navy Reserve Family Readiness	Marine Forces Reserve Family Program

- Domestic violence prevention and response services

- Deployment assistance

- Support for family members with special needs

- Emergency family assistance

- Information and referral

- Morale, welfare, and recreation services

- Nonmedical individual and family counseling

- Personal and family life education

- Personal financial management services

- Moving assistance

- Transition assistance

- Youth programs

The FRS encompasses more than 200 initiatives to support military family members, many of them explicitly designed to interface with the DoD child-care network.[37] Here are some of the most important ones:

Child and Youth Behavioral Health Military Family Life Counselors

These licensed clinicians work with child-care providers, teachers in DoD schools, parents, and children, with a focus on children who have recently moved or who have a deployed parent. They observe and assess children, intervene with children who need assistance, and serve as liaisons among child-care staff, teachers, and parents. The military is broadening the reach of family life counselors across the military. The counselors currently rotate through assignments for up to six months at a time, but a pilot program at Fort Bragg in North Carolina both extends access to counselors across the full school year and ensures that, rather than rotating each semester, the same counselors are assigned for the entire year. The DoD also recently started sending child and youth family life counselors to work in community schools that serve large populations of military children. The counselors offer help with bullying, conflicts, self-esteem, coping with deployment and reunion, and relationships and separations.[38]

Family Advocacy Program (FAP)

The FAP aims to prevent child and domestic abuse in military families through public

awareness, education, and family support. It provides programs and activities for military families who have been identified as being at risk for committing child or domestic abuse. The FAP promotes coordinated, comprehensive intervention, assessment, and support for military family members who are victims of child or domestic abuse. It also assesses, rehabilitates, and treats military family members who are alleged to have committed child or domestic abuse, and it works with civilian authorities and organizations.

New Parent Support Program (NPSP)

Military families access this program through their installation's Family Advocacy Program or Family Support Center. The program is staffed by nurses, social workers, or home visitation specialists, who are supervised by the Family Advocacy Program manager. The NPSP promotes resilient families, healthy parenting attitudes, and skills to prevent child abuse, neglect, and domestic abuse. NPSP personnel identify expectant parents and parents of children up to three years of age (five for Marine Corps families) whose life circumstances place them at risk for child abuse or neglect. Through intensive home visits, offered on a voluntary basis, NPSP personnel help parents cope with the hardships of raising children. The NPSP also makes hospital visits, refers parents to other resources, and offers prenatal classes, parenting classes, and play groups.

Exceptional Family Member Program (EFMP)

This service supports children with special medical and educational needs. Service members or their spouses who identify a child's special need are required to document it by enrolling in the EFMP. Documentation, which can occur at any military treatment facility, allows medical and educational personnel to review the resources required to meet the child's special need.

The EFMP determines whether families enrolled in the program can be sent on certain assignments, because critical medical and educational services may be in short supply or unavailable at some posts. And when the family is assigned to a new post, the EFMP helps them find and access the services that their child requires. The EFMP also refers parents to other military and community services; teaches parents about their children's condition; provides information about local school and early intervention services; and offers nonclinical case management, including individualized service plans. EFMP managers are available at family support centers across the military.

Children with special needs are considered for the same child-care options as are other children, and all Children and Youth Services activities are open to them. However, the Army, Navy, and Marine Corps have developed special processes to determine where to place special-needs children. The Army Special Needs Accommodation Process and the Marine Corps Special Needs Evaluation Review Team both convene multidisciplinary teams to determine the safest, least restrictive, and most appropriate placement. The Navy Special Needs Review Board (SNRB) determines whether the Navy's Child and Youth Program can reasonably accommodate children with special needs, then reports its findings to the installation commander, who decides what action to take.

Respite Care

Respite care supplements the military child-care system for parents whose spouse

is deployed overseas or families who have children with special needs. This free service provides a temporary rest from the stress of caregiving. Across the branches of service, eligible families enrolled in the EFMP may receive eight to 40 hours of respite care each month, based on the severity of the child's and the family's needs. Active-duty Guard and Reserve families with a deployed spouse may receive up to 16 hours per month.

Military OneSource

This free DoD service offers resources and support to service members and their families primarily through its website and a 24-hour call center staffed with master's level consultants who are familiar with military life. Consultants can provide comprehensive information about any aspect of military life, including deployment, reunions, relationships, grief, employment and education for spouses, parenting and child care, etc. Through Military OneSource, families can get personal, nonmedical counseling services, as well as help with managing their finances, doing their taxes, finding a job, maintaining their health, and a range of other topics.[39] The program also links families to the resources that their service branch and installation provide.

Joint Family Support Assistance Program (JFSAP)

The JFSAP augments military family support programs by providing resources and services, including child-care referrals, to military family members who are isolated from military installations, where most family support programs are based. JFSAP teams consist of a military family life counselor, a child and youth family life counselor, a Military OneSource consultant, and another person whose duties are determined by the state in which the team works, based on local needs.

JFSAP teams work in all 50 states and four U.S. territories, and they support more than 800,000 service members and their families.[40] They offer information about and referrals to community agencies, nonmedical counseling for children and family members, and help finding child care.[41] JFSAP delivers its services in the communities where service members and their families live, through collaboration with federal, state, local, and nonprofit entities. In this way, it enhances each community's capacity to serve its military families.

Challenges for DoD Child Care

About a million military service members are balancing the demands of serving our country and raising a family, and many depend on reliable, affordable child care. More than half of the active-duty force is married, and 63 percent of enlisted military spouses are employed. Approximately 6 percent of service members are single parents, and 3 percent are in dual-service marriages with children. These families move frequently (typically, every two to three years), and service members must be ready to deploy anywhere in the world on a moment's notice. The high rates of deployment since 9/11 have increased the demands for both military and civilian child care. Waiting lists for military child care are common, particularly for infant care, and families usually need child care immediately.

Families of Guard and Reserve members face their own challenges. Guard and Reserve families are dispersed across the United States, and they generally don't live in military communities. When Guard and Reserve members are called to active duty, their families often cannot access on-base child care. Programs like Operation Military Child Care and Military Child Care in Your

Neighborhood have grown increasingly important for these families. However, the demand for civilian child care exceeds the supply, a problem that is likely to grow worse in the years ahead.

Similarly, though DoD child care serves a large number of children in relatively high-quality facilities, the demand for care continues to exceed the supply in these facilities as well. The DoD hopes to meet 80 percent of the military's need for child care, and construction projects approved in 2008 and 2010 are expected to add more than 21,000 spaces in child-development centers.[42] At the same time, however, the number of family child-care homes on military installations is falling, for several reasons. Some of the decline can be traced to frequent deployments that place added time pressure on military spouses, who have traditionally been the major providers of on-base family child-care homes. At the same time, because of the added combat pay that deployed service members receive, husbands or wives who remain at home may have fewer financial worries, thus reducing the incentive to run a child-care home. Moreover, increasing privatization of military housing means that there are relatively fewer potential family child-care homes on military installations. Simply expanding the supply of on-base child-care centers, then, is unlikely to be sufficient to meet military families' needs.

The DoD is also working to close the gap between supply and demand for child care through interagency and public-private collaborations. The Military Family Federal Interagency Collaboration, primarily through its military child-care liaisons, works to give military families better access to quality civilian child-care programs. The liaisons also work to make child-care providers more aware of quality indicators that help to create

and maintain safe and healthy environments for children.[43] The liaisons' influence extends beyond the military: their work increases the quality and quantity of civilian child-care options not only for military families, but for civilian families as well.

As Guard and Reserve families who live in civilian communities seek child care in increasing numbers, the military needs help from federal, state, and local agencies, as well as nonprofit organizations.

The DoD's partnership with Child Care Aware also helps meet the demand, providing high-quality DoD-subsidized child care for at least 23,000 military children.[44] Through Child Care Aware, military families get a list of civilian child-care providers, learn the criteria for eligibility, and receive a DoD subsidy application. Civilian providers who meet the eligibility requirements must apply to receive DoD subsidies for serving military families.

As Guard and Reserve families who live in civilian communities seek child care in increasing numbers, the military needs help from federal, state, and local agencies, as well as nonprofit organizations. Military child-care liaisons must work diligently to provide training, awareness, and incentives to civilian child-care providers, and to press for legislation to ensure that civilian agencies increase the quality of child-care services under their

jurisdiction so that military families can receive DoD subsidies to support their child-care expenses.

Getting the Word Out

Some military parents may not be aware of their options for DoD-subsidized child care, particularly for subsidized civilian care.[45] About 73 percent of active-duty military families live off-base but within 20 miles of a military installation.[46] These families are less likely to use DoD child care than are families who live on-base.[47] They are also less likely to apply for military child-care subsidies. As a result, they are more likely either to pay the full price of civilian child care or rely on their extended families or some other informal child-care arrangement.

The DoD uses many methods to tell military families about their child-care options, including predeployment briefings, family readiness centers, brochures and ads, and e-mail and websites. But military families receive large amounts of information through these channels, making it difficult for them to focus on and remember specific programs, especially programs that they may not need immediately.[48] Conversely, families who live far from an installation are likely to receive less information; in general, they tend to believe, inaccurately, that military subsidies for civilian child care are needs-based.[49] The DoD is trying to improve communication about child care. Family readiness professionals, whose responsibilities include helping families find child care, are being assigned to military units. The military is also moving toward a central, web-based system that families can use to request either military or civilian child care as they move from one assignment to another.

Hard Choices

The DoD is striving to meet 80 percent of service members' demand for quality child care.[50] Looming budget cuts threaten the military's ability to achieve this goal. As we were writing this article, the defense secretary's office of Military Family and Community Policy was conducting a DoD-wide review of all family and military community programs, including child-care programs, to determine their effectiveness and to identify gaps in coverage and possible cost savings.[51] The DoD will have to make difficult decisions about whether resources can be diverted from military child care to other programs in the Family Readiness System. Cuts could reduce subsidies that installations receive to run their child-care programs, subsidies for civilian child-care providers, or the subsidies that military families receive to pay for child care. The DoD and the service branches are considering ways to mitigate the effects of budget cuts on their child-care operations, including uniformly imposed caps on subsidies.

Fertile Areas for Research

Although the military's child-care programs are widely recognized as the best in the country, researchers have not assessed their developmental effects. We need to know whether the DoD's investment in accessible, high-quality child care has paid off in terms of key developmental measures, such as readiness for school, social skills, and health. Ideally, such studies would use the same measures as other major child-care studies—for example, the NICHD Study of Child Care and Youth Development—so that we could compare the effects of civilian and DoD child care.[52] Given the context in which military families use child care, it is equally important to study dimensions of care, such as the stability of core staff and links to family support

services, that may be particularly important for children who face high stress, family loss and frequent moves. In particular, we need to know, through neuropsychological measurement, whether and how child care can buffer stress and restore security for young children. Such research would advance our understanding of child care generally.

Conclusions: Beyond Military Child Care

The U.S. military offers a remarkable example of what it takes to institute a dramatic turnaround of a child-care system that once served families poorly. Today, the DoD system exemplifies a sustained commitment to accessible, high-quality care, and it continuously strives to better meet this commitment as the characteristics and needs of U.S. military families change. If we acknowledge the issue's seriousness and find the political will, there is no reason that the civilian child-care system could not follow the military's example. The idea that undergirds DoD child care—the need to support and invest in workers' families—applies equally to the civilian labor force. Any argument that the military's is a "closed system" and cannot offer a model for civilian child care is undermined by the DoD's progress in mitigating inequities in access to quality child care for military families who rely on civilian providers. Like the military, the civilian sector is struggling to ensure that all families can find and afford high-quality child care. As the DoD builds bridges to state and local child-care agencies and services, we can embrace the military's belief that workforce readiness begins with high-quality child care.

ENDNOTES

1. Carnegie Task Force on Meeting the Needs of Young Children, *Starting Points: Meeting the Needs of Our Youngest Children* (New York: Carnegie Corporation, 1994); Jack P. Shonkoff and Deborah Phillips, eds., *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Washington: National Academy Press, 2000); White House, Office of the Press Secretary, "Remarks by the President and First Lady at White House Conference on Child Care," news release, October 23, 1997, http://clinton2.nara.gov/WH/New/Childcare/19971023-16352.html.

2. Ann Crittenden, "Fighting for Kids," *Government Executive* 29, no. 12 (1997), 29.

3. M.-A. Lucas, "The Military Child Care Connection," *Future of Children* 11 (Spring 2001), 129–33.

4. National Women's Law Center, *Be All That We Can Be: Lessons from the Military for Improving Our Nation's Child Care System* (Washington: National Women's Law Center, 2000).

5. David F. Burelli, cited in National Women's Law Center, *Be All That We Can Be*, 5.

6. U.S. Department of Defense (DoD), Military Community and Family Policy, *Demographics 2010: Profile of the Military Community* (Washington: U.S. Department of Defense, 2011).

7. Ibid.

8. Linda G. Morra, "Observations on the Military Child Care Program," testimony before the U.S. House, Subcommittee on Military Personnel and Compensation, Committee on Armed Services, August 2, 1988.

9. National Women's Law Center, *Be All That We Can Be*.

10. Barbara Thompson (director, Child and Youth Services, Military Family and Community Policy, Office of the Under Secretary of Defense), personal communication, September 4, 2012.

11. U.S. Government Accountability Office (GAO), *Military Child Care: DOD Is Taking Actions to Address Awareness and Availability Barriers* (Washington: GAO, 2012), 5.

12. Office of the President of the United States, "Strengthening Our Military Families: Meeting America's Commitment," January 2011, http://www.defense.gov/home/features/2011/0111_initiative/strengthening_our_military_january_2011.pdf.

13. DoD, *Demographics 2010: Profile of the Military Community*, 59.

14. Thompson, personal communication, September 4, 2012.

15. GAO, *Military Child Care*, 25.

16. Child Care Aware of America, *Child Care in America: 2012 State Fact Sheets* (Arlington, VA: Child Care Aware of America, 2012), 9, http://www.naccrra.org/sites/default/files/default_site_pages/2012/cca_sf_finaljuly12.pdf.

17. National Defense Authorization Act, 1996, Pub. L. No. 104–106, 104th Cong., 1st Sess. (February 10, 1996).

18. GAO, *Military Child Care*, 38.

19. Thompson, personal communication, January 7, 2013.

20. U.S. Census Bureau, "Who's Minding the Kids? Child Care Arrangements: Spring 2010: Detailed Tables" (2011), http://www.census.gov/hhes/childcare/data/sipp/2010/tables.html.

21. GAO, *Military Child Care*, 11.

22. U.S. Census Bureau, "Who's Minding the Kids?"

23. U.S. Department of Health and Human Services, Administration for Children and Families, "FY 2011 CCDF Data Tables (Preliminary)" (2013), http://www.acf.hhs.gov/sites/default/files/occ/fy_2011_ccdf_data_tables_preliminary.pdf.

24. Gail Zellman et al., *Examining the Effects of Accreditation on Military Child Development Center Operations and Outcomes* (Santa Monica, CA: RAND Corporation, 2012).

25. Linda K. Smith and Mousumi Sarkar, *Making Quality Child Care Possible: Lessons Learned from NACCRRA's Military Partnerships* (Arlington, VA: National Association of Child Care Resource and Referral Agencies, 2008).

26. National Association of Child Care Resource and Referral Agencies, *We Can Do Better: 2011 Update: NACCRRA's Ranking of State Child Care Center Regulation and Oversight* (Arlington, VA: NACCRRA, 2011), 12.

27. Child Care Aware of America, *Child Care in America*, 12.

28. Deborah A. Phillips and Amy E. Lowenstein, "Early Care, Education, and Child Development," *Annual Review of Psychology* 62 (2011), 483–95, doi: 10.1146/annurev.psych.031809.130707.

29. U.S. Department of Labor, *National Compensation Survey: Occupational Earnings in the United States, 2008* (Washington: U.S. Department of Labor, U.S. Bureau of Labor Statistics, 2009).

30. Ibid.

31. U.S. Department of Defense, *Instruction Number 6060.2: Child Development Programs (CDPs),* January 19, 1993.

32. Rona L. Schwarz et al., *Staffing Your Child Care Center: A Theoretical and Practical Approach* (Lafayette, IN: Military Family Research Institute, Purdue University, 2003) https://www.mfri.purdue.edu/resources/public/reports/Staffing%20Your%20Child%20Care.pdf.

33. Patricia Lester et al., "Families Overcoming Under Stress: Implementing Family-Centered Prevention for Military Families Facing Wartime Deployments and Combat Operational Stress," *Military Medicine* 176 (2011), 19–25.

34. Sarah C. Olesen et al., "Children's Exposure to Parental and Familial Adversities: Findings from a Population Survey of Australians," *Family Matters* 84 (2010), 43–52.

35. Angela J. Huebner et al., "Parental Deployment and Youth in Military Families: Exploring Uncertainty and Ambiguous Loss," *Family Relations* 56 (2007), 112–22, doi: 10.1111/j.1741-3729.2007.00445.x; Amy Richardson et al., *Effects of Soldiers' Deployment on Children's Academic Performance and Behavioral Health* (Santa Monica, CA: RAND Corporation, 2011); A. Alan Lincoln, Erika Swift, and Mia Shorteno-Fraser, "Psychological Adjustment and Treatment of Children and Families with Parents Deployed in Military Combat," *Journal of Clinical Psychology* 64 (2008), 984–92, doi: 10.1002/jclp.20520; Sarah C. Reed, Janice F. Bell, and Todd C. Edwards, "Adolescent Well-Being in Washington State Military Families," *American Journal of Public Health* 101 (2011), 1676–82; Kristin Mmari et al., "When a Parent Goes Off to War: Exploring the Issues Faced by Adolescents and Their Families" *Youth & Society* 40 (2008), 455–74, doi: 10.1177/0044118X08327873.

36. Michelle L. Kelley, "Geographic Mobility, Family, and Maternal Variables as Related to the Psychological Adjustment of Military Children," *Military Medicine* 168 (2003), 1019–24.

37. Robin M. Weinick et al., *Programs Addressing Psychological Health and Traumatic Brain Injury Among U.S. Military Service Members and Their Families* (Santa Monica, CA: RAND Corporation, 2011).

38. Elaine Wilson, "Consultants Offer Support to Off-Base Schools," news release, American Forces Press Service, January 20, 2010.

39. "About Military OneSource," accessed January 15, 2013, http://www.militaryonesource.mil/footer?content_id=267441.

40. U.S. Department of Defense, Military Family and Community Policy, *Joint Family Support Assistance Program: Desk Reference* (Washington: Office of the Secretary of Defense, 2011).

41. Ibid.

42. GAO, *Military Child Care,* 25.

43. U.S. Department of Health and Human Services, Office of Child Care, "Interoperability Collaboration: OCC/ACF Interagency Partnerships," accessed January 22, 2013, http://www.acf.hhs.gov/programs/occ/interoperability-collaboration.

44. National Association of Child Care Resource and Referral Agencies, *NACCRRA 2011 Annual Report: Supporting Early Education through Quality Care* (Arlington, VA: NACCRRA, 2011).

45. Ibid.

46. Susan Gates et al., *Examining Child Care Need among Military Families* (Santa Monica, CA: RAND Corporation, 2006), 18, 29.

47. Ibid.

48. Angela Huebner et al., *Summary of Findings: Military Family Needs Assessment* (Blacksburg, VA: Virginia Polytechnic Institute and State University, 2010), 19.

49. Ibid.

50. Thompson, personal communication, September 4, 2012.

51. Cheryl Pellerin, "DOD to Begin Review of Family, Military Community Programs," news release, American Forces Press Service, January 28, 2013.

52. NICHD Early Child Care Research Network, *NICHD Study of Early Child Care and Youth Development: Phase IV, 2005-2008 [United States]* (Ann Arbor, MI: Inter-University Consortium for Political and Social Research, 2010), doi: 10.3886/ICPSR22361.v1.

Resilience among Military Youth

*M. Ann Easterbrooks, Kenneth Ginsburg,
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Summary

Much research on children in military families has taken a deficit approach—that is, it has portrayed these children as a population susceptible to psychological damage from the hardships of military life, such as frequent moves and separation from their parents during deployment. But M. Ann Easterbrooks, Kenneth Ginsburg, and Richard M. Lerner observe that most military children turn out just fine. They argue that, to better serve military children, we must understand the sources of strength that help them cope with adversity and thrive. In other words, we must understand their resilience.

The authors stress that resilience is not a personal trait but a product of the relationships between children and the people and resources around them. In this sense, military life, along with its hardships, offers many sources for resilience—for example, a strong sense of belonging to a supportive community with a shared mission and values. Similarly, children whose parents are deployed may build their self-confidence by taking on new responsibilities in the family, and moving offers opportunities for adventure and personal growth.

As the wars in Iraq and Afghanistan drew more and more service members into combat, the military and civilian groups alike rolled out dozens of programs aimed at boosting military children's resilience. Although the authors applaud this effort, they also note that few of these programs have been based on scientific evidence of what works, and few have been rigorously evaluated for their effectiveness. They call for a program of sustained research to boost our understanding of military children's resilience.

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Nearly two million children and youth are growing up in military families in the United States.[1] When it comes to resilience, we know relatively little about how these young people are similar to, or different from, youth who grow up in civilian families. The military life presents young people with many opportunities, but they also face hardships that other children don't experience. To ensure that these young people thrive in the face of such adversities, the military and other organizations have developed prevention programs to help boost their resilience. These programs may indeed foster resilience, but the research evidence is thin. Ultimately, programs and policies should be supported by research that demonstrates their effectiveness.

In this article, we present our approach to understanding resilience among military-connected young people, and we discuss some of the gaps in our knowledge. We begin by defining resilience, and we present a theoretical model of how young people demonstrate resilient functioning. Next we consider some of the research on resilience among children and adolescents in military families, and we examine programs that may promote resilience among military youth. Finally, we suggest how the theory and research we discuss can guide policy makers and practitioners as they work to protect and promote resilience the next time our nation is at war.

Defining Resilience

Resilience is sustained competence or positive adjustment in the face of adversity. Resilience allows people to recover successfully from trauma, or maintain appropriate or healthy functioning even when they are under considerable stress.[2] The relations between an individual and his or her context produce resilience; in other words, resilience involves a fit between a person's individual characteristics (for example, health or talents) and supportive features of his or her environment (for example, family, school, or community).

Resilience should not seem exotic or unusual. Indeed, Ann Masten describes it as "ordinary magic," underscoring the fact that individuals and their contexts typically possess the components and processes that can produce resilient functioning.[3] But how humans respond to adversity can vary tremendously. If we understand the processes that underlie this variability, we can better support efforts to help young people adapt and thrive. We believe that the processes of resilience operate in the same way for military-connected young people as they do in the civilian population, although the stresses that military-connected young people face, and the contexts in which they face them, may sometimes be unique.

Resilience as a Relationship

Resilience is neither a personal attribute or trait, nor something that is present in a young person's environment. Rather, resilience comes from interactions between people and their environments as part of a "dynamic developmental system."[4] Thus resilience is not static; it can change across time and situations. For example, a youth who is struggling with a parent's deployment may show resilience at school, participating and maintaining high grades, and yet may suffer emotionally, with symptoms of anxiety and depression. Further, a child may demonstrate resilient functioning during one parental deployment but may struggle with the next one. In our view, the interdependent, two-way relationships between military-connected young people and their environments, which affect

resilience, are not distinct from the relation-ships involved in human functioning in general.[5] In this way, military-connected young people who cope well with the challenges of military life (for example, frequent moves or deployed parents) are similar to civilian youth who cope well when they face other kinds of stress (for example, chronic illness, parents' divorce, natural disasters). Resilient relations occur when we maintain or enhance links that are mutually beneficial to individual young people and to their contexts.[6]

Resilience comes from interactions between people and their environments.

To understand resilience among young people, we need to know:

- the fundamental attributes of individual children or adolescents (for example, features of cognition, motivation, emotion, physiology, or temperament);

- the status attributes of youth and adolescents (for example, age, sex, race, ethnicity, religion, geographic location);

- the characteristics of the young person's context (for example, family composition and cohesion, neighborhood resources, social policy, community economic resources, historical time frame);

- the facets of adaptive functioning (for example, maintaining health; active, positive contributions to self, family, community, and civil society); and

- the specific nature of the events or challenges they face (for example, a parent's deployment, moving to a new home).

Later in this article we more fully describe relational developmental systems theory, which lies behind our approach. Relational developmental systems theory is at the cutting edge of developmental science today.[7] We believe that this approach to studying resilience in military-connected youth will both enhance our understanding of this understudied group and serve as an excellent example of how we can apply developmental science to promote positive youth development in general.[8]

Stress and Resilience

Because, by definition, resilience means to adapt positively to adversity, it is important to note the relationship between adversity, or stress, and resilient functioning. From early childhood through adolescence, young people manifest developmental plasticity, which includes changes in their neural connections, modified by the environment; features of their own cognitive structure; attributes of their behavioral repertoire; and characteristics of their relationship with their context. Developmental plasticity ensures that resilience is dynamic rather than static. However, this plasticity is a "double-edged sword";[9] it creates both opportunities for resilient functioning and vulnerabilities. We know that not all children and youth are equally (or identically) influenced by environmental stresses or supports.[10] The way stress affects children and adolescents varies according to the nature of the stress (for example, acute and short-lived vs. chronic and extended), the individual (for example, temperament, intelligence, enjoyment of challenge, age-related coping strategies), and the context

(for example, family finances, parents' mental health, community youth development programs).[11] Some sources of stress may be unique to military-connected young people, for example, the deployment cycle. But in most ways, the stresses young people experience, and the ways they respond, are more similar between civilian and military-connected youth than they are different.

We may think of stress as harmful to children, but it can have positive, health-enhancing effects.[12] Edward Tronick, observing how infants learn to regulate stress as they grow older, noted that "normal" stress helps babies develop coping strategies that increase their capacity to adapt well to future stress.[13] Others refer to "steeling," or "stress inoculation"; Margaret Haglund writes that "exposure … to milder, more manageable forms of stress appears to aid in building a resilient neurobiological profile."[14] What critical features—of individuals, contexts, and their interactions—determine whether stress promotes healthy development or hinders resilient functioning?

According to the National Scientific Council on the Developing Child, stress may be positive, tolerable, or toxic.[15] Positive stress is typically brief, causing moderate physiological responses (that is, a faster heart rate; higher blood pressure; and a mild rise in cortisol, a hormone produced by the adrenal gland when a person is under stress). Positive stress, according to the council, "occurs in the context of stable and supportive relationships"; such relationships help "bring … stress hormones back within a normal range" so that children can "develop a sense of mastery and self control." Tolerable stress (triggered by, for example, parents' divorce or natural disaster) may last longer and have more serious consequences that alter children's daily routines.

Still, it has a beginning and an end, and it occurs in the context of supportive connections to emotionally and physically available adults whose protection helps children regulate stress. Toxic stress is most likely to be prolonged, repeated, or extreme (for example, chronic family violence, recurring maltreatment, or persistent and severe poverty). When toxic stress is not accompanied by effective, supportive adult relationships, it may disrupt the child's stress-regulation systems by keeping him or her chronically activated.

Whether stress is positive, tolerable, or toxic can depend on many factors. Among young people in military families, stressful circumstances, behaviors, and experiences that would produce tolerable or even positive stress in one situation—before a parent's deployment, for example—might produce toxic stress at another time. Imagine, for example, how hard it could be for a child already burdened with ADHD to complete difficult yet routine school homework after a parent returns from war with a traumatic brain injury or posttraumatic stress disorder. Physiological responses to stress that produce positive adaptation in small doses, or under controlled circumstances, can be emotionally and physically taxing if they are chronically activated. Cumulative exposure to toxic stress, and exposure during sensitive periods (particularly during the fetal stage and during periods of rapid brain development in early childhood), have been linked to adult health and disease.[16] Even when stress is toxic, supportive parenting, positive peer relationships, and the availability and use of community resources can foster positive adaptation.

Positive stress, on the other hand, is a catalyst for the kind of positive growth that may be called "thriving."[17] The key to thriving is finding the optimal conditions to support

Table 1. The Seven C's Model of Positive Development

Competence:
Youth need the skills to succeed in school, in a future job, and in a family. They also need peer negotiation skills to safely navigate their world and coping skills to avoid risks and recover from stress. Adults can model skills and notice, reinforce, and build on existing competencies. Adults undermine competence when they view youth as inherently problematic, or try to "fix" situations rather than guiding young people to find their own solutions.

Confidence:
Confidence may be developed through demonstrated and reinforced competence. Adults can help youth gain confidence by noticing and reinforcing their existing strengths. Confidence may be an important starting point for positive behavior because a young person who lacks confidence may be demoralized and cannot imagine taking the steps necessary to make wise decisions.

Character:
Character is about understanding behavioral norms, recognizing the others' perspectives, seeing how your behavior affects other people, and having moral standards and self-awareness. Perseverance, tenacity, and "grit" are other key character attributes associated with long-term success.

Connection:
A meaningful connection with at least one adult (more is better) is a core protective factor. Young people will be resilient if the important adults in their lives believe in them unconditionally and hold them to high expectations.

Contribution:
Youth who possess the protective attributes associated with Confidence, Competence, Character, and Connection are poised to make Contributions to their families, communities, and society. Experiencing the personal rewards of service may make them more comfortable asking for help in time of personal need. And youth who contribute will be surrounded by appreciation, rather than condemnation or low expectations.

Coping:
Children who learn to cope effectively with stress are better prepared to overcome life's challenges. A wide repertoire of positive, adaptive coping strategies may offer protection against unsafe, worrisome behaviors. In primary prevention, children and families develop positive coping strategies they can employ when most challenged. In secondary prevention, people already engaged in worrisome behaviors consider replacing those behaviors with others that will also reduce stress, but will do so safely and productively. Adults, especially parents, need to model appropriate coping strategies.

Control:
Control (or self-efficacy) is about believing in your own ability to avoid risky behaviors in the face of temptation. Having a sense of control over one's environment leads to having the capacity to act independently and is related to a sense of purpose/future. Discipline should teach that a child's actions lead directly to outcomes, and demonstrated responsibility should be rewarded with increasing trust and privileges). Parents who make all of their children's decisions deny them opportunities to learn self-discipline and self-responsibility. Parents can teach and model self-control and delayed gratification.

Source: Kenneth R. Ginsburg and Martha M. Jablow, *Building Resilience in Children and Teens: Giving Kids Roots and Wings*, 2nd ed. (Elk Grove Village, IL: American Academy of Pediatrics, 2011).

positive stress.[18] Research shows that people who experience controlled exposure to stress in childhood and adolescence cope better as adults with circumstances such as bereavement, moving, illness, and job or relationship trouble; for example, they have fewer mental health problems.[19] In fact, military personnel and first responders, among others, go through controlled exposure to stress as part of their training.

A Model for Positive Youth Development: The Seven C's

We have mentioned that resilience results from two-way interactions between individuals and their environments. Similarly, the Positive Youth Development (PYD) perspective states that thriving (positive and healthy functioning) occurs when a young person's strengths as an individual are coupled with the resources in his or her environment.

There are several models of how PYD works.[20] The Five C's model, derived from the work of Rick Little by Richard Lerner and Jacqueline Lerner, has been studied the most.[21] According to this model, which has been refined over the years,[22] young people who develop high levels of a set of five interrelated qualities are most likely to show resilience and thrive. In 2006, the American Academy of Pediatrics published a guide that translated the best research about PYD and resilience into practical advice for parents.[23] Because the Five C's are practical, actionable, and empirically verified, they formed the core of the AAP model, but Kenneth Ginsburg suggested adding two more qualities, for a total of seven: Competence, Confidence, Character, Connection, Contribution, Coping, and Control. Table 1 presents a brief summary of the Seven C's model.

Given that all children and adolescents can develop resilience,[24] developmental science aims to identify the individual and environmental conditions that reflect resilience and then apply this information in ways that maximize the chances that all youth will thrive.

Characteristics That Boost Resilience

Researchers have found many individual characteristics of children and adolescents that promote resilient functioning in the face of adversity.[25] Not everyone agrees on a complete list, but the following are commonly accepted: intelligence and cognitive flexibility, positive regulation and expression of emotion, an internal locus of control, personal agency and self-regulation, a sense of humor, an "easy" or sociable temperament, optimism, and good health.[26] These characteristics may seem like defining features of an individual, but they depend greatly on the family, social, and community environment in which children develop.

At the family level, children who encounter adversity need supportive and sensitive adults who are available physically, mentally, and emotionally. As we noted earlier, a supportive social network can buffer stress and foster resilience. Secure attachment relationships, for example, can mitigate the psychological effects of natural disasters, community violence, and other serious stresses, such as extended separation from a deployed parent.[27] In addition to providing a "haven of safety and stability" in difficult times, family relationships can help youngsters make meaning of adversity, affirm their strengths, help them feel connected through mutual support and collaboration, provide models and mentors, offer financial security, and help them frame the stressful circumstances in the context of family values and spirituality.[28] For military-connected children specifically, family relationships might help them find meaning in contributing, as a family, to the safety and protection of the nation; they might also receive self-affirming positive feedback from parents and extended family members for taking on additional responsibilities when a parent is deployed. Thus military families may help children see their experiences as a "badge of honor" rather than a burden.

Children who encounter adversity need supportive and sensitive adults who are available physically, mentally, and emotionally.

Social support from adults can take several forms. For example:

- Parents can help their adolescent children thrive by maintaining parental authority and spending lots of high-quality time with them, combining warmth with a high level of monitoring.[29]

- Adult mentors can boost young people's resilience, especially when they are competent, committed, and continuously present for at least one year.[30]

- Teachers or coaches can help students succeed in school and extracurricular activities, and spiritual leaders or guides can help children make meaning of their lives.[31]

Conversely, when parents and other caregivers are overwhelmed by their own problems, they may fail to help children cope with stress.

Children's peer and school relationships, neighborhoods, and communities can also support resilience. Among school-age children, and particularly among adolescents, relationships with peers hold particular sway.[32] For example, friendship can allay depression among preadolescent boys and girls.[33] When friends spend time together, they may contribute to resilience by modeling strategies for coping or sharing information about how to acquire emotional, material, and social resources.

Teachers are in an ideal position to support resilience, in part because young people spend more than 30 hours each week in school.[34] Classroom teachers and other school personnel may be especially important for children in under-resourced communities, and for children who live far from their extended families (like many military-connected

children) or whose mothers or fathers are deployed.[35] In fact, only parents have more impact on young people than supportive teachers and coaches do.[36] Relationships with teachers may be more important for adolescents than for younger children.[37]

Individual characteristics and relationships that either protect children and help them thrive or expose them to risk occur in the context of the communities where they live. Recently, scholars have begun to focus not only on what communities lack in terms of resources and functions, but also on the role that a community's assets and resources can play in helping young people thrive. Michael Ungar divides these assets into five types of "capital": financial capital; human capital, that is, knowledge, health, etc.; natural capital, including land, parks, and wildlife; physical capital, such as energy, shelter, and transportation; and social capital, or networks, groups, and communal activities.[38] Similarly, Christina Theokas and Richard Lerner name three types of resources that can interact with young people's personal characteristics and relationships to foster resilience: institutions (for example, libraries, parks, or community-based after-school and summer programs); opportunities for interpersonal interaction and collaboration (for example, in community programs where adults and youth work together on food drives or in soup kitchens); and accessibility (for example, transportation to reach recreational activities).[39]

Accordingly, from the perspective of Positive Youth Development, and of the developmental systems models that give rise to it, the broad presence of personal strengths and community assets means that both young people and their environments actively contribute to the developmental process. Resilience is likely to occur when young

people who face adversity possess capacities or skills that help them take advantage of the developmental assets available in their families and communities.

Research has identified many such capacities and skills. One promising characteristic is intentional self-regulation, or a person's ability to intentionally alter his or her behavior—as well as thoughts, attention, and emotions—to react to and influence the environment.[40] Young people's capacity for intentional self-regulation is a key strength, because it helps them access the resources they need to adapt and thrive in the face of adversity.[41]

Resilience among Military Children: What Does the Research Say?

Few researchers have used a relational developmental systems model to examine military-connected youth, their families, their communities, and the policies that affect them.[42] Instead, research on military children has more often focused on the quality or functioning of their families, or on the risks related to parents' deployment, than it has on children's cognitive, social, emotional, and behavioral strengths, or on their civic skills, competencies, and attitudes.[43] We have little data—for example, from long-range studies that follow military children as they grow up—that would tell us about these children's trajectories of adversity and resilience. In general, long-range studies of youth have focused on psychopathology and behavioral problems, rather than on strengths, developmental assets, or trajectories of positive development. Moreover, studies of resilience have often focused on subgroups whose experiences may be atypical, such as children of alcoholic parents or children who have been physically abused. Even when we do have data about youth in military families, many

studies were done on a small scale, making it hard to know whether their findings can be broadly applied. And studies of military-connected children have often excluded children of parents in the National Guard and Reserve, even though these parents and their children make up a considerable portion of military families.

Lieutenant Colonel Molinda Chartrand and Benjamin Siegel note that most research to date has focused primarily on children in military families during peacetime; such studies have concluded that, in the main, children respond well to moving and to separations from their parents during training, particularly when parents cope well. But even studies of children during the Gulf War of 1990–91 may be outdated. For one thing, unlike during the brief Gulf War, service members now typically experience multiple deployments. For another, technological advances have made it easier for families to keep in touch even when parents are deployed, but the impact of these technological changes has not been adequately studied.[44]

What, then, does the research to date tell us about resilience among military-connected children and adolescents, or about the developmental pathways these young people follow as they face the challenges of military life? Unfortunately, the answer is very little, at best. We have only a very general depiction of military children and their families, and certainly not a representative one. To better understand resilience among military children, we need to clarify the kinds of stress or adversity they face. In turn, we must study their strengths, which have remained relatively unexamined, and how these strengths interact with the strengths of military families as a whole (for example, their ability to remain emotionally close in the face

of separation, their sense of duty, and their values). We also need to discover and assess the resources that support their positive development—in schools, in the military, and in civilian communities.

Because the research base is so thin, it's hard to reach strong conclusions about which programs and policies would best help military-connected children thrive. Indeed, any inferences drawn from these studies must be taken with a grain of salt until they can be validated through reliable, well-designed, rigorous research.

One thing, however, is certain: Military children are children first, meaning that they must do many of the same things that children in civilian families do. They must establish positive friendships and peer relationships, make their way through school, build on their talents, develop their own "moral compass," and participate in their families and communities. But youth in military families also encounter challenges that civilian youth typically do not, such as frequent moves and parental deployment.[45]

Frequent moves may undermine stable friendships and affect schoolwork and family finances. Deployment means physical separation from a parent, altered routines, new responsibilities for children, and additional stress for deployed parents and parents who remain at home alike.[46] And the periods before and after deployment may be stressful as well, as the family realigns and roles change. Family members may experience anxiety and depression at any point in the deployment process. In fact, the "deployment cycle" can be divided into five phases—predeployment, deployment, sustainment, redeployment, and postdeployment—each of which offers specific trials.[47] Families of

Guard and Reserve troops who are deployed may face their own unique sources of stress. Along with some families of active-duty service members, they may also live far from military bases and the resources those bases provide.[48]

Some studies have tied the challenges of military life to problems such as depression, poor control of behavior, parenting stress, marital discord, and economic hardship.[49] Yet, when considered from a resilience perspective, the research tells us little about the strengths of military children and adolescents, partly because this research has generally not focused on how children develop.[50] For example, studies may ask participants about what happened in the past, rather than following them over time; others may have small sample sizes or rely on reports from parents (who may be experiencing stress, depression, or other mental health problems that affect their perceptions) rather than from the children themselves.[51] In general, we have too few post-9/11 studies of military children, and too few that differentiate among important criteria such as whether military youth live in single-parent or two-parent families; whether their mothers or fathers are deployed; or whether children's parents are on active duty or in the Guard and Reserve.

Although research sometimes overlooks the strengths of military families, we believe that past studies still hold lessons about what promotes resilience in military-connected children. For example, circumstances that are rare in civilian life (repeated separations from parents, frequent moves) are common in military culture. As we have explained, however, how children respond to these circumstances can depend on the context. In particular, families who live on military installations may

experience less stress from these common shared experiences. For example, military-connected children who attend civilian schools may be the only children in their classroom with a deployed parent, and they may have to cope in isolation. But children who attend school on a military base may find greater understanding and empathy.

Military-connected children may also be more resilient in certain areas of their lives (for example, in academic performance, spiritual connections, and community contributions such as volunteer work) than they are in others (for example, peer relationships or emotional wellbeing). Moreover, resilience is not an "all or none" phenomenon. For example, deployment may affect children's schoolwork more than it affects other areas of functioning.[52] Specifically, the new roles and responsibilities that young people take on when a parent is deployed—including providing emotional and financial support for their families—may compromise their academic performance but serve as a source of strength elsewhere in their lives.[53]

Sources of Strength

One review of research found that, compared with their civilian counterparts, military-connected youth function better than other children in several domains that help build resilience, including self-regulation, intellectual and academic performance, and emotional wellbeing.[54] Many of these studies were conducted before the current wars began; however, more recent work suggests that military youth are less likely to engage in risky behaviors and are more open to differences in other people;[55] young people can use such strengths when they encounter the adversities associated with military life.

A recent study investigated how 1,500 military-connected youth, ages 11–17, coped with deployment.[56] Two-thirds of them reported no emotional difficulties, although those whose parents were deployed longer were more likely to report problems. Looking at younger children, ages 6–12, whose Army and Marine Corps parents were currently or recently deployed, another study found that levels of depression and behavior problems among military-connected children were similar to those among civilian children in the same communities.[57] Other research has found that families with deployed parents may grow closer together, and that children in these families show more independence and responsibility.[58] These positive findings serve as a counterweight to past research that focused on problems or psychopathology in military families, rather than recognizing these families' strengths.

Indeed, we must consider how the military lifestyle promotes positive responses to adversity. For example, military life can enhance children's sense of community and offer a variety of cultural experiences. In fact, of the Seven C's that promote resilience, connection may be the one most affected by military life.[59] Military families often highlight the sense of belonging and community that permeates their lives.[60] Although youth in military families may worry about moving or seeing a parent deployed, young people who have strong social connections to their parents, their peers, and their neighborhoods—as military-connected youth often do—can adjust better to such challenges.[61] Young people may be more resilient when they know others who share the same kinds of stressful experiences, and know that they can count on those others to understand and lend support. Glen Elder calls this phenomenon "linked lives," where shared experiences create

important social connections that lessen the negative effects of stress.[62] Within the military community, this kind of support may be either informal (for example, military families sharing child care or offering emotional support to one another) or formal (for example, military-sponsored family centers, support groups, and summer camps for children).

Frequent Moves and Resilience

Military families move more often than civilian families do; for example, military-connected children in middle school and high school move three times as often as civilian youth do, on average.[63] Some scholars have assumed that these frequent moves put young people's development at risk. But from a resilience perspective, changing schools or towns can offer opportunities. Children who move can "reinvent" themselves; they can try out new activities, explore different social relationships, and develop new interests and talents.[64] In one study, 75 percent of military parents reported that moving enhanced their children's development, though it's important to remember that parents' reports may be biased by their own perceptions and wishes. Another study of 608 Army and Air Force families with children ages 10–17 found that certain individual characteristics and social relationships promoted resilience when a family had to move. Children who showed the greatest resilient functioning reported an internal locus of control, optimism, good physical and mental health, and a sense of mastery (which may reflect skill at intentional self-regulation). They also tended to live in families characterized by greater marital satisfaction and more effective parenting, and to participate in group social activities.[65] Yet another study found that when military children move, their ability to adapt is related to their mothers' adjustment and mental

health.[66] These findings suggest that relationships with close family members can help military children adapt, just as they can in civilian families.[67]

For military children, moving can also mean going overseas. Families of active-duty personnel have the chance to live abroad, where they can travel, learn new languages, and experience new cultures. These opportunities may help children and other family members develop self-confidence, cultural competence, and other skills.[68]

Adult Roles for Young People

When a parent is deployed, family structure must change. Older children and adolescents in particular may make new contributions (to use the language of the Seven C's model) by assuming new responsibilities and roles, including taking care of their younger siblings.[69] In some cases, they may even care for the emotional needs of the remaining parent.[70] This taking on of adult roles is sometimes called "parentification."

Few researchers have examined parentification among military children, and even fewer have examined how families readjust when a deployed parent returns home after a teen takes on adult roles. But we can surmise that, at least some of the time, an adolescent who takes on additional roles at home will reap benefits that foster resilience.[71] First, such young people can earn a genuine sense of contribution, as well as pride in their competence, another of the Seven C's. Second, taking on adult roles may help young people develop a third C, character, as they come to understand that they must act as role models for their younger siblings. Above all, they can learn how family members care for one another, and how families function best when

they share responsibility. Some research in nonmilitary contexts—for example, among teens with sick parents or unstable families—shows that parentification predicts better coping and less substance use in the wake of stressful events.[72] Although some research suggests that military children gain resilience by taking on adult roles, we need to confirm these results.[73]

We also need to keep in mind other research that ties parentification to negative outcomes, including substance use, mental illness, poor functioning in relationships, and behavioral problems.[74] Taking on adult roles may disrupt children's normal process of individuation, that is, the process by which they come to understand themselves as independent individuals apart from their families. Children who have to care for their parents' emotional needs may be particularly vulnerable to problems with individuation.[75]

What happens when deployed parents come home, and household roles change once again? The literature on military-connected children reveals that adolescents generally have a harder time with reintegrating a deployed parent than do younger children.[76] There are probably many reasons for this, but one may be connected to the normal adolescent struggle for independence. Adolescents who gain more independence during a parent's absence may find it especially hard to lose some of that independence when the parent returns. They may lose independence because the returning parent treats them the same way they were treated when the deployment began a year earlier (and in the life of a developing adolescent, a year is a very long time), or because two parents are now monitoring and disciplining them, instead of just one.

Minority Children in the Military

Some data suggest that growing up in military families may be especially positive for children who belong to racial and ethnic minority groups. One report found that African American and Latino students in DoDEA schools outperformed their civilian peers on the SAT, bucking the trend of wide achievement gaps in the general population. It's possible that in military families, minority youth avoid some of the hardships that minorities in the general population disproportionately experience, such as parental unemployment; limited education; poverty; and a lack of adequate health care, good schools, and safe neighborhoods.[77]

What developmental process accounts for the fact that African American and Latino students do so well in DoDEA schools? A useful frame for further research might be Margaret Beale Spencer and colleagues' Phenomenological Variant of Ecological Systems Theory. They outline how racism harms minority youth by degrading the environment in which they develop, for example, through violence, overcrowding, poverty, and increased stress on parents. But they also say that we must examine social and historical contexts of resilience for minority youth, particularly how these young people make meaning of their lives through "active interpretation." Spencer suggests that resilient functioning in minority youth may be overlooked, and that acknowledging such resilience would promote a sense of agency among young people.[78]

Programs to Support Military Children and Youth

Many programs aim to promote resilience among military youth and help them thrive. How well these programs work is hard to

determine, because their evaluation processes have methodological flaws. Still, Colonel Rebecca Porter notes, programs that give young people opportunities to develop confidence and competence should resonate with military-connected youth. She writes:

> *For military youth, such programs would capitalize on the character and connection that are an inherent part of military communities and culture. They might foster caring among military youth regarding the unique challenges and stressors that are faced by military families while their service members are deployed. Most importantly, these programs would provide youth with the opportunity to experience the joy of operating from a perspective that was based on what they can do—on their strengths—rather than trying to thrive in the context of experiencing the distress that comes from attempting to overcome and compensate for their purported deficits.*[79]

We lack the space to review all of the many programs that the military, military-affiliated nongovernmental organizations, and civilian-based organizations offer to support military families. Instead, we will briefly discuss some programs that fit with our view of resilience—programs that focus on fostering, enhancing, and maintaining connections despite frequent moves and repeated deployments, as well as coping with the associated stress.

Many programs to help military children were rolled out quickly at a time of pressing need, and this may be a key reason that the quality of their evaluation processes varies considerably. The Rand Center for Military Health Policy Research recently assessed selected resilience programs to determine the extent to which they use evidence-based

practices. The center found that the creators of these programs often used scientific evidence in the development stage, but to refine the programs, they used satisfaction and use data.[80] Without empirical data and standard measurements of resilience, it's hard to reach evidence-based conclusions about whether these programs are effective. For purposes of illustration, however, we will describe four youth programs that base their approach on resilience theory and regularly evaluate themselves: the Military Child Education Coalition (MCEC), Families OverComing Under Stress (FOCUS), the National Military Families Association (NMFA), and Operation: Military Kids (OMK).

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Military Child Education Coalition
The MCEC aims to ensure that all military-connected children get a high-quality education. It offers research-based publications, technology tools, and programs for military children and families who must move and deploy frequently. The organization is steeped in the philosophy of recognizing, supporting, and building on existing strengths. One of its programs, Student 2 Student, is a strength-based peer support program for military high school students transitioning to new schools, led and operated by students themselves.

Student 2 Student is based on the theory that positive peer support and connection enhance resilience.[81] The program eases the transition to a new school by connecting students to peers who can offer advice on how to navigate the new academic, community, and social environment. Satisfaction assessments confirm that the MCEC's far-reaching programs are well-received.[82]

Families OverComing Under Stress
Since 2008, FOCUS has helped thousands of military families with strength-based services to enhance resilience. The team of UCLA and Harvard researchers who developed FOCUS modeled it after existing evidence-based family prevention interventions, for example, Family Talk, a program for children and teens whose parents suffer from depression.[83] FOCUS's Individual Family Resilience Training is an eight-session program to teach families the best ways to communicate, solve problems, regulate emotions, and set goals— skills that foster family resilience in the face of stress caused by deployment and combat-related psychological problems.[84] Evidence for family resilience training's effectiveness is building. A recent study of 488 FOCUS families who underwent the training at 11 military installations in the U.S. and Japan showed a decrease in children's emotional and behavioral distress and an increase in prosocial behavior and the use of positive coping skills.[85] Further, parental distress fell, and family functioning and communication were enhanced.[86]

National Military Family Association
The NMFA is a family advocacy organization that offers resources for navigating military life, education scholarships for military spouses, and family retreats and camps. The organization's Operation

Purple Camp program has served more than 45,000 children of wounded service members. The camps endeavor to build psychological strength and resilience by fostering connections with other military youth, teaching positive coping and communication skills, and offering service projects and recreational activities. Evidence of the camps' effectiveness is limited to satisfaction surveys of participants.[87]

Operation: Military Kids
OMK—a collaboration between the Army and the 4-H/Army Youth Development Project—offers recreational, social, and educational support services for youth and families affected by deployment.[88] Rooted in theories of community social action, OMK uses a variety of programs to foster connection and improve communication between military and civilian youth.[89] For example, in the Hero Pack initiative, civilian youth fill backpacks with items for military youth to help recognize their sacrifices. Similarly, Speak Out for Military Kids is a youth-led after-school program in which military youth teach their communities about the experiences of military families. Evidence of OMK programs' effectiveness is limited to use reports and satisfaction surveys.[90]

Implications for Policy and Practice
The nation has endured more than a decade of war in Iraq and Afghanistan, and the burden of those conflicts has fallen disproportionally on a tiny fraction of the American populace. Those servicemen and servicewomen have two million children, who have shared their burden and made very real sacrifices. After 9/11, of course, we had no way of knowing how long these wars would last. From a practical standpoint, that means that programs to foster resilience often weren't

available until well after the conflicts had begun. In addition, in response to the great need, many programs were rolled out quickly, without the infrastructure to fully evaluate them and without the developmental, longitudinal research that could help them become more effective.

The research so far suggests that we should advocate for enhancing social support resources for military children and their parents. For example, Angela Huebner and her colleagues recommend that we align the formal supports of a military installation with the informal supports of the nonmilitary community, creating a "community practice" model to improve the lives of military families.[91] Their recommendations have influenced such important initiatives as the 4-H/Army Youth Development Project and Operation: Military Kids.

We do not yet know the outcomes of these kinds of partnerships for positive youth development. Still, we would not take issue with this recommendation. However, most research on military children has taken a deficit approach, and very little research has examined the strengths that help them thrive. Thus we have only limited knowledge about how these young people develop in positive ways, especially in regard to the approach to resilience that we take in this article. Indeed,

because so few studies have tracked these children and adolescents as they develop over time, parents and advocates for military youth currently have their values as the primary basis for their appeals or programs of action.

We must invest, then, in developmental research whose quality and depth will let us measure how the inherent challenges of military life, and the promise of resilience-based interventions, interact to affect the wellbeing of children and families over time. However, additional research is but one component of a multifaceted approach to supporting resilience among military children and youth, families, and communities. We must, through various channels, continue to gain from the wisdom and experience of those who have experienced deployments in the past decade, and those who have generated policies and programs to support them, so that when we again find ourselves at war we can use the lessons we have learned to serve military children and families. The parents of military-connected youth volunteer to serve in our military. However, their children have, in a sense, been drafted. Our nation owes these children and families an incalculable debt. Funding and carrying out rigorous research that is translated to guide policies and implemented in programs that enhance their lives is but one step in repaying them.

ENDNOTES

1. Karen Blaisure et al., *Serving Military Families in the 21st Century* (New York: Routledge, 2012).

2. Richard M. Lerner et al., "Resilience and Positive Youth Development: A Relational Developmental Systems Model," in *Handbook of Resilience in Children*, ed. Sam Goldstein and Robert Brooks, 2nd ed. (New York: Springer Publications, 2012), 293–308; Richard M. Lerner et al., "Resilience across the Lifespan," in *Emerging Perspectives on Resilience in Adulthood and Later Life*, ed. Bert Hayslip Jr. and Gregory C. Smith (New York: Springer Publications, 2012), 275–99; Michael Rutter, "Resilience as a Dynamic Concept," *Development and Psychopathology* 24 (2012): 335–44, doi: 10.1017/S0954579412000028.

3. Ann S. Masten, "Ordinary Magic: Resilience Processes in Development," *American Psychologist* 56 (2001): 227–38, doi: 10.1037//0003-066X.56.3.227.

4. Richard M. Lerner, "Developmental Science, Developmental Systems, and Contemporary Theories of Human Development," in *Handbook of Child Psychology*, ed. William Damon and Richard M. Lerner, 6th ed., vol. 1, *Theoretical Models of Human Development* (Hoboken, NJ: Wiley, 2006), 1–17; Rutter, "Resilience as a Dynamic Concept."

5. Masten, "Ordinary Magic."

6. Richard M. Lerner, *Liberty: Thriving and Civic Engagement among America's Youth* (Thousand Oaks, CA: Sage Publications, 2004).

7. Willis F. Overton, "Developmental Psychology: Philosophy, Concepts, Methodology" in Damon and Lerner, *Handbook of Child Psychology*, vol. 1, 18–88; Willis F. Overton, "Life-Span Development: Concepts and Issues" in *Handbook of Life-Span Development*, ed. Richard M. Lerner (Hoboken, NJ: Wiley, 2010), 1–29; Willis F. Overton, "Relational Developmental Systems and Quantitative Behavior Genetics: Alternative or Parallel Methodologies?" *Research in Human Development* 8 (2011): 25–263, doi: 10.1080/15427609.2011.634289; Willis F. Overton and Ulrich Mueller, "Meta-Theories, Theories, and Concepts in the Study of Development," in *Handbook of Psychology: Developmental Psychology*, ed. Richard M. Lerner, M. Ann Easterbrooks, and Jayanthi Mistry, vol. 6 (New York: Wiley, 2012): 19–58.

8. Lerner, "Developmental Science"; Masten, "Ordinary Magic"; Ann S. Masten and Jelena Obradović, "Competence and Resilience in Development," *Annals of the New York Academy of Sciences*, 1094 (2006): 13–27, doi: 10.1196/annals.1376.003; Theodore D. Wachs, "Contributions of Temperament to Buffering and Sensitization Processes in Children's Development," *Annals of the New York Academy of Sciences* 1094 (2006): 28–39; see also Jacqueline V. Lerner et al., "Positive Youth Development: Processes, Philosophies, and Programs," in Lerner, Easterbrooks and Mistry, *Handbook of Psychology*, 365–92.

9. Richard M. Lerner, *On the Nature of Human Plasticity* (New York: Cambridge University Press, 1984); Tomas Paus, "Brain Development," in *Handbook of Adolescent Psychology*, ed. Richard M. Lerner and Laurence Steinberg, 3rd ed. (New York: Wiley 2009), 95–115.

10. Evan Charney, "Behavior Genetics and Postgenomics," *Behavioral and Brain Sciences* 35 (2012): 1–80, doi: 10.1017/S0140525X11002226; Gilbert Gottlieb, *Synthesizing Nature-Nurture: Prenatal Roots of Instinctive Behavior* (Mahwah, NJ: Lawrence Erlbaum Associates Inc., 1997); Michael Meaney, "Epigenetics and the Biological Definition of Gene x Environment Interactions," *Child Development* 81 (2010): 41–79, doi: 10.1111/j.1467-8624.2009.01381.x; Michael Rutter, "Resilience, Competence, and Coping," *Child Abuse & Neglect* 31 (2007): 205–9, doi: 10.1016/j.chiabu.2007.02.001; Rutter, "Resilience as a Dynamic Concept."

11. Jelena Obradović, "How Can the Study of Physiological Reactivity Contribute to Our Understanding of Adversity and Resilience Processes in Development?" *Development and Psychopathology* 24 (2012): 371–87, doi: 10.1017/S0954579412000053; Glenn I. Roisman, "Distinguishing Differential Susceptibility

from Diathesis-Stress: Recommendations for Evaluating Interaction Effects," *Development and Psychopathology* 24 (2012): 389–409, doi: 10.1017/S0954579412000065.

12. National Scientific Council on the Developing Child, *Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper no. 3* (2005), http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp3; Edward Tronick, "The Inherent Stress of Normal Daily Life and Social Interaction Leads to the Development of Coping and Resilience, and Variation in Resilience in Infants and Young Children," *Annals of the New York Academy of Sciences* 1094 (2006): 83–104, doi: 10.1196/annals.1376.008.

13. Tronick, "Inherent Stress."

14. Margaret E. M. Haglund et al., "Psychobiological Mechanisms of Resilience: Relevance to Prevention and Treatment of Stress-Related Psychopathology," *Development and Psychopathology* 19 (2007): 889–920, doi: 10.1017/S0954579407000430; Donald Meichenbaum, "Stress Inoculation Training: A Preventative and Treatment Approach," in *Principles and Practice of Stress Management,* ed. Paul M. Lehrer, Robert L. Woolfolk, and Wesley S. Sime, 3rd ed. (New York: Guilford, 2007): 497–518; Rutter, "Resilience as a Dynamic Concept."

15. National Scientific Council on the Developing Child, *Excessive Stress*; National Scientific Council on the Developing Child, *The Timing and Quality of Early Experiences Combine to Shape Brain Architecture: Working Paper no. 5* (2007), http://developingchild.harvard.edu/index.php/resources/reports_and_working_papers/working_papers/wp5.

16. Jack P. Shonkoff, W. Thomas Boyce, and Bruce S. McEwen, "Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities," *Journal of the American Medical Association* 301 (2009): 2252–59, doi: 10.1001/jama.2009.754.

17. Jeanette R. Ickovics and Crystal L. Park, "Paradigm Shift: Why a Focus on Health Is Important," *Journal of Social Issues* 54 (1998): 237–44, doi: 10.1111/j.1540-4560.1998.tb01216.x.

18. Ibid.; Mark D. Seery, Allison A. Holman, and Roxane C. Silver, "Whatever Does Not Kill Us: Cumulative Lifetime Adversity, Vulnerability, and Resilience," *Journal of Personality and Social Psychology* 99 (2010): 1025–41, doi: 10.1037/a0021344.

19. Meichenbaum, "Stress Inoculation Training."

20. J. V. Lerner et al., "Positive Youth Development."

21. Richard M. Lerner et al., eds., "Foundations and Functions of Thriving in Adolescence: Findings from the 4-H Study of Positive Youth Development," special issue, *Journal of Applied Developmental Psychology* 30, no. 5 (2009); Richard M. Lerner et al., "Special Issue Introduction: The Meaning and Measurement of Thriving: A View of the Issues," *Journal of Youth and Adolescence* 39 (2010): 707–19, doi: 10.1007/s10964-010-9531-8; Richard M. Lerner et al., "Self-Regulation Processes and Thriving in Childhood and Adolescence: A View of the Issues," *New Directions for Child and Adolescent Development* 133 (2011): 1–9, doi: 10.1002/cd.300.

22. See, for example, Richard M. Lerner et al., "Positive Youth Development, Participation in Community Youth Development Programs, and Community Contributions of Fifth-Grade Adolescents: Findings from the First Wave of the 4-H Study of Positive Youth Development," *Journal of Early Adolescence* 25 (2005): 17–71, doi: 10.1177/0272431604272461; Richard M. Lerner et al., "Foundations and Functions"; R. M. Lerner et al., "Special Issue Introduction"; R. M. Lerner et al., "Self-Regulation Processes"; Helena Jelicic et al., "Using Positive Youth Development to Predict Contribution and Risk Behaviors in Early Adolescence: Findings from the First Two Waves of the 4-H Study of Positive Youth Development," *International Journal of Behavioral Development* 31 (2007): 263–73.

23. Kenneth R. Ginsburg and Martha M. Jablow, *Building Resilience in Children and Teens: Giving Kids Roots and Wings*, 2nd ed. (Elk Grove Village, IL: American Academy of Pediatrics, 2011).

24. Paul B. Baltes, Ulman Lindenberger, and Ursula M. Staudinger, "Lifespan Theory in Developmental Psychology," in Damon and Lerner, *Handbook of Child Psychology*, vol. 1, 569–664; R. M. Lerner, *Human Plasticity*.

25. Sam Goldstein and Robert Brooks, eds., *Handbook of Resilience in Children*, 2nd ed. (New York: Springer Publications, 2012); Hayslip and Smith, *Emerging Perspectives*; Rutter, "Resilience, Competence, and Coping"; Rutter, "Resilience as a Dynamic Concept"; Seery, Holman, and Silver, "Whatever Does Not Kill Us"; Emmy E. Werner and Ruth S. Smith, *Journeys from Childhood to Midlife: Risk, Resilience, and Recovery* (Ithaca, NY: Cornell University Press, 2001).

26. W. Thomas Boyce and Bruce J. Ellis, "Biological Sensitivity to Context: An Evolutionary-Developmental Account of the Origins and Functions of Stress Reactivity," *Development and Psychopathology* 17 (2005): 271-301; Steinunn Gestsdóttir et al., "Intentional Self-Regulation, Ecological Assets, and Thriving in Adolescence: A Developmental Systems Model," *New Directions for Child and Adolescent Development* 133 (2011): 61–76, doi: 10.1002/cd.304; Haglund et al., "Psychobiological Mechanisms"; Karol L Kumpfer, "Factors and Processes Contributing to Resilience: The Resilience Framework," in *Resilience and Development: Positive Life Adaptations*, ed. Meyer Glantz and Jeanette L. Johnson (New York: Kluwer, 1999), 179–224; Emmy E. Werner, "Resilience Research: Past, Present, and Future," in *Resilience in Children, Families, and Communities*, ed. Ray DeV. Peters, Bonnie Leadbeater, and Robert J. McMahon (New York: Kluwer, 2005), 3–12.

27. Angelique Trask-Tate, Michael Cunningham, and Lucinda Lang-DeGrange, "The Importance of Family: The Impact of Social Support on Symptoms of Psychological Distress in African American Girls," *Research in Human Development* 7 (2010): 164–82, doi: 10.1080/15427609.2010.504458; Frana Walsh, "Facilitating Family Resilience: Relational Resources for Positive Youth Development in Conditions of Adversity," in *The Social Ecology of Resilience: A Handbook of Theory and Practice*, ed. Michael Ungar (New York: Springer, 2012), 173–85; Tuppett M. Yates, Byron Egeland, and Alan A. Sroufe,"Rethinking Resilience: A Developmental Process Perspective," in *Resilience and Vulnerability: Adaptation in the Context of Childhood Adversities*, ed. Suniya S. Luthar (New York: Cambridge University Press, 2003), 243–66.

28. Walsh, "Facilitating Family Resilience."

29. Brett Laursen and W. Andrew Collins, "Parent–Child Relationships during Adolescence," in Lerner and Steinberg, *Handbook of Adolescent Psychology*, 3–43.

30. Jean E. Rhodes, *Stand by Me: The Risks and Rewards of Mentoring Today's Youth.* (Cambridge, MA: Harvard University Press, 2002).

31. Richard F. Elmore, "Schooling adolescents," in Lerner and Steinberg, *Handbook of Adolescent Psychology*, 193–227; Pamela E. King, Drew Carr, and Ciprian Boitor, "Religion, Spirituality, Positive Youth Development, and Thriving," *Advances in Child Development and Behavior* 41 (2011): 159–93; Doug Oman, Tim Flinders, and Carl E. Thoresen, "Integrating Spiritual Modeling into Education: A College Course for Stress Management and Spiritual Growth," *The International Journal for the Psychology of Religion* 18 (2008): 79–107.

32. B. Bradford Brown and James Larson, "Peer Relationships in Adolescence," in Lerner and Steinberg, *Handbook of Adolescent Psychology*, 74–103; Jean E. Rhodes and Sarah R. Lowe, "Youth Mentoring and Adolescent Development," in Lerner and Steinberg, *Handbook of Adolescent Psychology*, 152–89.

33. William M. Bukowski, Brett Laursen, and Betsy Hoza, "The Snowball Effect: Friendship Moderates Escalating Depressed Affect among Avoidant and Excluded Children," *Development and Psychopathology* 22 (2010): 749–57, doi: 10.1017/S095457941000043X.

34. Ann S. Masten and Marie-Gabrielle Reed, "Resilience in Development," in *Handbook of Positive Psychology,* ed. C. R. Snyder and Shane J. Lopez (Oxford: Oxford University Press, 2005), 74–88; Linda C. Theron and Petra Engelbrecht, "Caring Teachers: Teacher–Youth Transactions to Support Resilience," in Ungar, *The Social Ecology of Resilience*, 265–80.

35. Jean E. Rhodes and Jennifer G. Roffman, "Nonparental Adults as Asset Builders in the Lives of Youth," *Developmental Assets and Asset-Building Communities*, The Search Institute Series on Developmentally Attentive Community and Society 1 (2003): 195–209; Judith L. Evans, Chalizamudzi Elizabeth Matola, and Jolly P. T. Nyeko, "Parenting Challenges for the Changing African Family," in *Africa's Future, Africa's Challenge: Early Childhood Care and Development in Sub-Saharan Africa*, ed. Marito Garcia, Alan Pence, and Judith L. Evans (Washington: The World Bank, 2008), 265–84.

36. Rhodes and Roffman, "Nonparental Adults as Asset Builders."

37. Michael Lynch and Dante Cicchetti, "Children's Relationships with Adults and Peers: An Examination of Elementary and Junior High School Students," *Journal of School Psychology* 35 (1997): 81–99, doi: 10.1016/S0022-4405(96)00031-3.

38. Michael Ungar, "The Social Ecology of Resilience: Addressing Contextual and Cultural Ambiguity of a Nascent Construct," *American Journal of Orthopsychiatry* 81 (2011): 1–17, doi: 0.1111/j.1939-0025.2010.01067.x.

39. Christina Theokas and Richard M. Lerner, "Observed Ecological Assets in Families, Schools, and Neighborhoods: Conceptualization, Measurement and Relations with Positive and Negative Developmental Outcomes," *Applied Developmental Science* 10 (2006): 61–74, doi: 10.1207/s1532480xads1002_2.

40. G. John Geldhof, Todd D. Little, and John Colombo, "Self-Regulation across the Life Span," in Lerner, *Handbook of Life-Span Development*, 116–57; R. M. Lerner et al., "Self-Regulation Processes"; Megan M. McClelland et al., "Self-Regulation: The Integration of Cognition and Emotion," in Lerner, *Handbook of Life-Span Development*; Jack P. Shonkoff and Deborah Phillips, *From Neurons to Neighborhoods: The Science of Early Child Development* (Washington: National Academy Press, 2000).

41. Paul B. Baltes, "On the Incomplete Architecture of Human Ontogeny: Selection, Optimization, and Compensation as Foundation of Developmental Theory," *American Psychologist* 23 (1997): 366–80, doi: 10.1037/0003-066X.52.4.366; Paul B. Baltes and Margaret M. Baltes, "Psychological Perspectives on Successful Aging: The Model of Selective Optimization with Compensation," in *Successful Aging: Perspectives from the Behavioral Sciences*, ed. Paul B. Baltes and Margaret M. Baltes (New York: Cambridge University Press, 1990), 1–34; Alexandra M. Freund and Paul B. Baltes, "Life-Management Strategies of Selection, Optimization and Compensation: Measurement by Self-Report and Construct Validity," *Journal of Personality and Social Psychology* 82 (2002): 642–62, doi: 10.1037//0022-3514.82.4.642; Alexandra M Freund, Karen Z. H. Li, and Paul B. Baltes, "Successful Development and Aging: The Role of Selection, Optimization, and Compensation," in *Action and Self-Development: Theory and Research through the Life Span*, ed. Jochen Brandtstädter and Richard M. Lerner (Thousand Oaks, CA: Sage, 1999), 401–434; Gestsdóttir et al., "Intentional Self-Regulation"; Jennifer B. Urban, Selva Lewin-Bizan, and Richard M. Lerner, "The Role of Intentional Self Regulation, Lower Neighborhood Ecological Assets, and Activity Involvement in Youth Developmental Outcomes," *Journal of Youth and Adolescence* 39 (2010): 783–800, doi: 10.1007/s10964-010-9549-y.

42. Richard M. Lerner, Jon F. Zaff, and Jacqueline V. Lerner, *America's Military Youth: Towards a Study of Positive Development in the Face of Challenge* (Harker Heights, TX: Military Child Education Coalition, 2009).

43. Ibid.

44. Molinda M. Chartrand and Benjamin Siegel, "At War in Iraq and Afghanistan: Children in U.S. Military Families," *Ambulatory Pediatrics* 7 (2007): 1–2.

45. Pauline Boss, "Ambiguous Loss: Living with Frozen Grief," *The Harvard Mental Health Letter* 16 (1999), 4–6.

46. Cale Palmer, "A Theory of Risk and Resilience Factors in Military Families," *Military Psychology* 20 (2008): 205–17, doi: 10.1080/08995600802118858.

47. Kathleen V. Logan, "The Emotional Cycle of Deployment," *U.S. Naval Institute Proceedings* 113 (1987): 43–47; Simon H. Pincus et al., "The Emotional Cycle of Deployment: A Military Family Perspective," *Journal of the Army Medical Department* (April-June 2001): 15–23.

48. Chartrand and Siegel, "At War in Iraq and Afghanistan."

49. Eric M. Flake et al., "The Psychosocial Effects of Deployment on Military Children," *Journal of Developmental & Behavioral Pediatrics* 30 (2009): 271–78; Keith M. Lemmon and Molinda M. Chartrand, "Caring for America's Children: Military Youth in Times of War," *Pediatrics in Review* 30 (2009): 42–8.

50. Lerner, Zaff, and Lerner, *America's Military Youth*.

51. Blaisure et al., *Serving Military Families.*

52. Noel A. Card et al., "A Meta-Analytic Review of Internalizing, Externalizing, and Academic Adjustment among Children of Deployed Military Service Members," *Journal of Family Psychology* 24 (2011): 508–20, doi: 10.1037/a0024395.

53. Anita Chandra et al., "Children on the Homefront: The Experience of Children from Military Families," *Pediatrics* 125 (2010): 16–25, doi: 10.1542/peds.2009-1180.

54. Nansook Park, "Military Children and Families: Strengths and Challenges during Peace and War," *American Psychologist* 66 (2011): 65–72, doi: 10.1037/a0021249.

55. Jeffrey W. Hutchinson, "Evaluating Risk-Taking Behaviors of Youth in Military Families," *Journal of Adolescent Health* 39 (2006): 927–928, doi: 10.1016/j.jadohealth.2006.05.015; Lynn K. Hall, *Counseling Military Families: What Mental Health Professionals Need to Know* (New York, New York: Routledge, 2008).

56. Anita Chandra et al., *Views from the Homefront: The Experiences of Youth and Spouses from Military Families* (Santa Monica, CA: RAND Corporation, 2011).

57. Patricia Lester et al., "The Long War and Parental Combat Deployment: Effects on Military Children and At-Home Spouses," *Journal of the American Academy of Child and Adolescent Psychiatry* 49 (2010): 310–320.

58. Defense Manpower Data Center, *2008 Survey of Active Duty Spouses: Tabulations of Responses*, report no. 2008-41 (Arlington, VA, 2009).

59. Rachelle Swan et al., *Deployment and Family Separation: An Annotated Bibliography* (West Lafayette, IN: Military Family Research Institute, Purdue University, 2002).

60. Blaisure et al., *Serving Military Families.*

61. Kristin N. Mmari et al., "Exploring the Role of Social Connectedness among Military Youth: Perceptions from Youth, Parents, and School Personnel," *Child and Youth Care Forum* 39 (2010): 351–66.

62. Glen H. Elder, Jr., "War Mobilization and the Life Course: A Cohort of World War II Veterans," *Sociological Forum* 2 (1987): 449–72, doi: 10.1007/BF01106621.

63. Erik K. Shinseki, *The Army Family* (2003), http://www.whs.mil/library/Dig/AR-M620U_20080912.pdf.

64. Lisa B. Finkel, Michelle L. Kelley, and Jayne Ashby, "Geographical Mobility, Family and Maternal Variables as Related to the Psychosocial Adjustment of Military Children," *Military Medicine* 168 (2003): 1019–25.

65. Shelley M. MacDermid et al., *Understanding and Promoting Resilience in Military Families* (West Lafayette, IN: Military Family Research Institute, Purdue University, 2008).

66. Lester et al., "The Long War."

67. Finkel, Kelley, and Ashby, "Geographical Mobility."

68. Blaisure et al., *Serving Military Families.*

69. Angela J. Huebner and Jay A. Mancini, *Adjustments among Adolescents in Military Families When a Parent Is Deployed* (West Lafayette, IN: Military Family Research Institute, Purdue University, 2005).

70. Lisa M. Hooper, Sylvia A. Marotta, and Richard P. Lanthier, "Predictors of Growth and Distress following Childhood Parentification: A Retrospective Exploratory Study," *Journal of Child and Family Studies* 17 (2008): 693–705.

71. Lisa M. Hooper, "Expanding the Discussion regarding Parentification and Its Varied Outcomes: Implications for Mental Health Research and Practice," *Journal of Mental Health Counseling* 29 (2007): 322–37.

72. Judith A. Stein, Mary Jane Rotheram-Borus, and Patricia Lester, "Impact of Parentification on Long-Term Outcomes among Children of Parents with HIV/AIDS," *Family Process* 46 (2007): 317–33.

73. Hooper, Marotta, and Lanthier, "Predictors of Growth and Distress."

74. Nancy D. Chase, Mary P. Deming, and Marolyn C. Wells, "Parentification, Parental Alcoholism, and Academic Status among Young Adults," *American Journal of Family Therapy* 26 (1998): 105–14, doi: 10.1080/01926189808251091; Rebecca Jones and Marolyn Wells, "An Empirical Study of Parentification and Personality," *American Journal of Family Therapy* 24 (1996): 145–52, doi: 10.1080/01926189608251027; Tara S. Peris et al., "Marital Conflict and Support Seeking by Parents in Adolescence: Empirical Support for the Parentification Construct," *Journal of Family Psychology* 22 (2008): 633-42, doi: 10.1037/a0012792; Molly P. Valleau, Raymond M. Bergner, and Connie B. Horton, "Parentification and Caretaker Syndrome: An Empirical Investigation," *Family Therapy* 22 (1995): 157–64.

75. Thomas J. McMahon and Suniya S. Luthar, "Defining Characteristics and Potential Consequences of Caretaking Burden among Children Living in Urban Poverty," *American Journal of Orthopsychiatry* 77 (2007): 267-81, doi: 10.1037/0002-9432.77.2.267; Peris et al., "Marital Conflict and Support Seeking."

76. Chandra et al., "Children on the Homefront."

77. Department of Defense Education Activity, "DoDEA Announces 2010 SAT Results," news release, Sept. 20, 2010, http://www.dodea.edu/newsroom/pressreleases/20100920.cfm; see also Blaisure et al., *Serving Military Families.*

78. Margaret Beale Spencer et al., "Understanding Vulnerability and Resilience from a Normative Developmental Perspective: Implications for Racially and Ethnically Diverse Youth," in *Developmental Psychopathology,* ed. Dante Cicchetti and Donald Cohen, 2nd ed. (New York: Wiley, 2006), 627–72.

79. Rebecca Porter, "Invited Commentary: The Positive Youth Development Perspective is an Exciting Direction for Adolescent and Family Policies and Programs," *Journal of Youth and Adolescence* 39 (2010): 841, doi: 10.1007/s10964-010-9554-1.

80. Lisa S. Meredith et al., *Promoting Psychological Resilience in the US Military* (Santa Monica, CA: RAND Corporation, 2011).

81. Kristin Mmari et al., "When a Parent Goes Off to War: Exploring the Issues Faced by Adolescents and Their Families," *Youth & Society* 40 (2009): 455–75, doi: 10.1177/0044118X08327873.

82. Military Child Education Coalition, *Performance Report 1998–2008* (Harker Heights, TX: MCEC, 2009), http://www.militarychild.org/public/upload/images/10YearMCECPerformance_ReportFINAL.pdf.

83. Patricia Lester et al., "TALK: Teens and Adults Learning to Communicate," in *Handbook of Evidence-Based Treatment Manuals for Children and Adolescents*, ed. Craig W. LeCroy (New York, NY: Oxford University Press, 2008), 170–285; William Beardslee et al., "Family-Centered Preventive Intervention for Military Families: Implications for Implementation Science," *Prevention Science* 12 (2011): 339–48, doi: 10.1007/s11121-011-0234-5; William R. Saltzman et al., "Mechanisms of Risk and Resilience in Military Families: Theoretical and Empirical Basis of a Family-Focused Resilience Enhancement Program," *Clinical Child and Family Psychology Review* 14 (2011): 213–30, doi: 10.1007/s10567-011-0096-1.

84. William R. Saltzman et al., *FOCUS for Military Families: Individual Family Resiliency Training Mannual*, 2nd ed., unpublished manual, University of California, Los Angeles, 2009.

85. Patricia Lester et al., "Evaluation of a Family Centered Prevention Intervention for Military Children and Families Facing Wartime Deployments," *American Journal of Public Health* 102, no. S1 (2011): S48–54, doi: 10.2105/AJPH.2010.300088.

86. Beardslee et al., "Family-Centered Preventive Intervention."

87. Anita Chandra et al., "Understanding the Impact of Deployment on Children and Families: Findings from a Pilot Study of Operation Purple Camp Participants," Working Paper WR-566 (Santa Monica, CA: RAND, 2008).

88. "Positive Youth Development Research," *National 4-H Council Website*, accessed Aug. 15, 2012, http://www.4-h.org/about/youth-development-research/positive-youth-development-study.

89. Angela J. Huebner et al., "Shadowed by War: Building Community Capacity to Support Military Families," *Family Relations* 58 (2009): 216–28.

90. Operation Military Kids, *Operation Military Kids 2010*, http://dl.dropbox.com/u/40062293/OMK_National_Rpt_v5b-web2b.pdf; James A. Edwin, "An Evaluation of a Military Family Support Program: The Case of Operation: Military Kids in Indiana" (doctoral dissertation, Purdue University, 2007).

91. Gary L. Bowen et al., "Promoting the Adaptation of Military Families: An Empirical Test of a Community Practice Model," *Family Relations* 52 (2003): 33–44; Huebner et al., "Shadowed by War."

How Wartime Military Service Affects Children and Families

Patricia Lester and Lieutenant Colonel Eric Flake (U.S. Air Force)

Summary

How are children's lives altered when a parent goes off to war? What aspects of combat deployment are most likely to put children at risk for psychological and other problems, and what resources for resilience can they tap to overcome such hardships and thrive?

To answer these questions, Patricia Lester and Lieutenant Colonel Eric Flake first examine the deployment cycle, a multistage process that begins with a period of anxious preparation after a family receives notice that a parent will be sent into combat. Perhaps surprisingly, for many families, they write, the most stressful part of the deployment cycle is not the long months of separation that follow but the postdeployment period, when service members, having come home from war, must be reintegrated into families whose internal rhythms have changed and where children have taken on new roles. Lester and Flake then walk us through a range of theoretical perspectives that help us understand the interconnected environments in which military children live their lives, from the dynamics of the family system itself to the external contexts of the communities where they live and the military culture that helps form their identity.

The authors conclude that policy makers can help military-connected children and their families cope with deployment by, among other things, strengthening community support services and adopting public health education measures that are designed to reduce the stigma of seeking treatment for psychological distress. They warn, however, that much recent research on military children's response to deployment is flawed in various ways, and they call for better-designed, longer-term studies as well as more rigorous evaluation of existing and future support programs.

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Patricia Lester and Lieutenant Colonel Eric Flake (U.S. Air Force)

As the longest war in United States history, the conflict in Iraq and Afghanistan has placed extraordinary demands on children living in military families. Long separation from a parent is difficult for children of any age, but separation combined with the heightened danger of wartime military service is unique to military children.

As a matter of course, military children and their families negotiate the many transitions in military life that are familiar and expected—frequent moves, job reassignments, changing friends and communities, and new schools in different states and even different countries. These transitions may be rewarding, with opportunities for growth and adventure. But they may also be disruptive, with changes in routines and support networks for children and adults alike.

Over the past decade, however, U.S. military children and their families have also had to manage the cumulative stress of separation from a loved one in the context of danger. Children have said goodbye with the pervasive worry that their mother or father might return injured, or might not return at all. Multiple deployments mean that military children may experience this type of separation many times, from infancy to adolescence. Even if they themselves aren't directly affected, most military children know another child who has lost a loved one or seen a parent or sibling return injured from war. These children often know how hard it is to reconnect with a parent who suffers from traumatic brain injury, posttraumatic stress, or a serious physical disability. Deployment and its dangers can threaten children's sense of security in their primary caregiving relationship, a disruption that may not readily resolve even after the parent returns home. Perhaps more than any other unique characteristic of military life, deployment—and the way it shapes children's expectations of their caregiving relationships and their family's sense of safety—is central to understanding how parents' wartime service affects military-connected children.

In this article, we examine what we know and what we still need to know about how children react to military life and their parents' wartime service. We use developmental theory and research as the foundation to understand how children may experience wartime deployments, paying particular attention to risk and resilience. We hope that our framework will help guide a national research agenda and develop a public health approach for military-connected children and their families, at the same time that it offers insights about civilian children affected by other types of adversity.

Children have said goodbye with the pervasive worry that their mother or father might return injured, or might not return at all.

Context for Wartime Deployment

About four million military-connected children live in the United States, or about 5 percent of the total of 80 million children. More than two million children have a parent on active duty or in the Guard and Reserve, and another two million have a parent who is a veteran; 90,000 children are born annually to

active-duty service members. An even greater number of children have been affected by a sibling's military service. In essence, these children serve along with their family members, often without recognition for their contributions and sacrifice. Though some of them live on military installations, many do not, and military-connected children are embedded throughout our civilian communities. Only 50 percent of military children receive medical care on-base, and 80 percent of them attend civilian schools.[1]

Like families everywhere, military families have evolved over time, reflecting cultural and historical context. During the Vietnam era, as few as 10 or 15 percent of active-duty service members were married and had children. By contrast, in the contemporary all-volunteer force, 56 percent of active-duty service members are married, and nearly 7 percent of those are married to another service member. Notably, active-duty service members tend to marry and start a family earlier than civilians in the same age range, and 50 percent of children in active-duty families are younger than age seven.[2]

Relatively high pay and benefits, job security and readily available child care may influence service members' decisions to marry and start families earlier than the national norm. Military service offers a transparent pay scale and high standards of racial and gender equity.[3] Children raised in active-duty military households have at least one parent who is employed, and the job's benefits include health care (free for service members and inexpensive for their families) and access to an array of social services, including high-quality child care. These social, economic, and demographic factors, many of which provide stability and resources, can have lasting positive effects on children's physical, cognitive, and social-emotional development, and they may help to buffer the stress of deployment.

Among military families, several subpopulations warrant special attention, particularly in the context of deployment separations. Currently, 2.3 percent (52,322) of individual service members live in dual-service families with children, about 30 percent of female service members are mothers, and 6.9 percent (155,000) of service members are single parents.[4] More than 100,000 military families have children with special health-care needs.[5] These military children experience sources of stress that the majority of their peers do not.

Children and Military Life

Many experiences enrich a military child's life, but these adventures can bring both opportunity and hardship.[6] From an early age, children in military families often move to new communities, change schools and friends, live in foreign countries, and experience long periods of family separation. Active-duty families typically move every two to three years, potentially hindering their ability to establish a sense of belonging to a community. Even when they stay connected to a single base, families may move many times. Within a year of arriving at a new base, military families are typically already discussing and preparing for the next assignment and location. Even those who don't move may feel isolated because they have few friends with similar experiences and related emotions.[7]

Despite these challenges, living in a military family gives children a meaningful identity associated with strength, service, and sacrifice, which is a basic component of military culture not only for service members but also for their family members. This identity and the larger military community are

important sources of resilience and support.[8] Notably, the child's experience of this identity may vary depending on the parent's service branch and duties; each military branch has its own culture, with unique traditions, histories, and service roles. These unique characteristics influence service members' training, mobility, and deployments, which in turn influence their families. Appreciating these different background characteristics provides a context for understanding how children's individual experiences differ within the setting of their families and communities.[9]

Deployment

For military children, separation from a parent during deployment makes the family's already dynamic cycle of frequent moves even more complex. When a service member is deployed or sent on an unaccompanied yearlong tour, many families move to be closer to extended family. One study of families with a currently deployed service member found that 47 percent had moved at least three times in the past five years.[10]

The deployment cycle model describes the range of emotions and behaviors that families and children experience.[11] The model includes five phases: predeployment, deployment, sustainment (during deployment), redeployment, and postdeployment. During predeployment, children and family members may withdraw emotionally. When the service member leaves, emotions may intensify, and children can feel overwhelmed, sad, or anxious. When he or she returns, the family feels excitement and relief during a honeymoon period, but this is followed by another readjustment as the service member reintegrates into the family. Families must renegotiate roles and relationships, and they revisit family problems that were set aside during deployment.

The way children react to the deployment cycle depends on their age. Very young children may be more vulnerable to disruptions in parental functioning and family relationships, because they have fewer coping skills and less outside support than older children do.[12] Younger children typically express the stress of separation by struggling with daily routines, regressing behaviorally, withdrawing emotionally, and sometimes acting out.[13] School-aged children and adolescents, on the other hand, are more aware of their parents' duties and the dangers of war. Deployed parents aren't there to help with daily routines like homework, and they may miss major developmental milestones like school graduations.[14] Older children may take on new responsibilities and roles; they must not only help when a parent is away, but also when a parent comes home with physical or psychological injuries. For many families, in fact, readjustment is the most stressful part of the deployment cycle, yet it remains the least understood.[15] Although the deployment cycle model is widely used to guide educational programming, we must caution that it has not been studied through longitudinal research—that is, research that follows individuals or families over time.

Over the past decade, hundreds of thousands of military families have experienced the cycle of deployment many times. Their cumulative experience of multiple deployments is perhaps best described not as a cycle but as a *spiral*, a word that captures the accumulation and transformation of experience, both positive and negative, as the child and family grow.[16] The fast operational tempo during the past decade of war has dramatically increased the frequency and length of deployments, and decreased the amount of time at home between deployments.[17] Policies developed in peacetime were designed to allow service

members to stay at home for 18 to 24 months between deployments, giving them time to reconnect with family members. As deployments have grown longer, many service members have experienced unanticipated redeployments shortly after returning home, and this creates uncertainty and instability in family routines and roles.

Nowadays, however, technology allows real-time communication between deployed service members and their families, through e-mail, web chat, social media, etc. This sort of communication may help to maintain family connections. But such brief encounters don't always produce effective communication, and they can leave the family and the service member frustrated. Moreover, real-time communication brings family problems to the battlefront and the realities of war to the family, at times exacerbating the uncertainty and fear that spouses and children feel. And military commanders must negotiate how sensitive information leaves the combat theater, for example, by ensuring that families learn about casualties through appropriate channels rather than through social media.

Ecological Context of Development

Military children are embedded in an array of systems—family, school, health care, spiritual, and local and national communities—all of which may affect how they experience and negotiate their parents' deployments.[18] To better understand how parental deployments and other military separations during wartime affect children as they grow, we must recognize how these multiple systems contribute to child and family outcomes.[19] Urie Bronfenbrenner's ecological perspective provides a framework for doing so.[20] An ecological model emphasizes the mutual

influences both within families and between families and their social context.[21] If we identify and understand the links between family and community, we can better understand how families and communities affect the way children adjust over time, as well as the interplay between risk and resilience across the family system.[22] (For a detailed discussion of risk and resilience among military children, see the article in this issue by Ann Easterbrooks, Kenneth Ginsburg, and Richard Lerner.)

From an ecological perspective, how deployment affects military children and families may also be related to historical, social, and cultural contexts, including the national response to returning service members and veterans. A review of the relationship between military service and life course noted that returning combat veterans who received greater social support suffered fewer adverse effects from deployment.[23] Unlike during the Vietnam era, the national response to service members returning from Iraq and Afghanistan has been generally supportive, and an array of national and local initiatives has emerged to help service members, veterans, and their families. Still, only a small portion of our nation's population has direct knowledge about and experience of military service. In this context, communities, whether local or national, may not adequately recognize, understand, or support the military family's sacrifices.

Family Systems

Individuals are best understood in the context of the family system.[24] From a family system perspective, interactions between parents and children are bidirectional—that is, family members influence and modify one another.[25] Therefore, each family member's experiences

and reactions to military life will reverber-ate throughout the system. For example, individual distress, such as a combat-related mental health problem, may affect parenting practices, marital relationships, or extended family support. Marital conflict may spill over to other family relationships, such as those between parents and children, as well as to individual functioning.[26] Conversely, children's sleep or behavioral problems may strain marriages and family life. Thus family relationships influence one another, in ways that can be positive or negative. This prin-ciple applies not just to parents and children but to the extended family as well, including relationships with and among siblings, grand-parents, and others who play an important role in a child's life.

Family systems theory also helps us see how typical developmental milestones, as well as atypical or stressful life events, can affect family equilibrium. The deployment cycle and the transition from military to civilian life require changes to roles and routines, and these changes can disrupt family stabil-ity. For example, when a parent is deployed, adolescents often take on greater responsi-bilities to help the family. As they contribute to the family's shared mission, children may reap rewards, growing more competent and self-confident. However, when children take on more family responsibilities (for example, by caring for younger siblings), they may miss developmental opportunities because they don't have the time and freedom to pursue age-appropriate activities.[27] Furthermore, if boundaries change during deployment, the family may have trouble readjusting when the service member parent returns; for example, a child may not want to give up newfound autonomy.

Co-Parenting

Research on co-parenting gives us more insight into military families, as couples negotiate separation, readjustment, and reac-tions to combat-related stress. Co-parenting includes the ways that parents manage childrearing decisions, share responsibilities, and respond to each other's strategies. The quality of a co-parenting relationship is asso-ciated with the level of maternal warmth, the father's involvement, and parent-child inter-actions, and it is linked to children's wellbeing over time.[28] Deployment presents several obstacles to effective co-parenting, espe-cially because separations and reunifications require frequent shifts in responsibility for maintaining family routines and discipline. When these transitions happen unexpectedly, parents have little opportunity to prepare and communicate as a team. Furthermore, if the military parent returns with physical or mental health problems, the communication capacities that are central to effective co-parenting may be disrupted.

Attachment Theory

Research based on attachment theory has established that parent-child relationships are fundamental to social and emotional well-being throughout childhood.[29] Attachment theory describes how children develop a sense of security from their earliest experi-ences with a caregiving parent—specifically, how the parent provides protection and comfort in the context of threat.[30] From their earliest interactions with a parent, children develop their capacity for behavioral and emotional self-regulation, and the parents' ability to act as an external source of emo-tional regulation for the young child is a primary predictor of attachment security. Further, a child's confidence that a parent can provide emotional support enhances his

or her capacity to explore new environments and develop social competencies. These ideas suggest that children may have less confidence in a deployed parent's ability to provide reassurance, care, and safety, particularly when the parent is facing the dangers of war.[31]

> *Each family member's experiences and reactions to military life will reverberate throughout the system.*

Some longitudinal research shows that children who form secure attachment relationships early in life develop more positive social relationships with their peers, have greater academic success, and manage stress more effectively.[32] Attachment security also buffers physiological stress responses in early childhood, and it protects early brain development.[33] In fact, secure attachment relationships contribute to cognitive, social, emotional, and physical growth throughout childhood and into adult life.[34]

For military-connected children, a service member's deployment means that a primary caregiver—one of the child's usual resources for managing distressing events—is not immediately available. The child may seek more support from the parent who remains at home. However, an increase in household duties, greater parenting responsibilities, and worry over the deployed spouse's safety may interfere with the at-home parent's ability to respond to the child's increased demands.[35] In single-parent families, children may be separated from their sole primary caregiver; in dual-service families, both parents may

be deployed at the same time. In either case, children may be left in the care of extended family members or others, suggesting that these children may be particularly vulnerable.

Attachment theory also helps us understand how children are affected in the long term when a parent returns home with symptoms of posttraumatic stress or grief. Research on civilians indicates that parents with unresolved trauma or loss are more likely to have a disorganized attachment relationship with their children.[36] Parents who suffer from symptoms of posttraumatic stress, including aggression, irritability, or unpredictable responses to reminders of trauma, can behave in ways that confuse, upset, or even frighten children.[37] Unlike children who demonstrate secure attachment behaviors, children with disorganized attachment relationships have more trouble regulating their emotions, and they have a higher risk for psychological problems throughout their lives.[38] But we need more research to see whether these findings from civilian life hold true for children living with parents who have experienced combat trauma and loss.

Stress and Resilience
We can also gain insight into the lives of military children through research that documents how children develop when they face many hardships at once.[39] Longitudinal research among civilians consistently demonstrates that children who live in families with multiple risk factors are more likely to experience social, emotional, physical, and psychological problems than are children who live with fewer risks.[40] Early research showed that children who are exposed to multiple risk factors in the family are significantly more likely to develop mental health problems. More recently, we

have learned that the adversities parents face—demographic, environmental, and psychological—affect children both directly and indirectly.[41] The same studies have also consistently demonstrated that the quality of the caregiver-child relationship influences whether children experience the stress of these multiple hardships as "tolerable" or "toxic."[42] Thus research with civilian populations suggests that a cumulative stress model can help us understand how deployment affects military children. But we need to know the relative contribution and timing of independent and combined risk factors, including risks embedded in community systems (for example, level of resources, military rank and duty, school environment, level of community support, or historical context), risks directly related to deployment (parents' exposure to combat, cumulative length of separations), and risks at the family level (marital relationships, co-parenting, family adjustment).

A cumulative stress model that accounts for interactions at the systems level can also help illuminate pathways of resilience for military children. Ann Masten calls resilience "the capacity of a dynamic system to withstand or recover from significant challenges that threaten its stability, viability, or development."[43] If we clarify how resilience works for military children and families who face multiple deployments, we can build better preventive strategies. We can also learn, through longitudinal research, why some children grow more resilient than others, despite being exposed to similar levels of cumulative risk.[44] Developmental research consistently identifies family relationships and supportive communities as crucial factors that help children develop resilience in the face of adversity.[45] Based on resilience research, Froma Walsh has developed a model of core processes that

help families successfully manage adversity, including effective communication, collaborative problem solving, and the ability to create shared meaning.[46] Using models like this, scholars have developed intervention strategies that enhance family resilience.[47]

Research on Deployment, Children, and Families

One of the earliest studies of wartime deployment's effects on children comes from World War II; it suggested that a family's reaction to a service member's prolonged absence could affect the returning veteran's ability to reintegrate.[48] The Vietnam era saw a growing interest in studying military families, which led to the concept of a "military family syndrome." According to this concept, the returning father oversaw a household under an authoritative regimented order, producing psychological problems in military children.[49] More recent and rigorous research does not support the idea of such a syndrome, however. Although the evidence is still limited, it appears that most military children demonstrate the same psychological and behavioral processes that comparable civilians do.[50]

The past decade of war has brought national attention to military families, highlighting the need to better understand how parents' military service and combat deployments affect children. As a result, more studies of military children have been conducted.[51] A recent review of such studies found that parents' deployment is consistently associated with children's behavioral and academic problems, although the strength of this association is modest.[52] Next we summarize key findings from the latest research on military children, focusing on children's academic performance and psychological health.

Academic Performance

Research indicates that a parent's deployment can affect how military children do in school.[53] Quantitative and qualitative studies of children, caregivers, and schools alike have shown that deployment has modest negative effects.[54] For example, one of the authors of this article, Eric Flake, along with several colleagues, surveyed spouses of deployed soldiers who had at least one school-aged child; 14 percent reported that at least one of their children was having problems in school, including falling grades, declining interest, and conflicts with teachers.[55] Similarly, when the Department of Defense surveyed 26,000 spouses of active-duty and Guard and Reserve service members, it found that more than half of adolescent children saw their academic performance fall when a parent was deployed.[56] In focus groups, educators report that children of deployed parents are less likely to finish their homework and more likely to be absent.[57] Annual test scores tell a similar story. For example, achievement test scores of Army children in North Carolina and Washington showed modest but academically meaningful declines among students with a parent who had been deployed for a total of 19 months or more.[58]

Psychological Health

Young children. About 40 percent of children in active-duty military families are five years old or younger.[59] As we've said, young children are likely to be particularly sensitive to multiple long separations from a primary caregiver. Although few researchers have examined this recognized risk among very young military children, at least two studies have found that preschool children with a deployed parent are more likely than other children to exhibit behavioral problems.[60]

School-age children and adolescents. Like preschoolers, school-age children and adolescents with a deployed parent show moderately higher levels of emotional and behavioral distress.[61] In fact, school-age Marine Corps and Army children reported more symptoms of anxiety not only when a parent was deployed but also for up to a year after the parent returned home, suggesting that emotional effects continue after deployment ends.[62] Other studies of school-age children and teens with deployed parents have found increases in problems with peer relationships, physiological signs of stress, emotional and behavioral problems, depression and suicidal thoughts, and use of mental health services.[63] Interestingly, one recent study found that adolescents were more likely to use drugs or alcohol not only when a parent was deployed, but also when a sibling was sent to war.[64]

Families. Beyond the individual child, wartime deployment can also affect the way a family functions. For example, children are more likely to be maltreated or neglected in families affected by deployments, especially families consisting of younger parents with young children.[65] Deployment may also increase marital conflict and interpersonal violence in families.[66] A number of studies have found that family-level factors such as parent-child communication, as well as community support, can affect how children and families adjust to deployment.[67]

Child gender. A few studies have examined whether boys and girls react differently to wartime deployment. During the Gulf War, for example, one study found that school-age boys showed more behavioral distress than girls did.[68] Working with a number of colleagues, one of the authors of this article,

Patricia Lester, found an interesting pattern: girls with a deployed parent acted out more frequently than those with a recently returned parent, while boys did just the opposite.[69] But Anita Chandra found that girls had more problems when a parent returned than boys did.[70] These varied findings underscore how complex the deployment experience can be for individuals and families.

Separation during deployment. Studies consistently find that, as the cumulative stress model would predict, the longer and more often a parent is deployed, the greater the psychological, health, and behavioral risk for the child; for example, children whose parents were deployed the longest exhibited more problem behaviors and received more diagnoses of mental health problems.[71] But we need further longitudinal research to better understand how the nature of deployment (for example, combat vs. noncombat) and its timing interact with children's developmental transitions, as well as to clarify which processes may accelerate or buffer this risk.

Parent psychological health. When their parents suffer psychological distress during deployments, research shows, military children are at risk for adjustment problems. As we've said, an extensive body of research documents this effect in civilian populations, so it isn't surprising to see the same result in military families.[72]

Following wartime deployment, 17 to 20 percent of returning active-duty service members and veterans screen positive for combat-related mental health problems; the rates are higher in the Guard and Reserve.[73] Military parents who return home with mental health problems, such as posttraumatic stress disorder (PTSD) or depression, may not be able to manage their own reactions well,

compromising their relationships with other family members and interfering with their parenting.[74] For example, a parent who experiences the emotional numbing characteristic of PTSD may have trouble communicating or engaging with a spouse or child, putting both the marriage and the parent-child relationship at risk.[75] Furthermore, the tendency of returning service members to be hypervigilant and to react strongly and unpredictably to reminders of trauma may translate into marked irritability in interpersonal family relationships.[76] Children may perceive increased conflict in family relationships as a threat to their emotional security and to the integrity of family life.[77] Parents who react to reminders of combat stress and loss may also withdraw from family interactions and routines.[78] Research with veteran families shows that the reverberating effects of PTSD across family relationships can increase the risk for psychological health and adjustment problems in children and spouses living with these disruptions.[79]

Studies consistently find that … the longer and more often a parent is deployed, the greater the psychological, health, and behavioral risk for the child.

Family type. The way children experience deployment may vary by family situation. For example, we need to better understand how children react to a mother's versus a father's deployment. Also, the military's January 2013 decision to allow women to serve on the front

line means that we need to further scrutinize the impact on children of maternal military service and combat exposure. Within the military, we've seen an increase in both single-parent and dual-service families, but research on these groups is in short supply. One study of married and single Navy mothers found that deployment affected their children differently, with children of distressed single mothers exhibiting behavioral symptoms not seen in the children of married mothers.[80] Perhaps the absence of a second caregiver to help buffer the stress of deployment presents a risk for children's psychological adjustment. Children of deployed single parents may also worry more about their parent's safety and feel more vulnerable about their own care and protection.

Implications for Research

Despite its limitations, the emerging research on military children and parental deployment corresponds with what we know from civilian populations about how stress and separation affect children and families. For example, research on military families consistently indicates that stress accumulates with greater exposure, and that it reverberates through the family system, with both direct and indirect pathways of transmission. Furthermore, the research supports the idea that military families are strongly affected by relationships with their various contexts—communities, schools, health care, etc.—suggesting that effective prevention and intervention strategies should be embedded in existing systems of care, whether military or civilian.[81]

But we must interpret the research on military families cautiously. Many studies have been conducted with relatively small samples; chosen research subjects because they were easy to get access to rather than seeking a representative sample; selected research designs that can't demonstrate cause and effect; or relied solely on surveys of parents. Moreover, very few include direct observational data. Recently, however, researchers have been increasingly trying to overcome these shortcomings in design. Additionally, researchers are paying more attention to the systems that surround military children, including family, school, and community. Studies that use large military and medical data sets have already linked deployment to child maltreatment and greater use of mental health–care services.[82]

Despite these advances, researchers generally agree that a longitudinal study with a large, representative sample, which accounts for differences among the service branches, would help us pin down how the stresses of military life and deployment affect family functioning and child wellness in the long run. In particular, we need to clarify whether deployment and other family separations in the context of war and combat have effects that differ markedly from the separation effects we see in studies of civilian populations.

A longitudinal study could also help to clarify the role that developmental cascades play in the military child's life. The cascade model says that the way children function at one stage of life or in one developmental domain (physical, emotional, social, language, or cognitive) may affect how they function later in life or in other developmental domains. Longitudinal research based on the cascade model could help tell us how deployment and military life interact with other factors over time.[83] Such research could also help us to identify critical points during deployment and reintegration when we can build on positive cascades and interrupt negative ones, as we have done for nonmilitary populations.[84]

Studies should also use developmentally appropriate ways to measure resilience, stress, and wellness in children. We lack benchmarks for military children and families on standard assessments of child well-being. Thus we have relied on comparisons to civilian community norms, which may not adequately represent the norms for military children. We need to pay particular attention to at-risk or underrepresented populations within the military community, including single-parent and dual-service families, families exposed to combat injury or death, and families with risk factors such as mental illness, poor health, or children with disabilities.

Some longitudinal research on military families is already under way. For example, the Millennium Family Life Study is adding a spouse survey to a two-decade study of U.S. service members, and the RAND Corporation is conducting a three-year study of military families that surveys not only mothers and fathers, but also children who are at least 11 years old. Ideally, future researchers will have access to data from these longitudinal samples, which will help us integrate research on military children with national child health data sets.

We also need to know more about how service members and their families use real-time communication technology, so that we can guide policy and practice and enhance community education and intervention. A 2010 military lifestyle survey reported that 88 percent of military families use social media or e-mail more than once a week to connect with deployed service members.[85] Social media and electronic communication can keep families informed and give them better access to support services, yet we know little about the risks and benefits of these technologies.

Research on military children can also benefit civilian families. Military families are certainly not unique in having at least one parent whose work requires separation from their children; for example, truck drivers and pilots also spend a lot of time away from home. Nor are military jobs the only ones that involve dangerous duties; firefighters and police officers, for example, face danger every day. We anticipate, then, that research on military children who face the stress of deployment and military life will help us develop preventive interventions that can be translated to civilian children.

Implications for Prevention

Family-centered prevention science—which builds on the evidence that parenting, parent-child relationships, and family-level factors play an important role in children's development—can guide us to effective approaches to reducing the risk of deployment separations.[86] The ecological systems framework we described in this article can help integrate research findings so that we can offer targeted and timely preventive interventions for military and veteran children and families. Systemic methods that build on individual and family resilience processes to mitigate risk should be highly compatible with military communities, which value proactive approaches.[87] A systemic framework also recognizes that we must take community and culture into account when we develop new programs or adapt existing ones. As an example of how a systemic approach can improve interventions, studies among civilians, as well as a recent study of National Guard soldiers, have found that psychological health services are more acceptable and less stigmatizing when provided to families as a whole rather than to individuals.[88]

We should develop delivery platforms that engage virtual as well as physical communities.

Over the past decade, communities, military bases, the service branches, and the Department of Defense have rolled out a multitude of psychological health and family support programs for military families. Unfortunately, most of these programs lack scientific evaluations that could be used to determine their effect on the target population or to compare their costs against their benefits. Some programs, however—such as Families OverComing Under Stress (FOCUS), which offers resilience training, and the Army's School-Based Behavioral Health Program—not only use systemic approaches but also integrate evaluation into their design and implementation.[89] Also, a number of research initiatives are now attempting to rigorously evaluate the impact of various preventive and treatment interventions for military families.[90]

If we establish processes to assess and rigorously evaluate interventions, we can find the most effective programs and the best ways to implement them; certainly, we must pay attention to intervention fidelity, training, integration into military communities, and customization for particular settings and specific stresses.[91] In this way, we may advance not only the care of military families, but of children and families affected by other types of adversity as well. Fortunately, a range of innovative partnerships between military and civilian systems are under way, linking publicly collected data to the needs of military children. At the same time, assessment and intervention research on military children and families has been identified as a national and military research funding priority. Despite these advances, barriers to conducting research with military-connected children and families persist; for example, we need to streamline institutional review and data sharing across academic, Veteran's Affairs and military institutions.

As we said earlier, military-connected children, particularly those who live far from military installations, can be difficult to reach through traditional program delivery strategies. Taking an ecological perspective, we should develop delivery platforms that engage virtual as well as physical communities. Innovative web-based and mobile-application strategies can help us deliver education, prevention, and intervention to geographically dispersed children and their families. These programs hold promise for reaching greater numbers of children and families by reducing physical barriers, easing the burden of travel, and minimizing the stigma associated with mental health services; therefore, they warrant further rigorous study.

Implications for Public Health Policy

From a policy perspective, quantifying the impact of cumulative stress on military families may help the military set the length of deployments. We also need more data on families who do well despite multiple deployments, to help identify the supports they use to maintain stability. This information might help identify the children and families most vulnerable to deployment stress, so that we could allocate resources more effectively. Furthermore, our knowledge of military families' psychological health needs suggests

that we should facilitate public health education across military, veteran, and civilian communities, potentially reducing the stigma of seeking care.

Policy initiatives like the Army Family Covenant and the recent Joining Forces campaign by the White House have primed military and community leaders to focus even more on the role of the military family. A family focus is central not only to military readiness, but also in the larger context of support for our returning warriors. The ecological framework suggests that we should enhance existing systems of care to more effectively respond to the needs of military and veteran families. Community-based systems, including schools, child-care providers, and health-care and mental health facilities, should develop protocols to identify military-connected children, and they should receive training to provide relevant services based on sound evidence of their effectiveness. As the nation has recognized that strengthening systems of care in civilian communities is central to building resilience in military children, initiatives and partnerships have sprung up among local, state, and national organizations, and these should be encouraged.

Often, policy makers focus on the children of active-duty service members. Yet military life affects children far beyond military installations. If resources are concentrated on or near installations, Guard and Reserve families can be isolated from services and community support. Similarly, veterans and their families are dispersed across the nation. Reintegrating into civilian society often means fewer resources, fewer services, and

separation from the structure and identity inherent in military life. Understanding these individual life experiences remains a national priority, so that we can tailor our support for military children regardless of their situation.

Conclusions

Military children and families strengthen our national security. When a military father or mother volunteers to serve our country, their children do so as well. Military families have an immense sense of pride in the service they perform for the United States of America. Their mission requires constant change, poses continual and unforeseeable demands, and can be both challenging and rewarding. Even though the stress of military life has escalated in the past decade, military families continue to report high levels of strength and endurance.[92]

As a nation of individuals, families, communities, and systems of care, we share a responsibility to support military children and families by investing in research, services, and policies that honor their service and sacrifice. The best way to show our national gratitude is to respond effectively to their needs. Clinicians, researchers, and community members must work together to understand the challenges that military-connected children face, and to tackle the long-term implications for public health. A successful national public-health response for military-connected children and families requires policies that help military and civilian researchers—as well as communities and systems of care—communicate, connect, and collaborate with one another.

ENDNOTES

1. Department of Defense, *2011 Demographics Profile of the Military Community* (Washington: Office of the Deputy Under Secretary of Defense, 2012), http://www.militaryonesource.mil/12038/MOS/Reports/2011_Demographics_Report.pdf.

2. Ibid.

3. James Hosek and Shelley MacDermid Wadsworth, "Economic Conditions of Military Families," *Future of Children* 23, no. 2 (2013): 41–60.

4. Department of Defense, *2011 Demographics Profile*; Lori Manning, *Women in the Military: Where They Stand,* 5th ed. (Washington: Women's Research and Education Institute, 2005).

5. Department of Defense, *2011 Demographics Profile*.

6. Lolita M. Burrell et al., "The Impact of Military Lifestyle Demands on Well-Being, Army, and Family Outcomes," *Armed Forces & Society* 33, no. 1 (2006): 43–58, doi: 10.1177/0002764206288804; Stephen J. Cozza, Ryo S. Chun, and James A. Polo, "Military Families and Children During Operation Iraqi Freedom," *Psychiatric Quarterly* 76, no. 4 (2005): 371–78.

7. Eric M. Flake et al., "The Psychosocial Effects of Deployment on Military Children," *Journal of Developmental & Behavioral Pediatrics* 30, no. 4 (2009): 271–78, doi: 10.1097/DBP.0b013e3181aac6e4.

8. Shelley MacDermid Wadsworth et al., "Approaching Family-Focused Systems of Care for Military and Veteran Families," *Military Behavioral Health* 1 (2013): 1–10, doi: 10.1080/21635781.2012.721062.

9. Molinda M. Chartrand and Benjamin Siegel, "At War in Iraq and Afghanistan: Children in US Military Families," *Ambulatory Pediatrics* 7 (2007): 1–2.

10. Flake et al., "Psychosocial Effects."

11. Simon H. Pincus et al., "The Emotional Cycle of Deployment: A Military Family Perspective," *US Army Medical Department Journal* (April–June 2001): 15–23.

12. Ruth Paris et al., "When a Parent Goes to War: Effects of Parental Deployments on Very Young Children and Implications for Intervention," *American Journal of Orthopsychiatry* 80, no. 4 (2010): 610–18; American Psychological Association, *The Psychological Needs of U.S. Military Service Members and Their Families: A Preliminary Report* (Washington: American Psychological Association, 2007).

13. Kathleen Mulrooney and Dorinda Silver Williams, *Increasing Understanding of Infants and Young Children in Military Families through Focused Research* (Los Angeles: USC School of Social Work, Center for Innovation and Research on Veterans and Military Families, 2012), http://cir.usc.edu/wp-content/uploads/2011/09/CIR-Policy-Brief_Mar2012_K.Mulrooney-D.Williams.pdf.

14. Valorie Maholmes, "Adjustment of Children and Youth in Military Families: Toward Developmental Understandings," *Child Development Perspectives* 6 (2012): 430–35, doi: 10.1111/j.1750-8606.2012.00256.x.

15. Pincus et al., "Emotional Cycle."; Leora N. Rosen, Joel M. Teitelbaum, and David J. Westhuis, "Children's Reactions to the Desert Storm Deployment: Initial Findings from a Survey of Army Families," *Military Medicine* 158, no.7 (1993): 465–9.

16. Patricia Lester et al., "The Long War and Parental Combat Deployment: Effects on Military Children and At-Home Spouses," *Journal of the American Academy of Child & Adolescent Psychiatry* 49, no. 4 (2010): 310–20, doi: 10.1016/j.jaac.2010.01.003.

17. Institute of Medicine, *Returning Home from Iraq and Afghanistan: Preliminary Assessment of Readjustment Needs of Veterans, Service Members, and Their Families* (Washington: National Academies Press, 2010).

18. MacDermid Wadsworth et al, "Approaching Family-Focused Systems."

19. Joän M. Patterson, "Integrating Family Resilience and Family Stress Theory," *Journal of Marriage and Family* 64, no. 2 (2004): 349–60, doi: 10.1111/j.1741-3737.2002.00349.x; Pauline Boss, *Family Stress Management: A Contextual Approach* (Thousand Oaks, CA: Sage Publications, 2001); Cale Palmer, "A Theory of Risk and Resilience Factors in Military Families," *Military Psychology* 20, no. 3 (2008): 205–17.

20. Urie Bronfenbrenner, *The Ecology of Human Development: Experiments by Nature and Design* (Cambridge, MA: Harvard University Press, 1979); Urie Bronfenbrenner and Pamela A. Morris, "The Bioecological Model of Human Development," in *Handbook of Child Psychology*, 6th ed., vol. 1, *Theoretical Models of Human Development*, ed. Richard M. Lerner (Hoboken, NJ: John Wiley & Sons, 2006), 793–898.

21. Jack P. Shonkoff and Deborah Phillips, *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Washington: National Academies Press, 2000).

22. MacDermid Wadsworth et al., "Approaching Family-Focused Systems"; Bronfenbrenner and Morris, "Bioecological Model."

23. Alair MacLean and Glen H. Elder Jr., "Military Service in the Life Course," *Annual Review of Sociology* 33, no. 1 (2007): 175–96, doi: 10.1146/annurev.soc.33.040406.131710.

24. Patricia Minuchin, "Families and Individual Development: Provocations from the Field of Family Therapy," *Child Development* 56 (1985): 289–302; Martha J. Cox and Blair Paley, "Families as Systems," *Annual Review of Psychology* 48, no. 1 (1997): 243–67, doi: 10.1146/annurev.psych.48.1.243.

25. Arnold J. Sameroff, "Developmental Systems and Family Functioning," in *Exploring Family Relationships with Other Social Contexts,* ed. Ross D. Parke and Sheppard G. Kellam (Hillsdale, NJ: Lawrence Erlbaum Associates, 1994), 199–214; Glen H. Elder Jr., "War Mobilization and the Life Course: A Cohort of World War II Veterans," *Sociological Forum* 2 (1987): 449–72, doi: 10.1007/BF01106621.

26. Osnat Erel and Bonnie Burman, "Interrelatedness of Marital Relations and Parent-Child Relations: A Meta-Analytic Review," *Psychological Bulletin* 118, no. 1 (1995): 108–32.

27. Angela J. Huebner and Jay A. Mancini, *Adjustments among Adolescents in Military Families When a Parent Is Deployed: Final Report to the Military Family Research Institute and Department of Defense Quality of Life Office* (Falls Church, VA: Virginia Polytechnic Institute and State University, Department of Human Development, 2005); Lester et al., "The Long War."

28. Darya D. Bonds and Dawn M. Gondoli, "Examining the Process by Which Marital Adjustment Affects Maternal Warmth: The Role of Coparenting Support as a Mediator," *Journal of Family Psychology* 21, no. 2 (2007): 288; Mark E. Feinberg and Marni L. Kan, "Establishing Family Foundations: Intervention Effects on Coparenting, Parent/Infant Well-Being, and Parent-Child Relations," *Journal of Family Psychology* 22, no. 2 (2008): 253–63; Sarah J. Schoppe Sullivan et al., "Coparenting Behavior Moderates Longitudinal Relations between Effortful Control and Preschool Children's Externalizing Behavior," *Journal of Child Psychology and Psychiatry* 50, no. 6 (2009): 698–706, doi: 10.1111/j.1469-7610.2008.02009.x.

29. Alan L. Sroufe, "Attachment and Development: A Prospective, Longitudinal Study from Birth to Adulthood," *Attachment & Human Development* 7, no. 4 (2005): 349–67.

30. John Bowlby, *Attachment and Loss,* vol. 1, *Attachment* (1969; repr., London: Pimlico, 1997); John Bowlby, *Attachment and Loss,* vol. 3, *Loss, Sadness and Depression* (New York: Basic Books, 1980).

31. Lester et al., "The Long War."

32. Jay Belsky and R. M. Pasco Fearon, "Early Attachment Security, Subsequent Maternal Sensitivity, and Later Child Development: Does Continuity in Development Depend Upon Continuity of Caregiving?" *Attachment & Human Development* 4, no. 3 (2002): 361–87; Melissa Nachmias et al., "Behavioral Inhibition and Stress Reactivity: The Moderating Role of Attachment Security," *Child Development* 67, no. 2 (1996): 508–22.

33. Megan R. Gunnar, "Quality of Early Care and Buffering of Neuroendocrine Stress Reactions: Potential Effects on the Developing Human Brain," *Preventive Medicine* 27, no. 2 (1998): 208–11; Nachmias et al., "Behavioral Inhibition."

34. Sroufe, "Attachment and Development."

35. Patricia Lester et al., "Wartime Deployment and Military Children: Applying Prevention Science to Enhance Family Resilience," in *Risk and Resilience in US Military Families*, ed. Shelley MacDermid Wadsworth and David Riggs (New York: Springer, 2010), 149–73.

36. Karlen Lyons-Ruth and Deborah Jacobvitz, "Attachment Disorganization: Unresolved Loss, Relational Violence, and Lapses in Behavioral and Attentional Strategies," in *Handbook of Attachment: Theory, Research, and Clinical Implications,* ed. Jude Cassidy and Phillip R. Shaver (New York: Guilford Press, 1999): 520–54.

37. Mary Main and Erik Hesse, "Parents' Unresolved Traumatic Experiences Are Related to Infant Disorganized Attachment Status: Is Frightened and/or Frightening Parental Behavior the Linking Mechanism?" in *Attachment in the Preschool Years: Theory, Research, and Intervention*, ed. Mark T. Greenberg, Dante Cicchetti, and E. Mark Cummings (Chicago: University of Chicago Press, 1990), 161–82.

38. Karlen Lyons-Ruth, "Attachment Relationships among Children with Aggressive Behavior Problems: The Role of Disorganized Early Attachment Patterns," *Journal of Consulting and Clinical Psychology* 64, no. 1 (1996): 64–73; Mary K. Dozier, Chase Stovall-McClough, and Kathleen E. Albus, "Attachment and Psychopathology in Adulthood," in Cassidy and Shaver, *Handbook of Attachment*, 497–519.

39. Jay Belsky, "Interactional and Contextual Determinants of Security," in Cassidy and Shaver, *Handbook of Attachment*, 249–61; Natasha J. Cabrera et al., "Influence of Mother, Father, and Child Risk on Parenting and Children's Cognitive and Social Behaviors," *Child Development*, 82, no. 6 (2011): 1985–2005, doi: 10.1111/j.1467-8624.2011.01667.x; Stacey N. Doan, Thomas E. Fuller-Rowell, and Gary W. Evans, "Cumulative Risk and Adolescents' Internalizing and Externalizing Problems: The Mediating Roles of Maternal Responsiveness and Self-Regulation," *Developmental Psychology* 48, no.6 (2012): 1529–39, doi: 10.1037/a0027815.

40. Vincent J. Felitti et al., "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults," *American Journal of Preventive Medicine* 14, no. 4 (1998): 245–58.

41. Michael Rutter, "Protective Factors in Children's Responses to Stress and Disadvantage," in *Primary Prevention of Psychopathology,* vol. 3, *Social Competence in Children*, ed. Martha Whalen Kent and Jon E. Rolf (Hanover, NH: University Press of New England, 1979), 49–74; Arnold Sameroff, "Ecological Perspectives on Developmental Risk," in *WAIMH Handbook of Infant Mental Health,* vol. 4, *Infant Mental Health in Groups at High Risk*, ed. Joy D. Osofsky and Hiram E. Fitzgerald (New York: Wiley, 2000); Jack P. Shonkoff et al., "The Lifelong Effects of Early Childhood Adversity and Toxic Stress," *Pediatrics* 129, no. 1 (2012): e232–46, doi: 10.1542/peds.2011-2663.

42. Shonkoff et al., "Lifelong Effects"; Margaret Burchinal, Lynne Vernon-Feagans, and Martha Cox, "Cumulative Social Risk, Parenting, and Infant Development in Rural Low-Income Communities," *Parenting Science and Practice* 8, no.1 (2008): 41–69, doi: 10.1080/15295190701830672.

43. Ann S. Masten, "Resilience in Children Threatened by Extreme Adversity: Frameworks for Research, Practice, and Translational Synergy," *Development and Psychopathology* 23, no. 2 (2011): 493–506.

44. Ann S. Masten, "Ordinary Magic: Resilience Processes in Development," *American Psychologist* 56 (2001): 227–38.

45. Marion S. Forgatch and Terje Ogden, "Enhancing Resilience in a Nationwide System of Care for Children with Behavior Disorders," paper presented at the Fourth World Conference on the Promotion of Mental Health and Prevention of Mental and Behavioural Disorders, Oslo, Norway, October 2006; Suniya S. Luthar, "Methodological and Conceptual Issues in Research on Childhood Resilience," *Journal of Child Psychology and Psychiatry* 34, no. 4 (2006): 441–53, doi: 10.1111/j.1469-7610.1993.tb01030.x; Emmy E. Werner and Ruth S. Smith, *Journeys from Childhood to Midlife: Risk, Resilience, and Recovery* (Ithaca, NY: Cornell University Press, 2001); Abigail Gewirtz, Marion Forgatch, and Elizabeth Wieling, "Parenting Practices as Potential Mechanisms for Child Adjustment Following Mass Trauma," *Journal of Marital and Family Therapy* 34, no. 2 (2008): 177–92; Ann S. Masten, Karin M. Best, and Norman Garmezy, "Resilience and Development: Contributions from the Study of Children Who Overcome Adversity," *Development and Psychopathology* 2, no. 4 (1990): 425-444. doi: 10.1017/S0954579400005812.

46. Froma Walsh, *Strengthening Family Resilience,* 2nd ed. (New York: Guilford Press, 2006).

47. William R. Saltzman et al., "Mechanisms of Risk and Resilience in Military Families: Theoretical and Empirical Basis of a Family-Focused Resilience Enhancement Program," *Clinical Child and Family Psychology Review* 14, no. 3 (2011): 213–30, doi: 10.1007/s10567-011-0096-1; Tina Watson Wiens and Pauline Boss, "Maintaining Family Resiliency before, during, and after Military Separation," in *Military Life: The Psychology of Serving in Peace and Combat*, ed. Carl Andrew Castro, Amy Adler, and Thomas W. Britt (Westport, CT: Praeger Security International, 2006), 13–38.

48. Reuben Hill, *Families Under Stress: Adjustment to the Crises of War Separation and Return* (Oxford: Harper, 1949): 443.

49. Don M. Lagrone, "The Military Family Syndrome," *American Journal of Psychiatry* 135, no. 9 (1978): 1040–3.

50. Cozza, Chun, and Polo, "Military Families and Children"; Peter S. Jensen et al., "The 'Military Family Syndrome' Revisited: 'By the Numbers,'" *Journal of Nervous and Mental Disease* 179, no. 2 (1991): 102–7.

51. Kris M. Tunac De Pedro et al., "The Children of Military Service Members: Challenges, Supports, and Future Educational Research," *Review of Educational Research* 81, no. 4 (2011): 566–618, doi: 10.3102/0034654311423537; Shelley MacDermid Wadsworth, "Family Risk and Resilience in the Context of War and Terrorism," *Journal of Marriage and Family* 72, no. 3 (2010): 537–56, doi: 10.1111/j.1741-3737.2010.00717.x.

52. Noel A. Card et al., "A Meta-Analytic Review of Internalizing, Externalizing, and Academic Adjustment Among Children of Deployed Military Service Members," *Journal of Family Psychology* 25, no. 4 (2011): 508, doi: 10.1037/a0024395.

53. Janice H. Laurence, Avlyn Bolton, and Greg Cook, "Appendix B: Educational/Academic Outcomes in Relation to Transition and Deployment Experiences of Military Students," in Military Child Education Coalition, *Education of the Military Child in the 21st Century: Current Dimensions of Educational Experiences for Army Children* (Harker Heights, TX: Military Child Education Coalition, 2010), 224–30; Sean C. Sheppard, Jennifer Weil Malatras, and Allen C. Israel, "The Impact of Deployment on US Military Families," *American Psychologist* 65, no. 6 (2010): 599, doi: 10.1037/a0020332.

54. Anita Chandra et al., "Children on the Homefront: The Experience of Children from Military Families," *Pediatrics* 125, no. 1 (2010): 16–25, doi: 10.1542/peds.2009-1180; Anita Chandra et al., "The Impact of Parental Deployment on Child Social and Emotional Functioning: Perspectives of School Staff," *Journal of Adolescent Health* 46, no. 3 (2010): 218–23, doi: 10.1016/j.jadohealth.2009.10.009; Card et al., "A Meta-Analytic Review"; Amy Richardson et al., *Effects of Soldiers' Deployment on Children's Academic Performance and Behavioral Health* (Santa Monica, CA: RAND, 2011); Kristin Mmari et al., "When a Parent Goes Off to War: Exploring the Issues Faced by Adolescents and Their Families," *Youth & Society* 40, no. 4 (2009): 455–75, doi: 10.1177/0044118X08327873.

55. Flake et al., "Psychosocial Effects."

56. Department of Defense, *Report on the Impact of Deployment of Members of the Armed Forces on Their Dependent Children* (report to the Senate and House committees on Armed Services, October 2010), http://www.militaryonesource.mil/12038/Project%20Documents/MilitaryHOMEFRONT/Service%20 Providers/DoD%20Conferences/MFPP/MHF_page/Report_Impact_of_Deployment_Dependent_ Children.pdf.

57. Richardson et al., *Effects of Soldiers' Deployment.*

58. Ibid.

59. Department of Defense, *2008 Demographics Profile of the Military Community* (Washington: Office of the Deputy Under Secretary of Defense, 2008), http://www.militaryonesource.mil/12038/MOS/ Reports/2008%20Demographics.pdf.

60. Mulrooney and Williams, *Increasing Understanding of Infants*; Molinda Chartrand et al., "Effect of Parents' Wartime Deployment on the Behavior of Young Children in Military Families," *Archives of Pediatrics & Adolescent Medicine* 162, no. 11 (2008): 1009–14, doi: 10.1001/archpedi.162.11.1009; Lisa Hains Barker and Kathy D. Berry, "Developmental Issues Impacting Military Families with Young Children During Single and Multiple Deployments," *Military Medicine* 174, no. 10 (2009): 1033–40.

61. Anita Chandra et al., *Understanding the Impact of Deployment on Children and Families: Findings from a Pilot Study of Operation Purple Camp Participants* (Santa Monica, CA: RAND Corporation, 2008), http:// www.rand.org/pubs/working_papers/WR566; Flake et al., "Psychosocial Effects"; Angela J. Huebner et al., "Parental Deployment and Youth in Military Families: Exploring Uncertainty and Ambiguous Loss," *Family Relations* 56, no. 2 (2007): 112–22; Chandra et al., "Children on the Homefront"; Lester et al., "The Long War"; Laurence, Bolton, and Cook, *Educational/Academic Outcomes;* Sheppard, Malatras, and Israel, "The Impact of Deployment."

62. Lester et al., "The Long War."

63. Chandra et al., "Children on the Homefront"; Vernon A. Barnes, Harry Davis, and Frank A. Treiber, "Perceived Stress, Heart Rate, and Blood Pressure among Adolescents with Family Members Deployed in Operation Iraqi Freedom," *Military Medicine* 172, no. 1 (2007): 40–3; Mary Catherine Aranda et al., "Psychosocial Screening in Children with Wartime-Deployed Parents," *Military Medicine* 176, no. 4 (2011): 402–7; Sarah C. Reed, Janice F. Bell, and Todd C. Edwards, "Adolescent Well-Being in Washington State Military Families," *American Journal of Public Health* (2011): 1676–82, doi: 10.2105/ AJPH.2011.300165; Alyssa J. Mansfield et al., "Deployment and the Use of Mental Health Services among US Army Wives," *New England Journal of Medicine* 362, no. 2 (2010): 101–9, doi:10.1056/ NEJMoa0900177; Gregory H. Gorman, Matilda Eide, and Elizabeth Hisle-Gorman, "Wartime Military Deployment and Increased Pediatric Mental and Behavioral Health Complaints," *Pediatrics* 126, no. 6 (2010): 1058–66, doi: 10.1542/peds.2009-2856.

64. Tamika D. Gilreath et al., "Substance Use Among Military-Connected Youth," *American Journal of Preventive Medicine* 44, no. 2 (2013): 150–53.

65. Deborah A. Gibbs et al., "Child Maltreatment in Enlisted Soldiers' Families During Combat-Related Deployments," *Journal of the American Medical Association* 298, no. 5 (2007): 528–35, doi: 10.1001/jama.298.5.528; Danielle E. Rentz et al., "Effect of Deployment on the Occurrence of Child Maltreatment in Military and Nonmilitary Families," *American Journal of Epidemiology* 165, no. 10 (2007): 1199–1206, doi: 10.1093/aje/kwm008; Sheppard, Malatras, and Israel, "The Impact of Deployment."

66. James E. McCarroll et al., "Deployment and the Probability of Spousal Aggression by U.S. Army Soldiers," *Military Medicine* 165 (2000), 41–44.

67. Chandra et al., "Children on the Homefront"; Abigail H. Gewirtz et al., "Posttraumatic Stress Symptoms among National Guard Soldiers Deployed to Iraq: Associations with Parenting Behaviors and Couple Adjustment," *Journal of Consulting and Clinical Psychology* 78, no. 5 (2010): 599–610, doi: 10.1037/a0020571.

68. Peter S. Jensen, David Martin, and Henry Watanabe, "Children's Response to Parental Separation during Operation Desert Storm," *Journal of the American Academy of Child & Adolescent Psychiatry* 35, no. 4 (1996): 433–41, doi: 10.1097/00004583-199604000-00009.

69. Lester et al., "The Long War."

70. Chandra et al., "Children on the Homefront."

71. Anita Chandra et al., "Understanding the Deployment Experience for Children and Youth from Military Families," in MacDermid Wadsworth and Riggs, *Risk and Resilience,* 175–92; Chandra et al., "The Impact of Parental Deployment"; Gilreath et al., "Substance Use"; Lester et al., "The Long War"; Barker and Berry, "Developmental Issues"; Alyssa Mansfield et al., "Deployment and Mental Health Diagnoses among Children of US Army Personnel," *Archives of Pediatrics & Adolescent Medicine* 165 (2011): 999–1005, doi: 10.1001/archpediatrics.2011.123.

72. William R. Beardslee et al., "A Family-Based Approach to the Prevention of Depressive Symptoms in Children at Risk: Evidence of Parental and Child Change," *Pediatrics* 112, no. 2 (2003): e119–31.

73. Charles W. Hoge et al., "Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care," *New England Journal of Medicine* 351, no. 1 (2004): 13–22.

74. David S. Riggs et al., "The Quality of the Intimate Relationships of Male Vietnam Veterans: Problems Associated with Posttraumatic Stress Disorder," *Journal of Traumatic Stress* 11 (1998): 87–101; Ayelet Meron Ruscio et al., "Male War-Zone Veterans' Perceived Relationships with Their Children: The Importance of Emotional Numbing," *Journal of Traumatic Stress* 15 (2002): 351–57.

75. Riggs et al., "Quality of the Intimate Relationships"; Ruscio et al., "Male War-Zone Veterans."

76. Aphrodite Matsakis, *Vietnam Wives: Women and Children Surviving Life with Veterans Suffering Posttraumatic Stress Disorder* (Kensington, MD: Woodbine House, 1988).

77. Patrick T. Davies and E. Mark Cummings, "Exploring Children's Emotional Security as a Mediator of the Link between Marital Relations and Child Adjustment," *Child Development* 69, no. 1 (1998): 124–39.

78. Saltzman et al., "Mechanisms of Risk and Resilience."

79. Tara Galovski and Judith A. Lyons, "Psychological Sequelae of Combat Violence: A Review of the Impact of PTSD on the Veteran's Family and Possible Interventions," *Aggression and Violent Behavior* 9, no. 5 (2004): 477–501, doi: 10.1016/S1359-1789(03)00045-4; Rachel Dekel and Hadass Goldblatt, "Is There Intergenerational Transmission of Trauma? The Case of Combat Veterans' Children," *American Journal of Orthopsychiatry* 78, no. 3 (2008): 281–89, doi: 10.1037/a0013955; Melissa Pearrow and Lisa Cosgrove, "The Aftermath of Combat-Related PTSD: Toward an Understanding of Transgenerational Trauma," *Communication Disorders Quarterly* 30, no. 2 (2009): 77–82, doi: 10.1177/1525740108328227.

80. Michelle L. Kelley, Ashley N. Doane, and Matthew R. Pearson, "Single Military Mothers in the New Millennium: Stresses, Supports and Effects of Deployment," in Macdermid Wadsworth and Riggs, *Risk and Resilience,* 343–63.

81. William Beardslee et al., "Family-Centered Preventive Intervention for Military Families: Implications for Implementation Science," *Prevention Science* 12, no. 4 (2011): 339–48; MacDermid Wadsworth et al., "Approaching Family-Focused Systems."

82. Mansfield et al., "Deployment and Mental Health Diagnoses"; Rentz et al., "Effect of Deployment."

83. Martha J. Cox et al., "Systems Theory and Cascades in Developmental Psychopathology," *Development and Psychopathology* 22, no. 3 (2010): 497–506, doi: 10.1017/S0954579410000234.

84. Ann S. Masten et al., "Developmental Cascades: Linking Academic Achievement and Externalizing and Internalizing Symptoms over 20 Years," *Developmental Psychology* 41, no. 5 (2005): 733–46; Ann S. Masten, "Resilience in Children Threatened by Extreme Adversity: Frameworks for Research, Practice, and Translational Synergy," *Development and Psychopathology* 23 (2011): 493–506.

85. Gewirtz et al., "Posttraumatic Stress Symptoms"; Blue Star Families, *2010 Military Family Lifestyle Survey: Executive Summary* (Falls Church, VA: Blue Star Families, 2010), http://bluestarfam. s3.amazonaws.com/42/58/2/301/2010bsfsurveyexecsummary.pdf.

86. Richard L. Spoth, Kathryn A. Kavanagh, and Thomas J. Dishion, "Family-Centered Preventive Intervention Science: Toward Benefits to Larger Populations of Children, Youth, and Families," *Prevention Science* 3, no. 3 (2002): 145–52; Mary Jane England and Leslie J. Sim, eds., *Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment and Prevention* (Washington: National Academies Press, 2009); Beardslee et al., "Family-Centered Preventive Intervention."

87. Beardslee et al., "Family-Centered Preventive Intervention."

88. Spoth, Kavanagh, and Dishion, "Family-Centered Preventive Intervention Science"; Anna Khaylis et al., "Posttraumatic Stress, Family Adjustment, and Treatment Preferences among National Guard Soldiers Deployed to OEF/OIF," *Military Medicine* 176, no. 2 (2011): 126–31.

89. Patricia Lester et al., "Families Overcoming Under Stress: Implementing Family-Centered Prevention for Military Families Facing Wartime Deployments and Combat Operational Stress," *Military Medicine* 176, no. 1 (2011): 19–25; Patricia Lester et al., "Evaluation of a Family-Centered Prevention Intervention for Military Children and Families Facing Wartime Deployments," *American Journal of Public Health* 102, no. S1 (2012): S48–54, doi: 10.2105/AJPH.2010.300088; Stan F. Whitsett and Albert Y. Saito, "School-Based Behavioral Health Services for Military Youth: Essential Components of a Novel and Successful Service Delivery Model," CYF News, American Psychological Association, January 2013, http://www.apa.org/pi/families/resources/newsletter/2013/01/military-youth-health.aspx; Lester et al., "Families Overcoming Under Stress."

90. Gewirtz et al., "Posttraumatic Stress Symptoms"; Paris et al., "When a Parent Goes Off to War"; Stephen J. Cozza et al., "Combat Injured Service Members and Their Families: The Relationship of Child Distress and Spouse Perceived Family Distress and Disruption," *Journal of Traumatic Stress* 23, no. 1 (2010): 112–15.

91. Beardslee et al., "Family-Centered Preventive Intervention."

92. Military Child Education Coalition, *Education of the Military Child in the 21st Century: Current Dimensions of Educational Experiences for Army Children: Executive Summary* (Harker Heights, TX: Military Child Education Coalition, 2012), http://www.militarychild.org/public/upload/images/EMC21ExecutiveReportJune2012.pdf.

When a Parent Is Injured or Killed in Combat

Allison K. Holmes, Paula K. Rauch, and Colonel Stephen J. Cozza (U.S. Army, Retired)

Summary

When a service member is injured or dies in a combat zone, the consequences for his or her family can be profound and long-lasting. Visible, physical battlefield injuries often require families to adapt to long and stressful rounds of treatment and rehabilitation, and they can leave the service member with permanent disabilities that mean new roles for everyone in the family. Invisible injuries, both physical and psychological, including traumatic brain injury and combat-related stress disorders, are often not diagnosed until many months after a service member returns from war (if they are diagnosed at all—many sufferers never seek treatment). They can alter a service member's behavior and personality in ways that make parenting difficult and reverberate throughout the family. And a parent's death in combat not only brings immediate grief but can also mean that survivors lose their very identity as a military family when they must move away from their supportive military community.

Sifting through the evidence on both military and civilian families, Allison Holmes, Paula Rauch, and Stephen Cozza analyze, in turn, how visible injuries, traumatic brain injuries, stress disorders, and death affect parents' mental health, parenting capacity, and family organization; they also discuss the community resources that can help families in each situation. They note that most current services focus on the needs of injured service members rather than those of their families. Through seven concrete recommendations, they call for a greater emphasis on family-focused care that supports resilience and positive adaptation for all members of military families who are struggling with a service member's injury or death.

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Since the U.S. military began fighting in Iraq and Afghanistan in 2002, approximately two million military children have seen a parent deploy into harm's way at least once, and many families have experienced multiple deployments.[1] Most deployments end with a parent's safe return home, but more than 50,000 service members have been physically injured in combat, and even more are later diagnosed with traumatic brain injury (TBI) or posttraumatic stress disorder (PTSD). In the worst case, deployed parents don't return at all. In this article, we examine the impact on dependent children of deployments that result in visible or physical injuries (for example, amputations or burns); invisible injuries, including TBI and PTSD; and a parent's death.

Few researchers have studied how military children adapt to a parent's injury or death in the conflicts in Iraq and Afghanistan. But military and civilian accounts describe profound effects on parents' mental health (including that of injured, uninjured, and surviving parents), parenting capacity, family organization, and community resources. Where there are gaps in the research, we present data from studies of civilian parents or of service members from previous conflicts who faced similar challenges. These studies can help us understand what military-connected children are likely to experience, and what the affected children and their families will need in the long run. Of course, their needs will change as they move from the initial notification of injury or death and on to treatment, recovery, and reintegration into civilian communities. Clinical and nonclinical providers alike must be aware of these evolving needs and make a long-term commitment to the children and families who, in serving our nation, have paid a particularly high price.

Combat-Related Injury

Since fighting began in Iraq and Afghanistan, more than 50,000 men and women have been physically injured and required immediate medical attention.[2] Other combat-related conditions, including PTSD and TBI, may not be recognized or treated until service members return home. Thus injuries can be categorized as visible or invisible. The distinction is important, because visible and invisible injuries have different effects on children, families, and their relationships. Visible injuries are those easily identified by others, such as amputations, blindness or eye injuries, auditory damage, burns, spinal cord injuries, and paralysis.[3] TBI and PTSD are called invisible injuries because there is often no immediate external bodily indication of trauma; the symptoms appear as changes in cognition, behavior, and social functioning.[4]

Because service members wear body armor that protects their vital organs, most severe physical injuries affect the arms and legs (54 percent) or the head and neck (29 percent). Advances in medical care mean that severely injured service members are more likely to survive today than they were in previous conflicts.[5] Multiple physical injuries are common, and physical and psychological injuries often occur together.

An array of variables affects the way families experience a service member's combat injury. They include the type and severity of the injury, family composition, the children's developmental age, individual or family characteristics, the course of required medical treatment, and changes that occur as the injured parent regains function and the family copes and adapts. The course of recovery can be thought of as an injury recovery trajectory, with four phases: acute care,

medical stabilization, transition to outpatient care, and long-term rehabilitation and recovery.[6] In each phase, children and families face emotional and practical difficulties.

Injuries can be categorized as visible or invisible. The distinction is important, because visible and invisible injuries have different effects on children, families, and their relationships.

During *acute care*, the injured parent receives life-saving and life-sustaining medical interventions. When families are notified, children may be exposed to unfiltered information about the injury and raw emotional responses. When families are reunited, children may hear medical providers talk about injuries or medical procedures, and they may see other ill or injured people in the hospital; they may also have to take on some caregiving responsibilities.

Medical stabilization includes surgery and other medical care that prepare the injured service member to leave the hospital. How long this phase lasts depends on the severity of the injury. Stabilization typically occurs in a facility far from the family's home, and the other parent may need to travel to be near the injured service member, with or without the children. In a 2007 report, 33 percent of active-duty, 22 percent of Guard and Reserve, and 37 percent of retired service members reported that a family member or friend relocated temporarily to spend time

with the injured service member while he or she was in the hospital.[7] Whether children come with their uninjured parent or are left in the care of others, their daily routines are disrupted. Separation from parents, exposure to an injured parent, or exposure to an uninjured parent's emotional distress may cause children to feel sadness, anxiety, or confusion.

Younger children commonly express what they're feeling through behavior, such as aggression, greater dependency, or regression to behaviors more typical of a younger child. Older children may display the same kinds of symptoms; they may also either assume caregiving or household responsibilities or disengage from the family.[8] Children who lack social connections, as well as those who already suffer from a psychiatric illness, are more likely to experience emotional and behavioral problems.[9] Research in other contexts has shown that children with behavioral problems are more likely to be maltreated, and this may be true in the families of injured service members as well.[10]

Transition to outpatient care begins before discharge from the hospital, when follow-up care and rehabilitation are arranged. Families prepare to meet everyday needs (such as housing, financial planning, transportation, child care, and schooling) as they adapt to new medical demands (rehabilitation appointments, the service member's daily care) that add new emotional challenges for parent and child alike. The responsibility for coordinating these old and new demands falls mostly on the uninjured parent. In fact, family members or friends often must leave their jobs to care for the injured service member full time.

Rehabilitation and recovery is when service members learn to adapt to their injuries and settle into their new lives. During this phase,

families often move to new communities and seek new health-care providers. New homes, new neighborhoods, new schools, new friends, new child-care providers, and new daily routines add instability to children's lives. If schools, peers, and community providers don't know how to support children of injured service members, or if they are unfamiliar with military children in general, the readjustment may further tax a child's ability to cope.[11]

Visible Injuries

Severe injury often requires extended treatment, which is especially difficult for families. Periods of medical stability may alternate with periods of instability, when complications occur, progress is limited, or additional treatments (such as multiple reconstructive surgeries) are needed.[12] The family's living arrangements may change, and months or years of recurring hospital-based treatments and outpatient visits may disrupt their connections to the community. Moreover, when service members suffer multiple injuries, or when visible and invisible injuries occur together, treatment grows more complex and family adjustment more difficult.[13] A long and disruptive recovery can take its toll on children, 15 percent of whom exhibit clinical levels of emotional and behavioral problems several years after their military parent's injury.[14]

Parents' Mental Health

In addition to physical changes, combat-injured service members are at significant risk for invisible injuries or psychiatric problems, such as PTSD and depression.[15] These problems may not appear until long after the injury. In fact, one study found that nearly 80 percent of combat-injured service members who screened positive for either PTSD

or depression seven months after their injury had screened negative for both conditions six months earlier.[16] When injured service members have poor emotional health, they may not be able to engage fully with their children, which affects the children's ability to cope.

A long and disruptive recovery can take its toll on children, 15 percent of whom exhibit clinical levels of emotional and behavioral problems several years after their military parent's injury.

Parenting Capacity

External events can disrupt both relationships between couples and the entire family system, as well as individual wellbeing. A family systems framework explains how a parent's physical injury can affect a child's wellbeing by disrupting the parenting of both the injured and uninjured parent.[17] For example, among children of parents suffering from stroke, the uninjured parents' stress and depression were associated with anxiety and depression among their children.[18]

One critical way that combat injury can influence an injured parent's ability to engage with his or her children is through changes in physical function. Amputation, musculoskeletal injuries, burns, or eye injuries are likely to produce temporary or permanent loss of function, requiring prosthetic assistance or rehabilitative care. Before their injuries, many young military service members are physically active, and, especially among

fathers, parenting activities are often physical, "hands-on," or athletic.[19] After the injury, those activities may no longer be possible, or they may need to be modified significantly. In turn, injured service members must modify their ideas of how to be a good parent at the same time that they are mourning their own bodily changes or loss of function. The injured parents' physical absence during hospitalizations, and their emotional unavailability due to physical condition or treatment effects, can also seriously limit their ability to effectively interact with their children.[20]

The uninjured parent may also find it hard to be available for the children. For one thing, if the injured service member can't take part in routine activities, the uninjured parent (as well as the children) has to take on new responsibilities. Similarly, the uninjured parent may be less available while caring for the injured parent. Either of these circumstances can limit the parent's ability to engage in warm, nurturing interactions with children. As multiple sources of stress spill over into the parent-child relationship, children have fewer resources, and their risk for maladaptation increases. Thus, supporting the children of injured service members means bolstering the parenting relationships of both injured and uninjured parents.

Family Organization
We know from studies of families dealing with combat injuries, multiple sclerosis, or stroke that when an injury or illness produces significant changes in parenting ability, parents and children alike must renegotiate family relationships and come to terms with the injury and its consequences. When service members remain impaired and can't resume their former parental and household responsibilities, uninjured parents and children are

likely to see their own roles change. In these circumstances, children may act out if the family becomes disorganized or dysfunctional.[21] Likewise, relationships between parents and children, or between spouses, may grow strained, and children may experience emotional problems.[22] If the family's organization was poor before a combat injury, the injury is likely to make things worse, undermining family members' capacity to negotiate the challenges they face. In one small study of hospitalized injured service members, children from families where the stress from deployment was high even before the injury suffered greater emotional distress after the injury than did other children.[23] Because children's wellbeing depends on how well the family functions after a combat injury, service providers may need to work with such at-risk families more intensively.

A combat injury generates confusion and fear in the family, and better communication between parents and children can help children cope.[24] Injury communication refers to communication about injury-related topics both within the family and with others in the civilian and military communities.[25] Effective injury communication requires open dialogue about the injury and its consequences among many parties: the injured service member and the uninjured parent; family members, including children; friends; and medical personnel and other community professionals and service providers. Parents need sophisticated guidance about how to talk with their children about medical conditions; professionals need to know how to offer this support to parents.[26] Just as some parents may tell their children too little about the injury, others share more than the children can handle, or frighten them by unnecessarily bringing up unknown future consequences. Thus adults may need help calibrating the

amount, content, and timing of the facts they share. But even young children should be given some explanations to help them understand the actions and emotions of the adults they see around them.

Community Resources

Families who are dealing with combat injuries need support and services from the community, and these needs change and evolve as recovery from the injury progresses. For example, families may need help finding adequate housing, particularly when they expect long-term visits from extended family members. They may require assistance with child care, family health or schooling, or help navigating military regulations and paperwork, transitioning to civilian medical care, or finding a job.[27] Guard and Reserve families, who often live far from military communities and their associated support services, may require additional help. And when injured service members leave the military system and move to communities around the country, military families may find that service providers, teachers, and others are unfamiliar with their unique needs.

Traumatic Brain Injury

The number of service members who return home with combat-related TBI is not entirely clear. Estimates differ depending on the source of information, the screening criteria, and the threshold of diagnostic clarity, as well as the severity of the injury (that is, mild, moderate, or severe). The military health system reported that more than 250,000 cases of TBI had been diagnosed in military service members from 2000 through 2012.[28] Others have estimated a significantly higher incidence, for example, 320,000 cases among returning Iraq and Afghanistan combat veterans through 2007.[29] Overall, 33 percent

of service members who return from combat are reported to suffer from TBI, PTSD, or depression, and 5 percent meet the criteria for all three diagnoses.[30] When such injuries occur together, they are likely to have cumulative effects on children and families.

The impact of parents' traumatic brain injuries in military families has not been well studied. But evidence from nonmilitary families shows that this type of parental impairment can have profound effects on children. Children living with a parent who has suffered a TBI display more behavioral and emotional problems, feelings of loss and grief at the change in the injured parent, and a sense of isolation. They also exhibit more posttraumatic stress symptoms, and 46 percent meet the criteria for PTSD.[31] Interestingly, when compared with children of parents with diabetes, children of parents with TBI report higher levels of posttraumatic stress but no differences in behavioral problems, depression, or anxiety; this suggests that a parent's TBI may be uniquely traumatic for children.[32]

Parents' Mental Health

The symptoms of TBI and PTSD overlap, and the prevalence of co-occurring diagnoses among service members returning from Iraq and Afghanistan varies depending on the definition of TBI. When the TBI is moderate (for example, producing loss of consciousness), the incidence of co-occurring PTSD was higher than when the TBI was mild (for example, producing alteration of consciousness) or severe (for example, an open head wound).[33] Compared with those with TBI only and those who screened negative for either condition, service members with both TBI and PTSD engaged in more high-risk behaviors like reckless driving, binge

drinking, and heavy smoking.[34] Because TBIs are not always immediately identified or treated, families may not know what is causing the changes they see in a returning service member. Problems related to undiagnosed TBI or PTSD may continue for months or years, eroding a family's bonds.

Parenting Capacity
TBI poses unique challenges to parenting. Its psychiatric effects tend to be more distressing to family members and more disruptive to family functioning than those of other physical and nonneurological impairments.[35] These effects include altered personality, emotional problems (for example, irritability, a low frustration threshold, poor anger management, or apathy), difficulty with behavioral regulation, cognitive problems (for example, a short attention span or intolerance for overstimulation), lack of energy, substance abuse, thrill-seeking behavior, disrupted sleep, communication problems, and difficulty with personal engagement.[36] To cope with such TBI symptoms, injured parents may withdraw from the family to protect children and other loved ones.

Children are likely to be confused and distressed by these behaviors and may blame themselves for their parents' outbursts, loss of control, or emotional aloofness. In some cases, children and families are left with a troubling sense that the injured service member bears little resemblance to the person they knew before the injury, resulting in a sense of sadness and loss. As one 12-year-old girl said: "I basically just feel sad, because he's there physically. I suppose I've got a Dad, but he's not my Dad."[37]

Uninjured parents are also likely to be affected. They often must care for the injured parent, and they are at high risk for depression and anxiety, either of which can undermine their parenting capacity.[38] Compromised parenting in either the injured or the uninjured parent, as well as depression in the uninjured parent, correlates with higher levels of emotional and behavioral problems in children of TBI patients.[39] Thus, visible and invisible injuries prevent injured and noninjured parents from engaging in the warm, nurturing relationships children require after trauma. Supporting and intervening through parenting relationships can help children cope and adapt.

Because TBIs are not always immediately identified or treated, families may not know what is causing the changes they see in a returning service member.

Family Organization
Unlike those of other physical injuries, the effects of TBI on children and families may not improve. In one study, families disrupted by a TBI still needed professional help 10–15 years after the injury, and young families with the least financial and social support were at the highest risk.[40] The initial severity of the TBI was not the greatest predictor of how the uninjured parent and children would fare; rather, it was the degree to which the injury affected the victim's cognitive and interpersonal functioning. In particular, the uninjured parent's experience was heavily affected by whether the couple was still able to have a reciprocal emotional relationship and communicate effectively.

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For families of long-term TBI sufferers, the study concluded, social support from friends, family, and professionals alike was critical.

Community Resources

The common delay in diagnosing TBI, as well as the injury's long-term effects, can damage job performance, earnings, and the sufferer's military career. Because of the long-term effects, community providers will be seeing more cases of TBI as injured service members return to civilian life, and they will need to recognize the symptoms and provide appropriate treatment. Uninjured parents will need support of many kinds—practical, logistical, emotional—and they may also need temporary relief from caregiving. Similarly, the long-term impact of TBI means that children will need expanded community support from schools, clinicians, and therapists long after the injured parent leaves military service. Some younger children affected by a parent's TBI can be expected to exhibit disruptive behaviors, poor academic performance, and substance abuse years later, in middle school and high school.

PTSD is a signature injury of the post-9/11 conflicts.

Combat-Related Stress Disorders

Psychological injury is another invisible wound that affects children's health and well-being. Combat-related stress disorders can include PTSD, depression, anxiety disorder, and substance abuse. Recent reports indicate that up to one-third of service members deployed to Iraq and Afghanistan experience some sort of mental health disorder within three to four months of returning home.[41]

PTSD is a signature injury of the post-9/11 conflicts. Since 2000, 66,935 new cases of PTSD have been diagnosed among service members who have deployed, as well as 21,784 new cases among service members who have never deployed; the overall prevalence of PTSD among military personnel is variously estimated to be between 6 and 25 percent.[42] The disorder is associated with a range of problems, including occupational and social impairment, poor physical health, neuropsychological impairment, substance use, and risk of death.[43] Any of these complications can slow service members' recovery, affect children and families, disrupt reintegration into the community, and impair service members' ability to resume their former roles at home.

Unfortunately, only half of returning service members who meet the criteria for PTSD or depression seek treatment. Many are worried about job security; for example, they fear that they could lose a security clearance, or that their coworkers will lose trust in them. They may also fear the treatment itself.[44] Even among those who seek treatment, half receive only minimally adequate care. The children of these service members are affected as well. In studies from the Vietnam War and the second Iraq War alike, children of soldiers with PTSD showed higher levels of anxiety, depression, and posttraumatic symptoms themselves.[45] The children's symptoms may best be accounted for by disruptions in the parenting relationship and repeated exposure to the symptoms that the affected parent displays.[46]

As with visible injury, the way a parent's PTSD affects children depends on a child's age, developmental level, temperament, and preexisting conditions. Because their cognitive and emotional skills are less developed,

younger children may struggle more than older children to cope and adapt to changes in a parent's behaviors and the parenting relationship. Very young children may have an especially hard time coping with the disorganized parental behavior that can result from PTSD, such as overreaction or disengagement. These inappropriate responses can lead to an emotional disconnection between parents and very young children, resulting in a nonnurturing parent-child relationship that can mimic the dysfunctional relationships seen in early childhood abuse.[47] Definitive mental health treatment, mental health education for parents and children, developmental guidance, and supportive therapeutic assistance, such as parent-child interpersonal therapy, may all be tremendously useful in such situations, both on return from deployment and throughout the recovery.

Parents' Mental Health

Invisible stress-related injuries can harm the spouse's mental health along with the injured service member's. In studies from several conflicts, spouses of soldiers with PTSD were more likely than others to show traumatic stress symptoms themselves and to experience general distress.[48] Moreover, a spouse's mental health problems were more likely to harm children's functioning than were a service member's own, making spouses' mental health a critical target for treatment.[49] Clearly, attention to the mental health needs of both parents is essential to the health of their children.

Parenting Capacity

Studies of how parents' combat-related PTSD affects children and families come largely from work with American, Australian, and New Zealander Vietnam War veterans and their families. Within these populations,

PTSD has been associated with poor intimate relationships, impaired family functioning, greater family distress, higher levels of family violence, and disrupted parenting and parent-child relationships.[50] The complex interaction of risk behaviors and psychological symptoms that characterize PTSD—including emotional numbing, avoidance, and anger—make it difficult for those who suffer from the disorder to engage with their families. Ayelet Meron Ruscio and colleagues, writing about male victims of PTSD, say that "the disinterest, detachment, and emotional unavailability that characterize emotional numbing may diminish a father's ability and willingness to seek out, engage in, and enjoy interactions with his children, leading to poorer relationship quality."[51] In turn, spouses may see service members with PTSD as unreliable and inadequate caregivers, further alienating them from their children. The way that spouses' emotional health affects children's wellbeing suggests that the traditional approach to treating a veteran's PTSD—individually, without providing primary mental health support to spouses and children—is inadequate.

Family Organization

Through their effects on marital and parenting relationships, combat-related stress disorders make it harder for families to readjust after deployment. Up to 75 percent of service members who screen positive for postdeployment mental health disorders report marital conflict, and service members with PTSD symptoms show higher rates of conflict with spouses and children, as well as more difficulty with parenting.[52] Spouses and children often struggle to avoid triggering negative or explosive responses from affected service members. As PTSD symptoms become more severe, rates of interpersonal violence rise and the burden

on caregivers increases.[53] When families experience stress and conflict, the potential for child abuse is higher.[54] But military families and children have great capacity for resilience, and targeted individual and family treatments can harness these skills.[55]

Community Resources

Given the prevalence of combat-related stress disorders and their far-reaching effects on children and families, service members, spouses, children, and families need several levels of support. Moreover, services must be available in both military and civilian communities.

Identifying and treating stress disorders early can prevent long-term family exposure and reduce family stress. Unfortunately, lack of understanding, concern for career, and stigma regarding treatment prevent many service members from seeking diagnosis and help.[56] Thus we should encourage and train people to identify children affected by combat-related stress disorders in schools, community organizations, sports teams, and religious groups, as well as during pediatric visits.

In addition to promoting mental health and family resilience, programs that work with families affected by stress disorders must consider their practical needs, such as employment, finances, and housing. Help with meeting basic needs can diminish stress, particularly for spouses who bear the burden of running the family. Comprehensive support promotes overall family health and increases the likelihood that mental health treatment will succeed.

Combat-Related Death

We define combat-related deaths as deaths that occur during combat deployment, as well as suicides that occur in combat zones or after return from combat deployment. Since 9/11, more than 16,000 uniformed service members have died on active duty. Approximately one-third of these deaths occurred in combat; more than 97 percent of those killed have been male.[57] Another 14 percent of all service members' deaths are self-inflicted. Though we know a great deal about how a parent's death affects children in the civilian population, little empirical research has been done on how a parent's death, especially a parent's death in combat, affects children in the military.

We hypothesize that a parent's death in combat has a more immediate impact on military children than do visible or invisible injuries. However, death during combat deployment is not wholly unanticipated. Military families, as well as families in other line-of-duty professions (law enforcement, firefighting), do not necessarily focus on the ultimate sacrifice.[58] But these high-risk service professions carry mechanisms, such as a professional culture and a sense of mission, that may help children who are coping with loss.[59] For example, one study showed that Israeli children with a relative who died in combat reported fewer psychiatric symptoms and greater general wellbeing than children with a relative who died in a motor vehicle accident.[60] However, military deaths may be experienced differently in Israel, where nearly all adults serve in the armed forces. Nonetheless, the military culture and its support systems can bolster families as they grieve and adjust. Critical to understanding any family's response to combat death is their perspective on the death (for example, whether they see it as meaningful or meaningless), the events that surround the death, and their experience following the death of family and community cohesion and support.

A warm, nurturing, and effective relationship with the surviving parent promotes positive coping and interactions.

Parents' Mental Health

Evidence from civilian families shows that a spouse's death can affect the surviving spouse in a variety of ways: increased vulnerability to physical and psychological illness, reduced happiness, and feelings of social isolation and meaninglessness.[61] While spouses grieve, children of all ages may display a variety of healthy, developmentally appropriate grief responses: playing, talking, questioning, and observing. Many children feel sad, cry, or become more withdrawn; others express their emotions through reverting to earlier behaviors. When the surviving parent was already struggling with depression, anxiety, or sleep or health problems before the death, children are less likely to adjust well, and young children are more vulnerable as well.[62] Some children develop childhood traumatic grief, which is marked by trauma-related symptoms (for example, hyperarousal, psychological distress, and avoidance) that can make it harder for them to mourn appropriately.[63] No studies have examined the incidence of childhood traumatic grief in bereaved military children, but combat death shares many of the characteristics (such as sudden loss) that contribute to its development in other populations.

Parenting Capacity

A child's response to a parent's death is related to the surviving parent's response.

According to George Tremblay and Allen Israel, "Children appear to be at risk for concurrent and later difficulties primarily to the extent that they suffer a higher probability of inadequate parental functioning or other environmental support before, as well as after, the loss of a parent."[64] Therefore, the parenting relationship can support or undermine a child's adjustment after a parent's death. A warm, nurturing, and effective relationship with the surviving parent promotes positive coping and interactions.[65] Lax control (for example, inconsistent discipline practices), which is more common after one parent dies, as well as children's fear of abandonment, can increase problem behaviors, depression, and anxiety in children.[66]

Family Organization

Research has shown repeatedly that the surviving parent's competence helps ensure the bereaved child's positive adjustment, as does family cohesiveness.[67] The relationship between family cohesion and positive adjustment is significant, given that many military family members describe tension and alienation within the family after a service member's death.[68] If the death produces a large number of additional stresses and changes to routine, children are likely to show lower self-esteem and feel less in control of their lives.

For spouses, the death of a service member leads to a series of compounding losses. In addition to losing a husband or wife, bereaved military spouses may lose their identity as a "military spouse" and their way of life as a "military family." They may lose on-base housing and friends, as well as the feeling of being connected to the greater military community. Spouses may blame the military and the government for the death and for the

negative consequences that they and their families face, particularly if they have trouble navigating the bureaucracy. Thus, although the military culture and its support systems can provide avenues to resilience, they can also become painful reminders of a life lost, or a source of stress.

Community Resources

Following a service member's death, families must immediately make arrangements. Some of these are familiar to all families—for example, the funeral. Others are specific to the military, such as determining financial benefits and entitlements. Later, military families may have to make decisions about housing: qualifying military dependents may remain in on-base housing for one year after a service member's death, but after that they must leave. Each military service branch has created a casualty assistance program to aid families from the time they learn of the death, helping them get through military administrative processes and connecting them with survivor services.[69]

Importantly, providing practical and emotional support to surviving families both immediately and over time produces the best outcomes. A service member's combat death is likely to bring a cascade of events that can undermine the family's connection to practical support, communities of care, and military culture. Though many families remain close to military communities, where they can continue to access military services, others move great distances to be closer to extended family or friends. Like bereaved military families in the Guard and Reserve, these families may find themselves in communities that lack an understanding of their experience or sacrifice, leading to a sense of isolation or disconnection. National

community support services such as the Tragedy Assistance Program for Survivors (TAPS), Gold Star Wives, Gold Star Mothers, and the Army Survivor Outreach Services (Army SOS), among others, can help provide continuity across communities to ensure that families stay connected and effectively engaged.

For children, schools can play an important role. For one thing, children who do well in school are likely to have fewer behavioral problems.[70] Moreover, self-esteem plays a key role in how children experience and respond to stressful events. Self-esteem also promotes academic success. Thus educators can promote resilience by fostering self-esteem and academic competence.

Conclusions and Recommendations

For the post-9/11 conflicts in Iraq and Afghanistan, we do not have enough scientific evidence documenting how visible and invisible injuries or bereavement have affected military children. But the long-term effects are likely to be substantial in this high-risk population. Certainly, we need more research both to guide policy for future wars and to more effectively serve the current population. In this review, we have extrapolated from studies of the civilian population and of families from past wars. We know that the effects of combat injury and death are not limited to children's emotional, psychological, behavioral, or academic functioning at the time of the incident. We do not know how today's military children will evolve over time, nor how or whether this evolution will differ from that of civilian children, but we do know that families will be affected for years to come.

Clearly, the family's structure and function are critical to individual and familial health.

Injured, uninjured, and bereaved parents affect children directly and indirectly through their own mental health, their parenting abilities, the family's organization, and their place in the community; all of these factors can be sources of either risk or resilience.[71] Most current services emphasize the needs of the injured service member. But deployments that result in injury or death profoundly influence all members of the family and increase the risk for maladaptation both immediately and in the long term. Supporting parents' physical and mental health, bolstering their parenting capacity, and enhancing family organization can help children cope and thrive. Throughout the family's recovery, the most effective community support services and resources are those that emphasize family-focused care and resilience.

Based on our review of the evidence, we offer seven recommendations for service providers and policy makers.

1. *Stabilize the family environment throughout recovery by ensuring access to basic needs, such as housing, education, health care, child care, and jobs.* Families need basic resources, not only as they make immediate adjustments to a service member's injury or death, but also as they transition later to new communities. Many families must profoundly alter their lives. They move, changing schools and doctors and jobs. Their income may fall, and they may lose access to community resources such as child care, youth activities, and sports programs. To succeed, families need support both inside and outside the military system as injuries heal, stress disorders are identified and treated, and bereaved spouses and children adjust and reorganize. Some families are likely to be more affected, for example, younger families, families who have trouble making ends meet, and families

in which a parent has a disability that impairs parenting capacity. Even families who live on military installations or obtain treatment in the military or VA health-care systems will eventually transition to civilian communities, where understanding of military culture and expertise in working with military families is likely to be limited. Programs and services that foster a secure and stable environment for families of service members who are injured or killed are more likely to meet their multiple needs and, in turn, promote their children's wellbeing.

2. *Identify and promote services that support family organization, communication, coping, and resilience.* A parent's injury, illness, or death can powerfully disorganize families, contributing to distress and dysfunction. Families must effectively reorganize and rethink their activities and goals if they are to successfully overcome the challenges they face. Such family growth requires parents to exhibit strong leadership, fortitude, and patience, modeling positive adaptation and coping for their children. Professional assistance should support families in reaching these goals.

Another critical component of healthy family functioning is communication, particularly to help children understand the nature of an injured parent's condition at an age-appropriate level. Communication is also necessary for problem-solving and planning. Families must cope with real and perceived losses in all family members, and they must accept various emotional responses from everyone, including children. Conditions such as TBI or PTSD may complicate this process through heightened conflict, family disorganization, emotional problems, or interpersonal isolation. People who work with military families affected by these conditions need careful

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strategies to support better understanding among family members, encourage parents and children to build their skills, and help families come to terms with perceived losses to recover meaning and hope. This article has used two-parent families as illustrations, but family-centered care should also recognize and incorporate the needs of blended families and single-parent families, as well as families that include the younger siblings of service members.

3. Incorporate family-centered care models into clinical and community practice to provide basic parenting intervention and education about the challenges of a service member's visible or invisible injuries, or a surviving parent's bereavement. A family-centered care perspective supports the physical and mental health of all family members, especially children, by acknowledging and ameliorating how combat-related injuries affect parenting. A service member's physical limitations, changes in cognitive ability, and psychological or emotional distress may affect parenting capacity; an uninjured or bereaved parent may be affected as well. Impaired parenting capacity may be the immediate result of a combat injury, or it may occur later as adversities accumulate in the injury's wake. Comprehensive family-centered care helps family members understand the broad impact of combat-related conditions on everyone in the family, and it suggests parenting strategies that can effectively promote children's wellbeing during the recovery. There is an urgent need to develop and evaluate evidence-based programs that reduce the impact of deployment stress, PTSD, and TBI on the extended family system.

4. Identify and treat mental health problems—including depression, anxiety, and PTSD—in uninjured parents and children.

Clinicians who work with combat-injured service members or veterans can help their patients' families and children in simple ways. Clinicians can learn about the members of a patient's family and how the patient relates to the uninjured parent and children by asking how the illness or injury affects the marriage and parenting. For example, irritability, avoidance, or loss of interpersonal connectedness can decrease marital satisfaction and parental engagement. Clinicians should listen to uninjured parents and children for signs of distress and, when appropriate, get help for them. Uninjured parents and children who had psychiatric or developmental problems before the combat injury are at risk for greater problems. Clinicians who identify problems in the family can request a patient's permission to invite other family members to a clinical session to discuss the nature of family relationships and to assess the impact of combat-related injuries or illnesses. Such proactive attention to the clinical needs of all family members will boost the family's resilience, both together and individually.

5. Tailor services to families' individual risks and strengths. Children and families who were already functioning well may need only shorter-term support. On the other hand, children and families who had medical or mental health problems even before a combat injury or death can be expected to need more help. But in either case, strength-based approaches are more effective than deficit models. We can promote families' resilience by 1) reducing their distress, 2) educating them, 3) helping them plan for future needs, 4) linking them to outside resources, and 5) creating a sense of hope. Recognizing the variability among recovering families and adapting to their needs to promote resilience will help create cost-effective programs and services.

Clinicians should listen to uninjured parents and children for signs of distress and, when appropriate, get help for them.

6. *Educate clinical and community service providers about the unique needs of families of service members who have been injured or killed in combat.* Children and families who face combat injury and death should be able to get competent and well-informed medical, mental health, social, and educational care in any community in the nation, even and perhaps especially when they live far from military installations or in rural areas. Thus we need national programs to teach clinicians and community service providers about the unique needs of military children and families; the White House's Joining Forces campaign, for example, helps communities, businesses, clinicians, and schools learn about military families' needs. We also must evaluate such programs to make certain they deliver essential care efficiently and cost-effectively.

Building broad access to health care and community support programs is likely to be challenging, however. Professionals need incentives to participate in these programs. Because military children may need extensive and complex help after a parent's injury, illness, or death, children may be underserved. Or they may receive duplicate services or inappropriate treatments in overlapping systems. Policy must target efficient and formal coordination of care across multiple systems—education, health care, mental health, youth services—to facilitate recovery and to minimize the burden on already stressed families.

7. *Commit to sustaining systems of support for these families, who may need help for decades.* Policies and programs should recognize that a family's recovery after combat-related injury, illness, or death is likely to be prolonged, and families will have different needs at different times. Services from military, VA, and civilian providers should be supplemented, integrated, and coordinated to meet families' needs during their many years of recovery and healing. Increasing the use of web-based models of care may be a promising way to do this.

Ultimately, we need to do more research, evaluate the effectiveness of existing programs, and disseminate the findings so that we can expand resilience-based family programs to providers in the communities where families live and receive care. In the absence of strong, evidence-based programs to support these high-risk families, however, both contemporary practice and future research hypotheses should be grounded in sound clinical judgment.

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ENDNOTES

 1. Department of Defense, "Report on the Impact of Deployment of Members of the Armed Forces on Their Dependent Children," report to the Senate and House committees on armed services, October 2010, http://www.militaryonesource.mil/12038/MOS/Reports/Report_to_Congress_on_Impact_of_Deployment_ on_Military_Children.pdf.

 2. Iraq Coalition Casualty Count, "Military Fatalities by Year," accessed September 1, 2012, www.icasualties.org.

 3. Edwin A. Weinstein, "Disabling and Disfiguring Injuries," in *War Psychiatry*, ed. Franklin D. Jones et al. (Falls Church, VA: Office of the Surgeon General, U.S. Army, 1995), 353–81.

 4. Karyn D. Jones, Tabitha Young, and Monica Leppma, "Mild Traumatic Brain Injury and Posttraumatic Stress Disorder in Returning Iraq and Afghanistan War Veterans: Implications for Assessment and Diagnosis," *Journal of Counseling and Development* 88 (2010): 372–76, doi: 10.1002/j.1556-6678.2010. tb00036.x.

 5. Atul Gawande, "Casualties of War—Military Care for the Wounded from Iraq and Afghanistan," *New England Journal of Medicine* 351 (2004): 2471–75, doi: 10.1056/NEJMp048317.

 6. Stephen J. Cozza and Jennifer M. Guimond, "Working with Combat-Injured Families through the Recovery Trajectory," in *Risk and Resilience in U.S. Military Families*, ed. Shelley MacDermid Wadsworth and David Riggs (New York: Springer, 2011), 259–77.

 7. President's Commission on Care for America's Returning Wounded Warriors, *Serve, Support, Simplify: Report of the President's Commission on Care for America's Returning Wounded Warriors* (Washington, 2007).

 8. Stephen J. Cozza and Margaret M. Feerick, "The Impact of Parental Combat Injury on Young Military Children," in *Clinical Work with Traumatized Young Children*, ed. Joy D. Osofsky (New York: Guilford Press, 2011), 139–54.

 9. Daniel S. Pine and Judith A. Cohen, "Trauma in Children and Adolescents: Risk and Treatment of Psychiatric Sequelae," *Biological Psychiatry* 51 (2002): 519–31, doi: 10.1016/S0006-3223(01)01352-X.

10. Jocelyn Brown et al., "A Longitudinal Analysis of Risk Factors for Child Maltreatment: Findings of a 17-Year Prospective Study of Officially Recorded and Self-Reported Child Abuse and Neglect," *Child Abuse and Neglect* 22 (1998): 1065–78.

11. Stephen J. Cozza, "Meeting the Wartime Needs of Children and Adolescents," in *Caring for Veterans with Deployment-Related Stress Disorders: Iraq, Afghanistan, and Beyond*, ed. Josef I. Ruzek et al. (Washington: American Psychological Association, 2011), 171–90.

12. Elizabeth J. Halcomb and Patricia M. Davidson, "Using the Illness Trajectory Framework to Describe Recovery from Traumatic Injury," *Contemporary Nurse* 19 (2005): 232–41.

13. Greta Friedemann-Sanchez, Nina A. Sayer, and Treven Pickett, "Provider Perspectives on Rehabilitation of Patients with Polytrauma," *Archives of Physical Medicine and Rehabilitation* 89 (2008): 171–78, doi: 10.1016/j.apmr.2007.10.017.

14. Stephen J. Cozza et al., *The Impact of Combat Injury on the Adjustment of Military Service Members, Spouses, and Their Children,* poster presentation at the annual meeting of the International Society for Traumatic Stress Studies, Baltimore, MD, November 2011.

15. Danny Koren et al., "Increased PTSD Risk with Combat-Related Injury: A Matched Comparison Study of Injured and Uninjured Soldiers Experiencing the Same Combat Events," *American Journal of Psychiatry* 162 (2005): 276–82, doi: 10.1176/appi.ajp.162.2.276.

16. Thomas A. Grieger et al., "Posttraumatic Stress Disorder and Depression in Battle-Injured Soldiers," *American Journal of Psychiatry* 163 (2006): 1777–83.

17. Lisa Armistead, Karla Klein, and Rex Forehand, "Parental Physical Illness and Child Functioning," *Clinical Psychology Review* 15 (1995): 409–22, doi: 10.1016/0272-7358(95)00023-I; Lisa A. Gorman, Hiram E. Fitzgerald, and Adrian J. Blow, "Parental Combat Injury and Early Child Development: A Conceptual Model for Differentiating Effects of Visible and Invisible Injuries," *Psychiatry Quarterly* 81 (2010): 1–21, doi: 10.1007/s11126-009-9116-4.

18. Anne Visser-Meily et al., "Children's Adjustment to a Parent's Stroke: Determinants of Health Status and Psychological Problems, and the Role of Support from the Rehabilitation Team," *Journal of Rehabilitation Medicine* 37 (2005): 236–41.

19. Cozza and Guimond, "Working with Combat-Injured Families."

20. Beth A. Kotchick et al., "The Role of Parental and Extrafamilial Social Support in the Psychosocial Adjustment of Children with a Chronically Ill Father," *Behavior Modification* 21 (1997): 409–32.

21. Stavroula Diarme et al., "Emotional and Behavioural Difficulties in Children of Parents with Multiple Sclerosis: A Controlled Study in Greece," *European Child and Adolescent Psychiatry* 15 (2006): 309–18.

22. Anne Visser-Meily et al., "When a Parent Has a Stroke: Clinical Course and Prediction of Mood, Behavior Problems, and Health Status of Their Young Children," *Stroke* 36 (2005): 2436–40.

23. Stephen J. Cozza et al., "Combat-Injured Service Members and Their Families: The Relationship of Child Distress and Spouse-Perceived Family Distress and Disruption," *Journal of Traumatic Stress* 23 (2010): 112–15, doi: 10.1002/jts.20488.

24. Duncan Keeley, "Telling Children about a Parent's Cancer," *British Medical Journal* 321 (2000): 462–63.

25. Stephen J. Cozza et al., *Proceedings: Workgroup on Intervention with Combat Injured Families* (Bethesda, MD: Center for the Study of Traumatic Stress, Uniformed Services University, 2009).

26. Anna C. Muriel and Paula K. Rauch, "Suggestions for Patients on How to Talk with Children about a Parent's Cancer," *Journal of Supportive Oncology* 1 (2003): 143–45.

27. Francis M. Weaver et al., "Provider Perspectives on Soldiers with New Spinal Cord Injuries Returning from Iraq and Afghanistan," *Archives of Physical Medicine and Rehabilitation* 90 (2009): 517–21, doi: 10.1016/j.apmr.2008.09.560; John E. Zeber et al., "Family Perceptions of Post-Deployment Healthcare Needs of Iraq/Afghanistan Military Personnel," *Mental Health in Family Medicine* 7 (2010): 135–43.

28. Defense and Veterans Brain Injury Center, "DoD Worldwide Numbers for TBI," accessed September 1, 2012, www.health.mil/Research/TBI_Numbers.aspx.

29. RAND Center for Military Health Policy Research, *Invisible Wounds: Mental Health and Cognitive Care Needs of America's Returning Veterans* (Santa Monica, CA: RAND Corporation, 2008).

30. Terri Tanielian and Lisa H. Jaycox, eds., *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (Santa Monica, CA: RAND Corporation, 2008), xxi.

31 Nella Charles, Franca Butera-Prinzi, and Amaryll Perlesz, "Families Living with Acquired Brain Injury: A Multiple Family Group Experience," *NeuroRehabilitation* 22 (2007): 61–76.

32. Rikke Kieffer-Kristensen, Thomas W. Teasdale, and Niels Bilenberg, "Post-Traumatic Stress Symptoms and Psychological Functioning in Children of Parents with Acquired Brain Injury," *Brain Injury* 25 (2011): 752–60, doi: 10.3109/02699052.2011.579933.

33. Jennifer J. Vasterling, Mieke Verfaellie, and Karen D. Sullivan, "Mild Traumatic Brain Injury and Posttraumatic Stress Disorder in Returning Veterans: Perspectives from Cognitive Neuroscience," *Clinical Psychology Review* 29 (2009): 674–84, doi: 10.1016/j.cpr.2009.08.004.

34. Amanda M. Kelley et al., "Risk Propensity and Health Risk Behaviors in U.S. Army Soldiers with and without Psychological Disturbances across the Deployment Cycle," *Journal of Psychiatric Research* 46 (2012): 582–89, doi: 10.1016/j.jpsychires.2012.01.017.

35. John R. Urbach and James P. Culbert, "Head-Injured Parents and Their Children: Psychosocial Consequences of a Traumatic Syndrome," *Psychosomatics* 32 (1991): 24–33.

36. Linda J. Resnik and Susan M. Allen, "Using International Classification of Functioning, Disability and Health to Understand Challenges in Community Reintegration of Injured Veterans," *Journal of Rehabilitation Research and Development* 44 (2007): 991–1006.

37. Franca Butera-Prinzi and Amaryll Perlesz, "Through Children's Eyes: Children's Experience of Living with a Parent with an Acquired Brain Injury," *Brain Injury* 18 (2004): 83–101.

38 Jeffrey S. Kreutzer et al., "Caregivers' Well-Being after Traumatic Brain Injury: A Multicenter Prospective Investigation," *Archives of Physical Medicine and Rehabilitation* 90 (2009): 939–46; Jennie Ponsford et al., "Long-Term Adjustment of Families following Traumatic Brain Injury Where Comprehensive Rehabilitation Has Been Provided," *Brain Injury* 17 (2003): 453–68.

39. Linda F. Pessar et al., "The Effects of Parental Traumatic Brain Injury on the Behaviour of Parents and Children," *Brain Injury* 7 (1993): 231–40.

40. Sofie Verhaeghe, Tom Defloor, and Mieke Grypdonck, "Stress and Coping among Families of Patients with Traumatic Brain Injury: A Review of the Literature," *Journal of Clinical Nursing* 14 (2005): 1004–12.

41. Karen H. Seal et al., "Bringing the War Back Home: Mental Health Disorders among 103,788 US Veterans Returning From Iraq and Afghanistan Seen at Department of Veterans Affairs Facilities," *Archives of Internal Medicine* 167 (2007): 476–82, doi: 10.1001/archinte.167.5.476.

42. Fischer, *Casualty Statistics*.

43. Jeffrey L. Thomas et al., "Prevalence of Mental Health Problems and Functional Impairment among Active Component and National Guard Soldiers 3 and 12 Months following Combat in Iraq," *Archives of General Psychiatry* 67 (2010): 614–23, doi: 10.1001/archgenpsychiatry.2010.54; Lydia A. Chwastiak et al., "Association of Psychiatric Illness and All-Cause Mortality in the National Department of Veterans Affairs Health Care System," *Psychosomatic Medicine* 72 (2010): 817–22, doi: 10.1097/PSY.0b013e3181eb33e9.

44. Tanielian and Jaycox, *Invisible Wounds*, xxii.

45. L. E. del Valle and J. Alvelo. "Perception of Post Traumatic Stress Disorder Symptoms by Children of Puerto Rican Vietnam Veterans," *Puerto Rico Health Sciences Journal* 15 (1996): 101–6; Joseph R. Herzog, R. Blaine Everson, and James D. Whitworth, "Do Secondary Trauma Symptoms in Spouses of Combat-Exposed National Guard Soldiers Mediate Impacts of Soldiers' Trauma Exposure on Their Children?" *Child and Adolescent Social Work Journal* 28 (2011): 459–73, doi: 10.1007/s10560-011-0243-z.

46. Keith D. Renshaw et al., "Distress in Spouses of Service Members with Symptoms of Combat-Related PTSD: Secondary Traumatic Stress or General Psychological Distress?" *Journal of Family Psychology* 25 (2011): 461–69, doi: 10.1037/a0023994.

47. Melissa Hakman et al., "Change Trajectories for Parent-Child Interaction Sequences during Parent-Child Interaction Therapy for Child Physical Abuse," *Child Abuse & Neglect* 33 (2009): 461–70, doi: 10.1016/j.chiabu.2008.08.003.

48. N. Ben Arzi, Zahava Solomon, and Rachel Dekel, "Secondary Traumatization among Wives of PTSD and Post-Concussion Casualties: Distress, Caregiver Burden and Psychological Separation," *Brain Injury* 14 (2000): 725–36; Rachel Dekel, Zahava Solomon, and Avi Bleich, "Emotional Distress and Marital Adjustment of Caregivers: Contribution of Level of Impairment and Appraised Burden," *Anxiety, Stress & Coping* 18 (2005): 71–82, doi: 10.1080/10615800412336427.

49. Herzog, Everson, and Whitworth, "Secondary Trauma Symptoms."

50. David S. Riggs et al., "The Quality of the Intimate Relationships of Male Vietnam Veterans: Problems Associated with Posttraumatic Stress Disorder," *Journal of Traumatic Stress* 11 (1998): 87–101; Ann C. Davidson and David J. Mellor, "The Adjustment of Children of Australian Vietnam Veterans: Is There Evidence for the Transgenerational Transmission of the Effects of War-Related Trauma?" *Australian and New Zealand Journal of Psychiatry* 35 (2001): 345–51; Carol MacDonald et al., "Posttraumatic Stress Disorder and Interpersonal Functioning in Vietnam War Veterans: A Mediational Model," *Journal of Traumatic Stress* 12 (1999): 701–7.

51. Ayelet Meron Ruscio et al., "Male War-Zone Veterans' Perceived Relationships with Their Children: The Importance of Emotional Numbing," *Journal of Traumatic Stress* 15 (2002): 351–57.

52. Steven L. Sayers et al., "Family Problems Among Recently Returned Military Veterans Referred for a Mental Health Evaluation," *Journal of Clinical Psychiatry* 70, no. 2 (2009): 163–70; Abigail H. Gewirtz et al., "Posttraumatic Stress Symptoms among National Guard Soldiers Deployed to Iraq: Associations with Parenting Behaviors and Couple Adjustment," *Journal of Consulting and Clinical Psychology* 78 (2010): 599–610, doi: 10.1037/a0020571.

53. Candice M. Monson, Casey T. Taft, and Steffany J. Fredman, "Military-Related PTSD and Intimate Relationships: From Description to Theory-Driven Research and Intervention Development," *Clinical Psychology Review* 29 (2009): 707–14, doi: 10.1016/j.cpr.2009.09.002.

54. Cindy M. Schaeffer et al., "Predictors of Child Abuse Potential among Military Parents: Comparing Mothers and Fathers," *Journal of Family Violence* 20 (2005): 123–29.

55. Shelley M. MacDermid et al., *Understanding and Promoting Resilience in Military Families*, report prepared for the Office of Military Community and Family Policy in the Office of the Secretary of Defense (West Lafayette, IN: Military Family Research Institute at Purdue University, 2008).

56. Charles W. Hoge et al., "Combat Duty in Iraq and Afghanistan, Mental Health Problems, and Barriers to Care," New England Journal of Medicine 351 (2004): 13–22, doi: 10.1056/NEJMoa040603.

57. Iraq Coalition Casualty Count, "Military Fatalities by Year"; Fischer, *Casualty Statistics*.

58. Elaine Willerton et al., "Military Fathers' Perspectives on Involvement," *Journal of Family Psychology* 25 (2011): 521–30, doi: 10.1037/a0024511; *Cheryl* Regehr et al., "Behind the Brotherhood: Rewards and Challenges for Wives of Firefighters," *Family Relations* 54 (2005): 423–35, doi: 10.1111/j.1741-3729.2005.00328.x.

59. Shelley MacDermid Wadsworth and Kenona Southwell, "Military Families: Extreme Work and Extreme 'Work-Family,'" *Annals of the American Academy of Political and Social Science* 638 (2011): 163–83, doi: 10.1177/0002716211416445; Regehr et al., "Behind the Brotherhood."

60. Eytan Bachar et al., "Psychological Well-Being and Ratings of Psychiatric Symptoms in Bereaved Israeli Adolescents: Differential Effect of War- Versus Accident-Related Bereavement," *The Journal of Nervous and Mental Disease* 185 (1997): 402–6.

61. Jeffrey G. Johnson et al., "Stigmatization and Receptivity to Mental Health Services among Recently Bereaved Adults," *Death Studies* 33 (2009): 691–711, doi: 10.1080/07481180903070392.

62. Kirk K. Lin et al., "Resilience in Parentally Bereaved Children and Adolescents Seeking Preventive Services," *Journal of Clinical Child and Adolescent Psychology* 33 (2004): 673–83; J. William Worden and Phyllis R. Silverman, "Parental Death and the Adjustment of School-Age Children," *OMEGA—Journal of Death and Dying* 33 (1996): 91–102, doi: 10.2190/p77l-f6f6-5w06-nhbx; J. William Worden, *Grief Counseling and Grief Therapy: A Handbook for the Mental Health Practitioner*, 4th ed. (New York: Springer, 2009), 231.

63 Robert S. Pynoos, "Grief and Trauma in Children and Adolescents," *Bereavement Care* 11 (1992): 2–10; Judith A. Cohen et al., "Childhood Traumatic Grief: Concepts and Controversies," *Trauma, Violence, & Abuse* 3 (2002): 307–27, doi: 10.1177/1524838002237332.

64. George C. Tremblay and Allen C. Israel, "Children's Adjustment to Parental Death," *Clinical Psychology: Science and Practice* 5 (1998): 424–38, doi: 10.1111/j.1468-2850.1998.tb00165.x.

65. Victoria H. Raveis et al., "Children's Psychological Distress following the Death of a Parent," *Journal of Youth and Adolescence* 28 (1999): 165–80.

66 Sharlene A. Wolchik et al., "Stressors, Quality of the Child-Caregiver Relationships, and Children's Mental Health Problems after Parental Death: The Mediating Role of Self-System Beliefs," *Journal of Abnormal Child Psychology* 34 (2006): 212–29.

67. Neil Kalter et al., "The Adjustment of Parentally Bereaved Children: I. Factors Associated With Short-Term Adjustment," *OMEGA—Journal of Death and Dying* 46 (2002): 15–34, doi: 10.2190/nt8q-r5gb-x7cw-acn2; Phyllis R. Silverman et al., "The Effects of Negative Legacies on the Adjustment of Parentally Bereaved Children and Adolescents," *OMEGA—Journal of Death and Dying* 46 (2002): 335–52, doi: 10.2190/ac8p-7cay-lf55-yxkr.

68. Jill Harrington-LaMorie and Meghan McDevitt-Murphy, "Traumatic Death in the United States Military: Initiating the Dialogue on War-Related Loss," in *Grief and Bereavement in Contemporary Society: Bridging Research and Practice*, ed. Robert A. Neimeyer et al. (New York: Routledge, forthcoming).

69. Douglas H. Lehman and Stephen J. Cozza, "The Families and Children of Fallen Military Service Members," in Ritchie, *Combat and Operational Behavioral Health*, 543–62.

70. Irwin N. Sandler, "Quality and Ecology of Adversity as Common Mechanisms of Risk and Resilience," American Journal of Community Psychology 29 (2001): 19–61.

71. Ann Masten, "Ordinary Magic: Lessons from Research on Resilience in Human Development," *Education Canada* 49, no. 3 (2009): 28–32.

Building Communities of Care for Military Children and Families

Harold Kudler and Colonel Rebecca I. Porter (U.S. Army)

Summary

Military children don't exist in a vacuum; rather, they are embedded in and deeply influenced by their families, neighborhoods, schools, the military itself, and many other interacting systems. To minimize the risks that military children face and maximize their resilience, write Harold Kudler and Colonel Rebecca Porter, we must go beyond clinical models that focus on military children as individuals and develop a public health approach that harnesses the strengths of the communities that surround them. In short, we must build communities of care.

One obstacle to building communities of care is that at many times and in many places, military children and their families are essentially invisible. Most schools, for example, do not routinely assess the military status of new students' parents. Thus Kudler and Porter's strongest recommendation is that public and private institutions of all sorts—from schools to clinics to religious institutions to law enforcement—should determine which children and families they serve are connected to the military as a first step toward meeting military children's unique needs. Next, they say, we need policies that help teachers, doctors, pastors, and others who work with children learn more about military culture and the hardships, such as a parent's deployment, that military children often face.

Kudler and Porter review a broad spectrum of programs that may help build communities of care, developed by the military, by nonprofits, and by academia. Many of these appear promising, but the authors emphasize that almost none are backed by strong scientific evidence of their effectiveness. They also describe new initiatives at the state and federal levels that aim to break down barriers among agencies and promote collaboration in the service of military children and families.

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Pediatrician-turned-child psychoanalyst Donald Woods Winnicott once said that "there is no such thing as a baby."[1] In other words, no child exists in isolation. Each develops biologically, psychologically, and socially through give-and-take with others. By the same token, military children develop through their relations with their military parents, other family members, caretakers, schools, communities, and the culture and operational tempo of the armed forces. That's what makes them military children. And many such children are, themselves, intergenerational links in long family histories of military service, which they will pass on to their own children. The U.S. Department of Defense (DoD) estimated that 57 percent of active-duty troops serving in 2011 were the children of current or former active-duty or reserve service members.[2] To understand and promote the growth and health of military children, for their own sake and for the sake of our nation, we must consider interactions that extend across families, communities, culture, and time. In practical terms, we need a public health model that looks beyond the clinical care of individual military children to define broader interactions that either promote or threaten their wellbeing. We must also pose a fundamental question: How does a nation develop communities of care that maximize resilience and minimize the health risks that military children and their families face?

In this article, we define communities of care as complex systems that work across individual, parent/child, family, community, military, national, and even international levels of organization to promote the health and development of military children. Relatively few elements of these communities are clinical. Some elements focus directly on military children, while others support military children (or, at least, minimize their vulnerabilities) through interaction with parents, schools, youth organizations, law enforcement and judicial systems, educational and vocational programs, and veterans' organizations, among others. Communities of care often evolve around military children in a particular geographic area and/or period of history (for example, wartime life on a military base in a foreign country). Such communities are shaped by explicit care and planning, but they also reflect implicit principles and practices embedded in military culture.

We know a great deal about the links between the health of individual children and that of their family and community, but less research has focused on military children specifically. We are also hampered by longstanding tension between clinical models (for example, diagnosing depression in a military child and instituting an evidence-based course of treatment) and public health models (such as encouraging community schools to identify and support military children to better promote their wellbeing). People trained in one camp or the other may not be comfortable working outside their own paradigm. But to build effective communities of care, clinicians and public health professionals must work together.

From a systems perspective, any attempt to isolate interventions (whether clinical or public health) and their effects within any single dimension is futile: each dimension inevitably resonates across the entire system. For example, a program designed to ensure that Guard and Reserve members have stable housing when they return from deployment may enhance their children's academic performance and mental health. As we review programs that support military children,

it would be appealing to organize them in clearly defined categories. For example, do they focus on direct interaction with children, the military parents, the parents as a couple, the family as a whole, the school, the children's broader social network, the military community, or society at large? Some interventions focus primarily on clinical care, while others enhance resilience, cohesion, safety, education, or economic security in families, military units, and their surrounding communities. Many programs are still in the early stages. Even those that have been well received and seem to help often lack the strong evidence base that planners would need to make informed decisions about whether they should be replicated. Our goal is to define common principles across existing community approaches, assess the strength of current evidence, and suggest next steps to develop effective communities of care.

In practical terms, we need a public health model that looks beyond the clinical care of individual military children to define broader interactions that either promote or threaten their wellbeing.

A Historical Precedent

Military medical history demonstrated long ago that merging clinical and public health approaches can effectively help service members cope with the stress of deployment. An outstanding example is the work of Thomas Salmon, a doctor who served as chief consultant in psychiatry for General Pershing's American Expeditionary Force during World War I.[3] When U.S. forces entered the war in 1917, they had to prepare for the same mental health problems that had stymied the English, French, Germans, and Russians since the war began in 1914. Chief among them was "shell shock," a common response to the psychological trauma that troops experienced in combat. Symptoms of shell shock included nightmares, psychosomatic complaints, or the inability to eat or sleep. European military medical experts approached shell shock through a clinical model. Soldiers stayed in the trenches until they developed all the signs and symptoms of that devastating disorder. Then the warrior was summarily "demoted" to the rank of patient, evacuated to his home country, and hospitalized. Though doctors applied every standard (and many experimental) treatments of the day, these patients proved very hard to put back together again. Consequently, the fighting force was significantly diminished, and hospitals on the home front overflowed with fresh cases from the trenches.

Salmon developed a different strategy.[4] Rather than wait for warfighters to develop the full clinical picture of shell shock, he arranged for anyone who displayed significant signs of stress (including marked irritability, anxiety, insomnia, social withdrawal, tics, or confusion) to be immediately identified by his buddies, noncommissioned officers, or command and, as quickly as possible, sent just behind the front lines. The entire American force was trained to be alert to such changes, understand the need to spot them as early as possible, and know how to report them. Crucially, they were taught that paying attention and taking prompt action were instrumental to helping their buddies, helping their units, and accomplishing their mission. Because military culture sees the health and success of the individual as inseparable from

the health and success of the group, the military is fertile ground for merging clinical and public health models of care.

Warfighters with signs of shell shock (which we might now call combat stress) remained in uniform and worked in noncombat roles.[5] Their treatment emphasized regular meals and sleep ("three hots and a cot") and maintaining their military identity. The psychologically injured warfighter was treated as a worthy soldier making a meaningful contribution to the mission. Program leaders consistently expressed their clear and confident expectation that these troops would soon return to regular duty with their units. Salmon's combat stress doctrine of proximity, immediacy, and high expectations of success came to be known as the PIE model. It remains a central principle of combat medicine today. For example, Combat Stress Control Teams in Iraq and Afghanistan, using this approach, have had a 97 percent return-to-duty rate.[6] Salmon's model has been adopted around the world as a fundamental principle of military mental health.[7]

Public health has been defined as "the science and art of preventing disease, prolonging life and promoting health through the organized efforts and informed choices of society, organizations public and private, communities and individuals."[8] While the clinical model focuses on diagnosing and treating a specific disorder in an individual patient, a public health perspective aims to increase resilience to health problems at the population level. In practice, health interventions often involve a mixture of clinical and public health practices. For example, clinicians and public health leaders collaborate to tell patients about the coming flu season, inoculate those at risk, and monitor the disease across the population.

Salmon's PIE model sprang from his experience as the first director of the National Committee for Mental Hygiene. Mental hygiene was an early-twentieth-century social movement that brought those we would now call "mental health consumers," including psychiatric patients and their families, into partnership with medical professionals, academics, and leaders in government and public opinion across multiple levels of society. The National Committee hired Salmon to put its vision into practice. Under Salmon's leadership, the mental hygiene movement cultivated an informed community, replaced

An enlightened, well-organized community plays the decisive role in recognizing, managing, and, whenever possible, preventing mental illness.

stereotypes and stigma with understanding and hope for the mentally ill, created community organizations to advocate for and assist the mentally ill and their families, and always paired community efforts with those of mental health clinicians and researchers. Salmon's PIE model directly extended the mental hygiene movement's key principle on behalf of service members: although any population (civilian or military) needs well-trained clinical professionals and excellent clinical facilities, an enlightened, well-organized community plays the decisive role in recognizing, managing, and, whenever possible, preventing mental illness. You might well say that the mental hygiene movement's

primary goal was to create communities of care. Decades after Salmon's death, the programs described in this article extend his time-tested principles of battlefield medicine to improve the health of military children and their families on the home front.

Communities of Care for Military Children

To apply Salmon's principles to military children, we must first determine where their "front lines" are, identify the clinical and public health supports available to them, and apply a few basic tenets. One key tenet of deployment mental health is that all warfighters and all of their family members (including children) face difficult readjustments in the course of the deployment cycle. This population-based approach is less about diagnosing individual patients than about helping children, families, military units, and entire communities retain or regain a healthy balance despite the stress of deployment. In the life of the family and the child, each developmental step builds on the relative success of previous steps. Thus we should remember that children and their families are dynamic rather than static. Military parents' resilience and vulnerability affects the resilience and vulnerability of their children. Clinical experience suggests that children may be the most sensitive barometers of their families' adaptation, and military children are no different. Each family brings its own capacities and liabilities to the coping process, and each has successive opportunities to adapt over the course of the deployment cycle and in the years after.

Unfortunately, the family's efforts to adapt may miscarry. For example, a military child might learn (without ever having been told) to remain quiet and even aloof in the face of a parent's volatile emotions and violent outbursts. Though this tactic might help the child adjust to a parent's deployment-related problems, it could cause trouble over time. But even when children's attempts to protect themselves are maladaptive in the long run, they are nonetheless efforts to cope and adapt rather than inherent weaknesses or failures. This is the basis for treating veterans and their family members with respect and high expectations that they will successfully adapt over time.

Communities of care extend the responsibility for developing that environment of respect and positive expectations from the clinic to the community. They must work steadily and incrementally to improve access to information, support and, when necessary, clinical care. Their efforts must be integrated across clinical and public health domains, and their services must be timely and appropriate. The services that warfighters or their children need as they prepare for deployment are different from those they need during deployment or in the days, weeks, months, and years after the service member returns home. And communities of care must reach out rather than wait for military families to find their way to the right mix of services and support.

To build successful communities of care for deployment mental health, we need two things: policy (building community competence by bringing end-users, health providers, community leaders, and policy makers together to identify military populations, understand military culture, and tackle the broader implications of deployment stress) and practice (building community capacity to identify those who need clinical care and deliver that care effectively). Policy and practice require separate but related structures

and partnerships that converge to establish and enhance outreach, education, and integration of systems.

A Developing Relationship

Our approach to military children must be multipronged because, like their military parents, these children are highly mobile and intimately adapted to a wide range of communities and social support systems. Some are born in military facilities and raised in base housing, live in a succession of military installations, and attend on-base schools. Others grow up many miles from a parent's military base and are immersed in civilian culture and civilian schools. Still others are born and raised overseas.

Children of Guard and Reserve members face their own challenges. They usually live far from military bases and military treatment facilities, and they may be strangers to the institutions of military life. Their parents were once called "weekend warriors" because they drilled only one weekend a month (plus an additional two weeks a year). Many of these families did not even think of themselves as military until they were plunged into the deployment cycle of our recent wars. Their children are less likely to have the steady companionship of other military children or reliable access to military family programs.

Military children don't wear uniforms, and they may be hard to recognize in their communities. Yet they serve and sacrifice alongside their parents in ways that often go unappreciated. Teachers, guidance counselors, coaches, and even their own pediatricians may not know that they are military children, even though this core component of their identity may be critical to their academic

success, behavior, and health. These children have to manage frequent moves that repeatedly separate them from friends, support systems, and school curricula. Even when they don't move, a parent's deployment disrupts routines and family dynamics. Military children live with constant concern for the safety of their deployed mother or father. Depending in part on their families' health, stability, and resilience, they may fall behind in school, regress in their development, or display emotional or behavioral problems. This is not to say that military children are doomed to troubles or permanent damage. Many thrive in the face of challenges. But these challenges are significant, and we must help military children cope with them.

Military Children at the Community Level

Most Americans today are comfortably isolated from the military deployment cycle. Fewer than 1 percent of Americans have served in our recent wars. Still, service members and their families are not a rare species. There are more than 22 million living U.S. veterans, and more than 60 million Americans are either veterans or dependents of veterans eligible for benefits and services from the Department of Veterans Affairs (VA).[9] Three-quarters of these veterans served during a war or other official conflict. Military and veteran families are one of the largest U.S. subcultures, and they live in every community. The effects of war on military families and their communities extend from predeployment through return and reintegration, and they are often repeated through cycles of further deployments. Veterans and their families may require years of readjustment to psychological and physical stress and/or injuries. When a nation goes to war, it makes a long-term investment in

military families, whether it acknowledges this explicitly or not.

Given this long-term investment in military families, what are the requisites of resilient development? The Positive Youth Development model holds that young people thrive in the context of community-based, youth-serving programs that foster five attributes: competence, connection, character, confidence, and contribution to society.[10] In this issue of the *Future of Children*, M. Ann Easterbrooks, Kenneth Ginsburg, and Richard M. Lerner add two more attributes—coping and control—for a total of "Seven C's" that promote resilience.[11] So, for military children to thrive, we should give them opportunities to develop a strong sense of competence, experience a profound connection to family and community, maintain character despite adversity and ambiguity, build confidence in themselves, contribute to society, cope with stress, and exercise self-control.

Clinical Services

Communities of care can't be reduced to clinical services. But informed, accessible clinical services are an important component. People often assume that the health burden of going to war is fully met and managed by the DoD and the VA. But the DoD and VA health-care systems focus primarily on service members rather than their families. The nation needs clinical systems for military families that understand military culture, ask about military histories, and consider the health implications of deployment as a routine component of care.

Before the wars in Iraq and Afghanistan, military medical facilities were brimming with military spouses and children who received care from military clinicians in military settings. It was easy for military children to feel at home in these settings and for their providers to understand them in the context of their military community (of course, this was less true for the spouses and children of Guard and Reserve members). Like their military parents, military children had a military medical home.

Military children … serve and sacrifice alongside their parents in ways that often go unappreciated.

The accelerated operational tempo in Afghanistan and Iraq, however, meant that service members used more health-care services, including comprehensive pre- and post-deployment medical screening. This drove a shift of military children out of military facilities and into civilian clinical practices, paid for through TRICARE, the national health-care program for service members, veterans, and their families. Unfortunately, TRICARE doesn't mandate any special training for providers, and there is no guarantee that community health-care professionals who enroll in TRICARE have the understanding of military culture or the training about deployment's effects that they need to treat military children. They are simply licensed health professionals willing to accept the terms of coverage. Nor is there any guarantee that enough pediatricians, child mental health professionals or family therapists will be available to meet the needs of military children wherever they reside. Guard and Reserve members, whose TRICARE benefits

are often limited to the period immediately before, during, and after deployment, may also face the difficult decision of whether to change pediatricians if their current doctor doesn't accept TRICARE.

Even in military facilities, where service members receive state-of-the-art care, a wounded service member's children may remain beyond the focus of that care. One of the authors of this article, Harold Kudler, first recognized this in 2004, while touring Walter Reed Army Medical Center with an editor of this issue, Stephen J. Cozza. As we stepped aside to allow a young child to push a wheelchair bearing his disfigured father toward the physical therapy room, Cozza quietly asked, "Who talks with these children?" This is still an important question, though recent years have seen some gains.

Beginning in 2007, for example, Congress appropriated additional funding to the DoD to support psychological health and treatment of traumatic brain injury. The Army Medical Command used these funds to develop a Comprehensive Behavioral Health System of Care, which includes Child and Family Assistance Centers and a School Behavioral Health interface with military children's parents and teachers. Unfortunately, fiscal realities may constrain this effort in the future.

Service members and their children are twice as likely as the average American to live in rural communities, where accessing DoD health care is more difficult. Guard and Reserve members and their families also tend to live in rural areas. Compared with other Americans, rural Americans in general face significant disparities in access to health care.[12] Unfortunately, in the mistaken belief that service members and their families live only on or near military

bases, rural health-care professionals often assume that there is no point in becoming TRICARE providers. This misunderstanding is a major obstacle to ready access to health care for military children.

DoD data tell a very different story: all but 27 counties across the continental United States had sent Guard and Reserve members to Iraq or Afghanistan as of October 2011.[13] Given that Guard and Reserve members make up about one-third of the force in Iraq and Afghanistan, and that active duty service members and their families are also scattered across the nation, it is fair to say that virtually every county and community in the United States is home to military children. Data from the Department of Health and Human Services bring home another key point: most communities across the United States face a shortage of mental health professionals.[14] And mental health professionals are particularly hard to find in rural areas.

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The DoD and VA have made great strides in reaching geographically dispersed populations through online and mobile technologies, or telehealth. Legislation passed at the end of 2012 allows certain health-care providers to work across state lines, so that telehealth

services can reach more service members in remote areas.[15] But limited broadband access, especially in rural areas, continues to hamper remote access to health services in many parts of the nation.

Testing Access to Clinical Care

Given that service members, veterans, and their families are distributed across the nation and tend to seek care within their own communities, are community providers and programs prepared to recognize, assess, treat, or triage deployment-related mental health problems? A recent survey of community providers (mental and primary care combined) found that 56 percent don't routinely ask patients about military service or military family status.[16] Even more worrisome, the survey was circulated primarily in North Carolina and Virginia, states that host some of the nation's largest military bases and, together, are home to more than 198,000 active-duty service members, 44,000 Guard and Reserve members, and more than 1.5 million veterans.

Failure to screen for military service or military family status may reflect the community providers' lack of experience with the military or with military health issues. In fact, only one of six respondents had served in the military. And although the VA is a national leader in training health-care providers, only one in three providers reported past training in VA settings and only one in eight had ever worked as a VA health professional.

The survey also found that rural providers were significantly less likely to have ever been employed by the VA. And even though rural Americans are overrepresented in the military, a significantly smaller percentage of rural providers routinely screen for military

history (37 percent of rural providers versus 47 percent of others). Further, rural providers were significantly more likely to report that they didn't know enough about managing depression, substance abuse and dependence, and suicide. Rural providers also reported significantly less confidence in treating post-traumatic stress disorder (PTSD) (46 percent of rural providers reported low confidence, versus 35 percent of others). Finally, the survey found that only 29 percent of community providers felt that they knew how to refer a veteran to VA care. Taken together, these findings indicate a yawning disconnect between community providers and the DoD and VA systems of care.

Envisioning Communities of Care

The DoD has tremendous capacity to support service members and their children through its clinical and family services, but there are limits to what it can accomplish without the help of clinical and public health programs in the civilian communities where military families live. The community response must be flexible enough to track military families and their children as they change over time, both over the course of a military career and in the transition from military to veteran status. It must appreciate that military children often grow into the next generation of service members, and that they carry a complex legacy of stress and resilience into the future. Individual military careers, like wars, have a beginning and an end, but the dynamics of military children go on across generations. These children cannot go unrecognized and unsupported in their communities.

Among the greatest challenges to building communities of care is the stigma in military culture associated with deployment-related

mental health problems, which seems to apply whether the problem is experienced by a parent or a child. Military families may be unwilling to report a child's problem because they fear that the service member will be held responsible. If a military child is missing school, getting drunk, or having run-ins with the police, for example, the local military command is likely to find out; if it does, it is certain to bring the issue to the military parent. The service member and even the child are likely to fear implications for the parent's performance review, security clearance, or future promotion, and this fear can hinder communication and dissuade families from seeking appropriate help. Even Guard and Reserve members who live hundreds of miles from the nearest base may experience this stigma. If we are to develop a proactive approach to deployment-related problems among military children, people at all levels of the military must understand that identifying such problems early is much more likely to support both the child and the service member.

Health-care providers trained and employed in traditional clinical programs often have problems of their own when they try to incorporate public health principles into their practices. Most of them have been taught to focus on discrete diseases that have known causes, diagnostic criteria, treatments, and outcomes. Communities of care for warfighters and their families require a broader picture. For example, PTSD may be the single most common mental health disorder associated with deployment, but a nation's medical response to going to war can't be reduced to screening for and treating PTSD. After all, PTSD is just one of many conditions associated with deployment. It often coexists with major depression, substance abuse, and/or traumatic brain injury,

and any of these can affect families and children, creating a wide array of clinical and nonclinical needs.

Moreover, PTSD and other deployment health problems coexist with and are strongly affected by other issues not traditionally considered clinical. For example, one of the most important predictors of whether Vietnam veterans developed PTSD was the level of social support that they believed they were getting from their families.[17] This is likely just as true of today's veterans. And when service members come home to a nation in recession and have trouble finding or keeping a job, their work problems are likely to exacerbate the severity of their PTSD, depression, substance abuse, or chronic pain. Moreover, PTSD or traumatic brain injury may contribute to homelessness among veterans and their families. Even the best clinical practice guidelines for deployment health problems need to incorporate public health perspectives, and the best place for intervention is often the community rather than the clinic.

To advance the wellbeing of military children along with that of their military parents, then, we need to integrate clinical systems with community systems, including schools, youth organizations, employee assistance programs, child and family services, child protective services, local law enforcement, family courts, and more. Community programs must be able to identify military children and families, and they must understand how military culture and deployment can affect health and resilience. The question is, How can we ensure that there is no wrong door in the community to which service members and their families can turn for help?

PTSD may be the single most common mental health disorder associated with deployment, but a nation's medical response to going to war can't be reduced to screening for and treating PTSD.

Military Programs that Support Communities of Care
The military has worked to optimize support for military children, and many programs already in place follow the principles of communities of care.

Family Readiness Groups (FRGs), as they are known in the Army, connect families with their service member's unit and with one another. Each of the services has an FRG-like organization, and each unit customizes its FRG to match its mission, membership, deployment cycle, and home community. At one level, the FRG is the commanders' tool to communicate through the ranks to individual service members and their families. But it also lets family members share information (much of which has been gained through personal experience rather than institutional indoctrination) and support one another, and to share questions and concerns with commanders. When units and families are geographically dispersed, online virtual FRGs promote community support and continuity.[18] Unfortunately, the open door that is a key strength of the FRG can sometimes be its greatest weakness: As one military spouse said, "Why would I want to talk about my family's troubles when his commander's wife might be listening?"[19]

Military OneSource functions much like a national employee assistance program for service members and their families. It offers practical information and reliable support through free online, telephone, and face-to-face counseling, for everything from managing a checkbook to changing a tire. Military OneSource can help with effective parenting, health problems (including those related to deployment), special educational needs, and coping with frequent moves and long separations. Other online resources, such as RealWarriors.Net and AfterDeployment.Org, also offer links to information, support, and clinical resources.

RESPECT-Mil, based at Walter Reed National Military Medical Center's Deployment Health Clinical Center, trains military and civilian clinicians about the deployment cycle and how to manage stress and illness among service members and their families. The program, which uses a systems approach to get better results by disseminating the military's guidelines for treating depression and PTSD, has been implemented at more than 100 military facilities around the world.[20] RESPECT-Mil provides systematic, evidenced-based care to service members with symptoms of depression and PTSD in primary care settings. Primary care providers are trained to routinely screen for depression and PTSD and communicate effectively about behavioral health. Routine screening leads to early identification and treatment of these problems in easy-to-access primary care settings, where the stigma of seeking mental health services is reduced. Early, effective support for military members translates to meaningful support for their children.

One of RESPECT-Mil's goals is to improve the continuity of care for personal or family problems that require coordinated or sustained intervention. Such problems may not be clinical (at least, not yet), but they are still critical to bolstering resilience among service members and their families. With better continuity of care, people in the RESPECT-Mil program are less likely to fall through the cracks of a complex health services delivery system.

Military Kids Connect is an online community of military children (aged 6–17) created by the DoD's National Center for Telehealth and Technology. This website supports military children from predeployment through a parent's return home, offering informative activities, games, videos, and surveys that promote understanding, resilience, and coping skills. In monitored online forums, children share their ideas, experiences, and suggestions with other military children, letting them know they are not alone. Military Kids Connect also helps parents and educators understand what it takes to support military children at home and in school. Parents can control and monitor their children's access and activity on the website.

Not all interventions for military children and their families that use community-of-care principles have begun as in-house DoD programs. For example, the University of California, Los Angeles (UCLA), and the Harvard School of Medicine collaborated to adapt and pilot a family-centered, evidence-based program for military families at the Marines' Camp Pendleton.[21] Families OverComing Under Stress (FOCUS) is a preventive intervention that teaches children and families to cope with hardships such as long separations, changes in family routines, worries about deployed parents' safety, and

the effects of combat stress or injuries.[22] The Navy's Bureau of Medicine and Surgery adopted FOCUS through a contract with UCLA in 2008, and the program has since expanded to 23 Navy and Marine Corps facilities and served more than 400,000 people.[23]

FOCUS teaches practical, empirically tested resilience skills that help military children from infancy through the teen years, along with their families, meet the challenges of deployment and reintegration, communicate and solve problems effectively, and successfully set goals together. Each family creates a shared family narrative about their deployment cycle experiences, thereby increasing mutual understanding and enhancing family cohesion and support. Evaluations have shown that the program improves psychological health and family adjustment for service members, spouses, and children alike.[24] FOCUS also provides ready access to a select set of resources for parents, providers, military commanders, and community leaders. By detecting stress early and beginning intervention in culturally acceptable ways within the family rather than in clinical settings, FOCUS effectively promotes family and community resilience.

Recently, to better serve military families who live far from large military communities, the developers of FOCUS have worked to employ the same principles in civilian communities (and sometimes through online resources). FOCUS is scalable and portable, and it can be tailored to the dramatically different needs of individual communities and military children.

Each National Guard unit offers a variety of programs to support military children, including local National Guard Family Assistance Centers, which any military family

may use. The centers are supported jointly by the Guard and by the unit's home state or territory. Their staff includes Military and Family Life Consultant Counselors, who must have a minimum of five years' experience and a master's degree in counseling, social work, or a related discipline. Counseling is private, confidential, and free for service members and their families.

National Guard programs across the nation have been progressively incorporating behavioral health support programs into everyday operations and at family gatherings and events. Guard children can take part in the innovative Operation: Military Kids (OMK), the Army's collaboration with communities to support children and teens affected by deployment. Through OMK, they meet other children whose parents are deployed, and they learn about community resources. In 2011, more than 103,000 military children participated in OMK activities in 49 states and the District of Columbia. Through OMK's recreational, social, and educational programs, military children, many of whom live far apart from one another, can become friends and develop personal and leadership skills. OMK also helps military children and their families with problems that crop up at school.[25]

The military also supports children through partnerships with national youth programs at the community level. The 4-H Club, itself a program of the U.S. Department of Agriculture, has formal partnerships with the Army, Air Force, and Navy. These 4-H Military Partnerships harness the resources of land grant universities across the nation (including youth development professionals and targeted programing) to establish 4-H Clubs for military children living on and off base. 4-H seeks out children whose

parents serve in the Guard and Reserve and live in communities with little or no military presence. Given that military families move frequently and experience lengthy and frequent deployments, 4-H provides continuity through predictable programming and a safe, dependable, and nurturing environment for military kids.

In a similar partnership with the military, the Boy Scouts of America serves about 20,000 military children annually on bases around the world. Scouts conduct service projects such as clothing drives for children in Afghanistan, painting military facilities, base-wide cleanups, and book drives for military libraries. Like 4-H, Scouting is a "portable culture" of shared values, knowledge, and skills that can help sustain a military child through frequent moves and long separations.[26]

The departments of Defense, Veterans Affairs, and Labor have developed the National Resource Directory (NRD), a website that connects wounded warriors, service members, veterans, and their families and caregivers with helpful programs and services. The NRD is an ambitious effort to build a virtual community. It connects service members and their families to national, state, and local resources that can help them with benefits and compensation, education and training, employment, family and caregiver support, mental and physical health, homelessness and housing, transportation, and travel and volunteer opportunities.

Perhaps the NRD's greatest weakness derives from its vast ambition. Military family members and providers trying to make the right referral depend on comprehensive, accurate, constantly updated information, but constant updating is hard to sustain across the entire

United States. One practical solution is modeled by War Within, a demonstration project of the Citizen Soldier Support Program that has recruited health professionals for a state-by-state database. Searching by county on the War Within website, military families can find descriptions of practitioners, what insurance they accept (including TRICARE), whether they offer sliding-scale fees, whether they have expertise in deployment health, and how to get to their offices. The data are reviewed and validated every six months and can easily be uploaded to the NRD. Thus War Within is an effective model of how to develop and maintain state-by-state processes to make the NRD more timely, accurate, and useful.

Those who have seen [Talk Listen Connect] programs will never think about military families without deep appreciation for their resilience and their sacrifices.

Civilian Programs that Support Communities of Care

The military has put considerable thought, energy, and investment into helping military children become resilient and thrive. But much of this work can be accomplished only in and by the communities where military children live. National advocacy organizations such as the National Military Family Association (NMFA) and the Military Child Education Coalition (MCEC) are excellent examples of civilian organizations that effectively mobilize civilian communities. Both organizations work to ensure quality opportunities for all military children affected by frequent moves, deployment, family separations, and the transition to civilian life.

A closer examination of the MCEC illustrates how such civilian programs can work. As they move from school to school, from state to state, and even to other nations, military children must give up friends and routines, deal with changing academic standards and curricula, and fulfill disparate requirements for promotion and graduation. The MCEC helps families, schools, and communities support military children as they cope with these transitions. The organization recommends that schools ask every new student, "Has someone in your household served in the armed forces?" This basic step would go a long way toward ensuring that military children and their families are recognized wherever they go. Knowing children's military status would help schools understand the academic and social problems they face.

One of the MCEC's innovations is the Living in the New Normal Institute (LINN-I), which encourages military families to enhance their children's resilience, fosters community support for military children and their families, and provides concerned adults with information about helping military children cope with uncertainty, stress, trauma, and loss.[27] The LINN-I's core tenet is that military children's inherent attributes of courage and resilience can be strengthened through deliberate encouragement at the community level. The target audience includes school guidance counselors and other professional educators, school nurses, community social workers, military installation leaders, military and VA transition specialists, military and veteran parents, and other caring adults who want to improve the education of military children. The LINN-I provides accredited training for

such people in communities across the nation. For example, the MCEC Health Professionals Institute deepens the capacity of community providers to serve military children, and the MCEC Special Education Leaders Institute prepares education and health professionals to work with military children who have special needs.[28]

Give an Hour, another nonprofit organization, develops national networks of health professionals and other community members who volunteer their services to meet the mental health needs of service members and their families. At this writing, Give an Hour's network of licensed mental health professionals includes nearly 6,500 psychologists, social workers, psychiatrists, marriage and family therapists, drug and alcohol counselors, pastoral counselors, and others. Through free services for individuals, couples, families, and children, these counselors help with depression, anxiety, PTSD, traumatic brain injury, substance abuse, sexual health and intimacy, and grief. Give an Hour volunteers also work to reduce the stigma associated with seeking mental health care through training and outreach in schools and communities on and around military bases.

Recently, the organizers of Give an Hour developed Community Blueprint, a road map that lets local communities across the United States effectively tackle common problems that military families face.[29] This network brings together local leaders, government agencies (including representatives from local DoD and VA programs), nonprofits, and others to develop community-based collaborative solutions for problems ranging from unemployment to education to behavioral health to housing. Volunteers, including service members, veterans, and their family members, are integral to this process.

Many well-established organizations have used their talents and resources to help military families and children. Prominent among them is Sesame Workshop, which produces Sesame Street's Talk Listen Connect series.[30] This multimedia program, in English and Spanish, helps military families with children between the ages of two and five cope with the stress of deployment or combat injuries. A separate program helps military children and their families deal with a parent's death in combat or by suicide. A broad yet fully integrated set of Sesame Street products includes videos for children, teaching materials for parents and providers, magazines, postcards, and posters. Talk Listen Connect has reached hundreds of thousands of households around the world through free DVDs and related materials as well as direct downloads from the Sesame Street website. Few public health interventions are as likely to be taken home and enthusiastically put to use by military children and their families.

An essential strength of Talk Listen Connect is its ability to sensitize health professionals, teachers, school administrators, and others in the community to the way deployment stress can affect military families and their children. Those who have seen these programs will never think about military families without deep appreciation for their resilience and their sacrifices. They will also be more likely to recognize and engage military children and their families in the future and more likely to advocate for military children with their colleagues and across their communities.

Many more civilian organizations work independently and together to weave a patchwork quilt of clinical, supportive, or other services that champion military families and children. They represent community responses from

the grassroots level to the needs of military families, and to the gaps that the government cannot and should not be fully expected to fill. In this way, they exemplify communities of care.

New Partnerships to Build Communities of Care

In recent years, millions of service members returned home from war to a nation in recession. This "double whammy" galvanized the development of new government-community partnerships to serve them. Military children may not always be the primary focus of these partnerships, but, as with many of the programs described above, children are often their beneficiaries. Unfortunately, the recession constrained not only families' resources but also those of communities and governments at every level. When funds are short, it's even more important to collaborate, both formally and informally, to support military children. The national recession has been a powerful incentive to develop communities of care.

One key initiative is Paving the Road Home, a program of the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA).[31] Since 2007, Paving the Road Home has coordinated a series of National Behavioral Health Conferences on Returning Veterans and Their Families. The conferences bring together state-level teams of community mental health and substance abuse service leaders, DoD and VA representatives, and veterans' service organizations for Policy Academies, where they make recommendations about (1) how national programs can best support the behavioral health of returning warfighters, their families, and their children at the community, state, and regional levels and (2) how to foster enduring

state-level partnerships geared to local and regional needs. At this writing, virtually all U.S. states and territories have attended at least one SAMHSA Policy Academy, and many of these state-level partnerships continue to work together.

Among the advantages of working at the state level is that each state has its own National Guard and state office of veterans services. Each state offers services and benefits for service members, veterans, and their families that are geared to local needs and resources, and these are best promoted at the state level. Many state benefits and services further enhance those available through the federal government. North Carolina, a mentor state in Paving the Road Home, has been developing its model since 2005. The North Carolina program illustrates what can be accomplished at the state level.

First, a small working group partnered with the governor to host a summit that brought together key leaders of state and local government, senior representatives of DoD and VA facilities, leaders of the North Carolina National Guard, and representatives of state and community provider and consumer groups. The governor asked summit participants to develop new ideas to help returning warfighters get back to their families, their jobs, and their communities. The North Carolina Governor's Focus on Returning Veterans and Their Families has met monthly ever since.[32] Its mission is to continuously expand a network of services through which service members and their families can get effective assistance throughout the deployment cycle and beyond. Military children have been a central interest from the start.

Surveying access to needed services, the Governor's Focus found that only 76 of

North Carolina's 100 counties had an identi-fied TRICARE mental health professional. Members of the group then produced "Treating the Invisible Wounds of War," a training series, conducted in person and online, for health professionals and others.[33] For example, these free, accredited train-ing programs can teach doctors to recognize symptoms of traumatic brain injury during routine eye exams, or train employers to help workers with problems related to deployment and combat. More than 14,000 people have completed at least one of these training pro-grams. Since 2011, the U.S. Health Resources and Services Administration has collaborated with the National Area Health Education Center (AHEC) Organization to field a train-the-trainer version of North Carolina's series, aimed at training another 10,000 health-care providers through 112 participating AHECs across the nation.[34]

Members of the North Carolina Governor's Focus recently joined forces with the North Carolina Institute of Medicine to produce a comprehensive report laying out key medi-cal and community assets and needs in the effort to support service members and their families across the state.[35] The report's recommendations, which went well beyond traditional clinical perspectives to outline services for military children in state and community programs—including public schools, colleges, and religious communi-ties—were then established in state law.[36] The Governor's Focus is monitoring compli-ance with that law on behalf of the North Carolina General Assembly.

Replicating the steps that established the North Carolina Governor's Focus, Virginia developed the Virginia Wounded Warrior Program, which has created high-level part-nerships within the state's leadership while

simultaneously building local capacity and coordinated outreach in communities across the commonwealth.[37] These same steps could be applied to develop community compe-tence and capacity in any state or territory, but it's essential to recognize that each state has its own culture and needs to build its system in its own way. There are no cookie cutters for this process.

The next great push in establishing a national system that builds community-level com-petence and capacity is the White House Joining Forces Initiative.[38] Joining Forces is a comprehensive effort that seeks action on behalf of military families from all sectors of society, including individual citizens, commu-nities, businesses, nonprofits, religious institu-tions, schools, colleges and other educational programs, philanthropic organizations, and government. In the clinical realm, Joining Forces is challenging professionals to inte-grate evidence-based practices and licensing and credentialing processes across disciplines and national professional organizations, aiming to ensure that knowledge of military culture and training in deployment mental health are ubiquitous.

To support Joining Forces, a presidential order of August 2012 calls for a national public health approach that "must encom-pass the practices of disease prevention and the promotion of good health for all military populations throughout their life-spans, both within the health-care systems of the depart-ments of Defense and Veterans Affairs and in local communities," adding that "our efforts also must focus on both outreach to veter-ans and their families and the provision of high-quality mental health treatment to those in need."[39] This mission, which can best be accomplished through partnerships among the military, states, and communities, must

focus on military children to be truly effective. At this writing, each of the nation's 152 VA Medical Centers was planning to hold a community mental health summit in response to the presidential order. These summits should create new opportunities for communities of care.

Evidence-Based, Effective Communities of Care

Based on our review of military and community programs that serve military children, what have we learned about building communities of care? The first lesson is that we must identify military children so that we can make community resources available to them. Too often, military children remain invisible. The second lesson is that there can be no single approach to serving our nation's military children. They come in all ages, live in all sorts of communities (rural and urban, on and off military bases), have parents at different phases of the deployment cycle, and have many different levels of need and access to resources. When more than one program for military children is available in a community, it is to everyone's advantage to look for synergy rather than to choose between competing approaches and services. William Beardslee, writing about FOCUS, spoke of the value of having a "suite of services" available.[40] We might go further and suggest that military children require an entire symphony of services— health care, educational, spiritual, legal, business, and more—across their communities and across time.

The programs we've reviewed have been evaluated in many ways. Some programs, like FOCUS, have established a solid evidence base. Other programs can point only to positive evaluations from participant surveys,

and still others lack any formal evaluations, though they "seem like the right thing to do." Participant surveys and "do-gooding" do not constitute valid evidence that a program has met its goals. We are still a long way from having the needed menu of evidence-based services for military children, and further still from anything approaching a practice guideline to steer clinical or public health services across the nation. As we wait for data that will eventually tell us which programs and approaches work best, we should remember that much if not most of the support military children need is in areas that are already well understood. If military children have access to good schools, safe and stable housing, and, when necessary, clinical and social services— and if their parents have stable jobs, opportunities for advancement, and quality health care—military children will be better off.

Recommendations

Based on these considerations, we recommend the following steps to recognize military children and their family members and respond to their needs when they seek help in clinical settings:

- Every clinical program (including those associated with local schools, child protection agencies, law enforcement, and the courts) should routinely ask everyone who enters its system, "Have you or has someone close to you served in the military?"

- Military membership and military family status should be flagged in each person's medical record so that it is noted at each encounter. Appropriate data fields should be required as a meaningful part of all electronic health records.[41]

- Government health-care programs and private-sector insurance companies should

offer incentives to providers to take military history as a way to improve health outcomes and potentially reduce health-care costs through more effective treatment and better-coordinated care across DoD, VA, and private systems.

- All clinical program staff members should be taught about military culture and basic deployment mental health.

- Every clinical program that agrees to routinely apply these steps should register its name and basic information in the National Resource Directory (following the strategies of War Within described in this article) so that it is easily accessible to military families as well as to providers, employers, college officials, religious leaders, and others.

Taken together, these five practical steps will go a long way toward building communities of care in clinical settings.

Similar recommendations apply in educational, occupational, religious, local governmental, and other community settings:

- Military-connected status (whether active duty or Guard and Reserve) should be annotated in children's education records, as the MCEC has advocated.

- Employers should record which of their employees are service members, or have service members in their family, so that they can better understand military-related work/family issues and offer optimal support at times of stress. Employee assistance programs should routinely address military family issues and raise awareness of these issues among supervisors.

- Religious leaders should likewise be aware of the presence and contributions of military families and remain alert to opportunities to support them.

- State and local governments, including law enforcement, child protection services, and local courts and judiciary officials, should take advantage of programs that teach civilians about military life, culture, and deployment stress.

- Local, state, and federal governments, as well as community organizations, should commit to fully populating and continuously updating the National Resource Directory so that community resources are fully represented and accessible. Further, librarians in communities, schools, universities, hospitals, professional schools, businesses, penal institutions, and government agencies of all kinds should be trained to post and promote information about the NRD and help users access the services available through it.

Conclusions

The greatest irony and most exciting opportunity is that the same principles Thomas Salmon developed to control combat stress in World War I provide a strong foundation on which to build communities of care for military children today. We ought to focus on recognizing military children and addressing their problems in close proximity to their homes, schools, community organizations, and doctor's offices. We need to identify their needs early by watching for warning signs of stress rather than waiting for them to develop clear clinical disorders and find their way to clinical settings. Finally, we should always have high expectations that, despite their sacrifice and stress, military children will continue to cope,

grow, and succeed as valued citizens of their communities and their nation.

Military children and their families constitute one of the largest American subcultures, but they are also one of the least visible. Thinking back to Winnicott, there is, after all, such a thing as a military child. But military children are always embedded in families and communities, and in a military culture that values humility and self-sufficiency. Precisely because they are military children, they strive to put the needs of others (including their military parents) above their own. This is perhaps the real secret of their invisibility. An effective community of care can be measured by its public awareness of military children, its ability to recognize military children in community settings, and the ease with which military children and their family members can access its resources and services. Again, there should be no wrong door to which military children or their families can turn for help at the right time.

The distinguished physician and medical educator Francis Peabody once said that "the secret of the care of the patient is caring about the patient."[42] Summarizing the clinical and public health models reviewed in this article, we might well say that the secret of creating communities of care for military children is creating communities that care about military children. This will require effort and time, but we believe it is a highly achievable goal.

ENDNOTES

1. Donald Woods Winnicott, "The Theory of the Parent-Infant Relationship," *International Journal of Psycho-Analysis* 41 (1960): 585–95.

2. Human Resources Strategic Assessment Program, *January 2011 Status of Forces Survey of Active Duty Members: Leading Indicators* (Arlington, VA: Defense Manpower Data Center, 2011).

3. Françoise Davoine and Jean-Max Gaudillière, *History Beyond Trauma*, trans. Susan Fairfield (New York: Other Press, 2004).

4. Thomas William Salmon, "The Care and Treatment of Mental Diseases and War Neuroses ('Shell Shock') in the British Army," *Mental Hygiene* 1 (1917): 509–47.

5. Charles R. Figley and William P. Nash, *Combat Stress Injury: Theory, Research, and Management* (New York: Routledge, 2007).

6. Joint Mental Health Advisory Team 7 (J-MHAT 7), *Operation Enduring Freedom 2010 Afghanistan* (Washington: Office of the Surgeon General United States Army Medical Command and Office of the Command Surgeon HQ, USCENTCOM, and Office of the Command Surgeon U.S. Forces Afghanistan (USFOR-A), 2011).

7. Zahava Solomon, Rami Shklar, and Mario Mikulincer, "Frontline Treatment of Combat Stress Reaction: A 20-year Longitudinal Evaluation Study," *American Journal of Psychiatry* 162 (2005): 2309–14, doi: 10.1176/appi.ajp.162.12.2309.

8. Charles-Edward Amory Winslow, "The Untilled Fields of Public Health," *Science* 51 (1920): 23–33.

9. VA National Center for Statistics and Analysis, U.S. Department of Veterans Affairs, "Veteran Population," accessed March 9, 2013, http://www.va.gov/vetdata/Veteran_Population.asp.

10. Richard M. Lerner, Elizabeth M. Dowling, and Pamela M. Anderson, "Positive Youth Development: Thriving as the Basis of Personhood and Civil Society," *Applied Developmental Science* 7 (2003): 172–80, doi: 10.1002/yd.14.

11. M. Ann Easterbrooks, Kenneth Ginsburg and Richard M. Lerner, "Resilience among Military Youth," *Future of Children* 23, no. 2 (2013): 99–120.

12. David Hartley, "Rural Health Disparities, Population Health, and Rural Culture," *American Journal of Public Health* 94 (2004): 1675–78, doi: 10.2105/AJPH.94.10.1675.

13. Citizen Soldier Support Program, "Citizen Soldier Support Program Mapping and Data Center," accessed March 9, 2013, http://www.unc.edu/cssp/datacenter/.

14. Health Resources and Services Administration, U.S. Department of Health and Human Service, "Health Professional Shortage Areas—Mental Health," http://datawarehouse.hrsa.gov/exportedmaps/HPSAs/HGDWMapGallery_BHPR_HPSAs_MH.pdf.

15. National Defense Authorization Act for Fiscal Year 2012, Section 713, H.R. 1540, 112th Congress, http://www.gpo.gov/fdsys/pkg/BILLS-112hr1540enr/pdf/BILLS-112hr1540enr.pdf.

16. Dean G. Kilpatrick et al., *Serving Those Who Have Served: Educational Needs of Health Care Providers Working with Military Members, Veterans, and Their Families* (Charleston, SC: Medical University of South Carolina Department of Psychiatry, National Crime Victims Research & Treatment Center, 2011).

17. Daniel W. King et al., "Resilience-Recovery Factors in Posttraumatic Stress Disorder Among Female and Male Vietnam Veterans: Hardiness, Postwar Social Support, and Additional Stressful Life Events," *Journal of Personality and Social Psychology* 74 (1998): 420–34.

18. U.S. Army, "Army FRG: Family Readiness Group," accessed April 15, 2013, https://www.armyfrg.org/skins/frg/home.aspx; U.S. Navy, *Family Readiness Groups Handbook 2011*, http://www.nsfamilyline.org/publications/NavyFRGHandbook.pdf; U.S. Air Force, *Air Force Family Readiness Edge*, http://www.afcrossroads.com/famseparation/pdf/ReadinessFAmily.pdf; U.S. Marines, "Unit, Personal and Family Readiness Program (UPFRP)," accessed April 15, 2013, http://www.marcorsyscom.marines.mil/CommandStaff/FamilyReadinessOfficer(FRO).aspx.

19. Military wife, focus group, October 10, 2006.

20. Deployment Health Clinical Center, accessed March 9, 2013, http://www.pdhealth.mil/main.asp; U.S. Department of Veterans Affairs, "VA/DoD Clinical Practice Guidelines," accessed March 9, 2013, www.healthquality.va.gov/.

21. William Saltzman et al., "Mechanisms of Risk and Resilience in Military Families: Theoretical and Empirical Basis of a Family-Focused Resilience Enhancement Program," *Clinical Child and Family Psychological Review* 14 (2011): 213–30.

22. Patricia Lester et al., "Families Overcoming Under Stress: Implementing Family-Centered Prevention for Military Families Facing Wartime Deployments and Combat Operational Stress" *Military Medicine* 176 (2011): 19–25.

23. William Beardslee et al., "Family-Centered Preventive Intervention for Military Families: Implications for Implementation Science," *Prevention Science* 12 (2011): 339–48, doi: 10.1007/s11121-011-0234-5.

24. Patricia Lester et al., "Evaluation of a Family-Centered Prevention Intervention for Military Children and Families Facing Wartime Deployments," *American Journal of Public Health* 102 (2012): S48–54, doi: 10.2105/AJPH.2010.300088.

25. Operation: Military Kids, accessed March 9, 2013, www.operationmilitarykids.org/public/home.aspx.

26. "2011 Report to the Nation," Boy Scouts of America, accessed March 9, 2013, http://www.scouting.org/about/annualreports/2011rtn.aspx.

27. "Living in the New Normal," Military Child Education Coalition, accessed March 9, 2013, http://www.militarychild.org/professionals/programs/living-in-the-new-normal-linn.

28. "Programs," Military Child Education Coalition, accessed March 9, 2013, http://www.militarychild.org/professionals/programs.

29. "The Community Blueprint," Give an Hour, accessed March 9, 2013, http://www.giveanhour.org/CommunityBlueprint.aspx.

30. "Talk, Listen, Connect," Sesame Workshop, accessed March 9, 2013, http://www.sesamestreet.org/parents/topicsandactivities/toolkits/tlc.

31. "Paving the Road Home: Returning Veterans and Behavioral Health," *SAMHSA News* 16, no. 5 (September/October 2008), http://www.samhsa.gov/samhsaNewsletter/Volume_16_Number_5/SeptemberOctober2008.pdf.

32. North Carolina Division of Mental Health, Developmental Disabilities, and Substance Abuse Services, "North Carolina Focus on Service Members, Veterans, and Their Families," accessed March 9, 2013, http://www.veteransfocus.org/our-mission/.

33. "Treating the Invisible Wounds of War," AHEConnect, accessed March 9, 2013, http://aheconnect.com/citizensoldier/cdetail.asp?courseid=citizensoldier1.

34. "A-TrACC Project for the Behavioral/Mental Health of Veterans/Service Members & Families," Health Resources and Services Administration, accessed March 9, 2013, http://bhpr.hrsa.gov/grants/areahealtheducationcenters/ta/trainings/veterans/tttworkshopsummary.pdf.

35. North Carolina Institute of Medicine, *Honoring Their Service: A Report of the North Carolina Institute of Medicine Task Force on Behavioral Health Services for the Military and Their Families* (Morrisville, NC: North Carolina Institute of Medicine, 2011), http://www.nciom.org/wp-content/uploads/2011/03/MH_FullReport.pdf.

36. An Act to Ensure that the Behavioral Health Needs of Members of the Military, Veterans, and Their Families Are Met, Sess. L. No. 2011-185, General Assembly of North Carolina Session 2011, www.ncga.state.nc.us/EnactedLegislation/SessionLaws/PDF/2011-2012/SL2011-185.pdf.

37. "We Are Virginia Veterans," Virginia Wounded Warrior Program, accessed March 9, 2013, http://www.wearevirginiaveterans.org.

38. "Joining Forces: Taking Action to Serve America's Military Families," White House, accessed February 27, 2013, http://www.whitehouse.gov/joiningforces.

39. Office of the Press Secretary, White House, "Executive Order—Improving Access to Mental Health Services for Veterans, Service Members, and Military Families," news release, August 31, 2012, http://www.whitehouse.gov/the-press-office/2012/08/31/executive-order-improving-access-mental-health-services-veterans-service.

40. Beardslee et al., "Family-Centered Preventive Intervention," 341.

41. Centers for Medicare and Medicaid Services (CMS), "An Introduction to the Medicaid EHR Incentive Program for Eligible Professionals," accessed May 26, 2013, http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/EHR_Medicaid_Guide_Remediated_2012.pdf.

42. Francis W. Peabody, "The Care of the Patient," *Journal of the American Medical Association*, 88 (1927): 877–82.

Unlocking Insights about Military Children and Families

Anita Chandra and Andrew S. London

Summary

As this issue of the *Future of Children* makes clear, we have much yet to learn about military children and their families. A big part of the reason, write Anita Chandra and Andrew London, is that we lack sufficiently robust sources of data. Until we collect more and better data about military families, Chandra and London say, we will not be able to study the breadth of their experiences and sources of resilience, distinguish among subgroups within the diverse military community, or compare military children with their civilian counterparts.

After surveying the available sources of data and explaining what they are lacking and why, Chandra and London make several recommendations. First, they say, major longitudinal national surveys, as well as administrative data systems (for example, in health care and in schools), should routinely ask about children's connections to the military, so that military families can be flagged in statistical analyses. Second, questions on national surveys and psychological assessments should be formulated and calibrated for military children to be certain that they resonate with military culture. Third, researchers who study military children should consider adopting a life-course perspective, examining children from birth to adulthood as they and their families move through the transitions of military life and into or out of the civilian world.

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Anita Chandra and Andrew S. London

In the past decade, during the conflicts in Afghanistan and Iraq, researchers have focused on military children and youth to an unprecedented degree.[1] As this issue of the *Future of Children* shows, these researchers have raised serious questions about the findings of earlier work about military children and the adequacy of the data available to study them. Moreover, this issue points to both challenges and opportunities in any effort to expand systematic exploration of military children's experiences.

Despite the limitations of the data, new research on children in military families has advanced relatively quickly as researchers and policy makers have sought to learn more about the academic, social, emotional, and behavioral consequences of parental deployment for children.[2] Still, our knowledge remains incomplete, and opportunities to expand the data infrastructure for future research have not been vigorously pursued. The national survey and administrative data available to researchers today has substantial gaps that make it hard to robustly analyze how military children grow and develop or to evaluate how parents' military service affects children's lives. These gaps in the data hinder our ability to:

- accumulate a comprehensive understanding of military children's experiences, resilience, and needs;

- focus on important subgroups of the military child population (for example, children of active-duty mothers versus fathers, children whose parents serve in different branches of the military, or children of parents who have experienced combat); and

- compare military children with their non-military counterparts.

To improve the situation, national surveys should routinely ask about parents' military experience; medical histories and administrative and educational data systems should do so as well. Moreover, researchers who conduct smaller-scale studies should adapt their methodologies and test their measurements on military populations and examine how the unique circumstances of military life affect children's health, behavior, and emotions.

Beyond the need for new data and better measurements, there are questions about "who counts," particularly in relation to the transition from military to veteran status. To improve data collection, we need to carefully consider the definition of a military family. Does that definition include the families of veterans? Some argue that veterans' families are, by definition, families that include at least one person who has served on active duty, and that the relationship between the military and the family can persist in complex ways after the active-duty period ends.[3] Such enduring connections can affect children's development and wellbeing. Proponents of a broad definition contend that a life-course perspective can help us understand the lifelong consequences for children of parents' military service.

As more and more scholars seek to understand military children and families—their strengths and vulnerabilities, their ability to show resilience, and the systems that support them—the gaps in the data raise the question of how we can bolster the data infrastructure to support research with this population. To answer this question, we take a two-pronged approach. First, we analyze the types of data that are currently available for studying

military children, and, to some extent, we also explore what pre-9/11 data can be used for historical comparisons. Second, we describe critical needs for future efforts to collect and analyze data about military children, and we identify opportunities to augment our efforts.

As more and more scholars seek to understand military children and families—their strengths and vulnerabilities, their ability to show resilience, and the systems that support them—the gaps in the data raise the question of how we can bolster the data infrastructure to support research with this population.

Current Research and Available Data

Three principal kinds of data could be enhanced to further analyze military children: large national surveys, administrative records, and smaller studies based on convenience samples (for example, families who live on a particular installation to which the researcher has ready access). Though much of the research on military children is rooted in such smaller studies, we focus less on these. As important as they are, such studies rarely produce publicly available data sets that other researchers can use for secondary analyses. However, we conclude this article with some

discussion of how these smaller studies could be enhanced.

Here we focus on national surveys and administrative records, organized according to key components of children's lives: physical health and development, cognitive and academic development, and social and emotional wellbeing. Where it is relevant, we note whether the data are collected from parents alone or whether youth are surveyed as well. We emphasize sources of data that include military designation, which allows researchers to analyze subgroups. However, we also mention some exemplary data sources that could be explored in the future if questions about military status were added.

Physical Health and Development

A child's biological maturation is critical to healthy physical development. In light of chronic diseases linked to obesity, and the increase in other childhood diseases such as asthma, the ability to assess and track military children's physical health is increasingly important.

National survey data. Three national surveys expressly aim to document health and health-risk behaviors among children and youth. The first, the National Survey of Children's Health (NSCH), is part of the State and Local Area Integrated Telephone Survey system at the Centers for Disease Control and Prevention (CDC).[4] The NSCH is based on parents' reports of their children's health status and use of health services. It has been fielded in 2003, 2007, and most recently, 2011. In 2003 and 2007, the NSCH had no questions about military status. In 2011, the survey added questions about whether the child is in a military academy, but this is not a reliable indicator

of parents' military status. The survey's parental employment section doesn't ask about military status, nor does the section on health insurance ask about the military's health-care program, TRICARE. (The survey asks about employer-based insurance, which could include TRICARE, but a researcher wouldn't be able to infer the link.)

Second, the National Survey of Adolescent Health (Add Health) is a longitudinal study (that is, a study that follows participants over time) of a nationally representative sample of adolescents who were in grades 7–12 in the United States during the 1994–95 school year.[5] Add Health has followed its cohort into young adulthood, with four in-home interviews, the most recent in 2008 during Wave IV of the survey, when the respondents were 24–32 years old. Add Health collects data on physical health, as well as a broad range of other information. Wave IV included a module on the military, with approximately 15,701 participants. The module did not ask whether participants came from a military family. Rather, it asked whether the participants had served in the military; if so, it asked a number of questions about their service experiences. In addition, in Wave IV, Add Health obtained the military records of veterans who agreed to their release; however, 39 percent refused to provide their Social Security number, which was necessary to link the records.[6] Presumably, the data about military service could be linked to other information in the survey on physical health and other aspects of wellbeing, just as some researchers have linked the military data with previous assessments of academic engagement and social isolation.[7]

The third major national survey is the CDC's Youth Risk Behavior Survey (YRBS), which tracks health and health-risk behaviors among youth in grades 7–12.[8] No questions on this survey specifically track military status, though some states have added questions about military status and substance use.

Other major studies that provide information on child and family health, such as the National Health Interview Survey, exclude active-duty military personnel and those who live on military bases.[9]

Administrative data. In health research, the usual sources of administrative data are those that track use of health services, specifically insurance claims data. Though these data are limited by the fact that they don't assess unmet health needs, they often help researchers understand access to and use of timely preventive care, use of emergency departments, avoidable and unavoidable hospitalizations due to poor disease management, and diagnostic patterns among a given community or population. For military youth, the primary data source of this type is TRICARE's dependent information. These data have been used, most recently, to track patterns in the use of mental and behavioral health services among military youth as they relate to parental deployment. However, many military families (for example, those in the Guard and Reserve) may come in and out of TRICARE coverage and rely principally on private, employer-based insurance. Data on how children in these families use health services may be obscured because private insurers don't routinely assess military status. Without data on Guard and Reserve families, we may have a skewed perspective on health issues across the military population. Furthermore, as enlisted personnel leave service, some of them may switch from TRICARE to Medicaid programs (either through enhanced CHIP or traditional

Medicaid). We rarely have data on military status for people enrolled in these public insurance programs.

Data about use of health services can also be gleaned from hospital and emergency department discharges. These data are particularly useful to assess whether hospitalization is used appropriately, whether access to prevention services is acceptable, and whether chronic diseases (for example, childhood asthma) are managed well, as well as for smaller-scale studies on emerging issues. In theory, these data could be abstracted from hospitals that serve large numbers of military personnel and their families (and not simply military treatment facilities). To date, however, there has been little analysis along these lines.

Finally, data on the distribution of health-care providers could help us understand the extent to which military children are living in areas where providers—especially pediatricians, dentists, and child psychiatrists and psychologists—are in short supply. Data on areas with shortages of health-care providers are readily available from the U.S. Department of Health and Human Services, but few researchers have compared these areas to areas with large military communities. Such efforts might be particularly fruitful in communities with large numbers of Guard and Reserve members.

Cognitive and Academic Development
Many researchers have studied military children and academic performance, primarily because school achievement has been a hallmark of military families' success. One result of this work is the worry that military children and youth receive insufficient academic support during periods of transition. This

concern gave rise to the Military Interstate Educational Compact, which tries to lower barriers to academic success as children and families move from state to state.

National survey data. Some sources of data span early to later childhood and collect information about education and related topics; however, many of these sources do not routinely track military status. The Head Start Family and Child Experiences Survey (FACES), run by the Administration for Children and Families, provides descriptive information on the characteristics, experiences, and outcomes of Head Start children and families. FACES captures cognitive development through word recognition, language acquisition, and vocabulary. It also asks about parents' employment status, but it does not systematically collect and analyze current and past military status. However, since the survey also collects data on Head Start program type and geography, links to the military might be inferred from families' proximity to military installations, at least for active-duty families.

The National Education Longitudinal Study (NELS) is a somewhat older, nationally representative sample of eighth-graders, who were first surveyed in the spring of 1988. A sample of these respondents was then surveyed again in 1990, 1992, 1994, and 2000. The survey focuses on educational progress and aspirations, and it includes the military as a choice for parental and youth employment. These data could be further assessed to track the trajectories of military children from previous generations and offer some context for how newer generations approach education and career development. (For example, are children whose parents deployed to Afghanistan or Iraq faring differently from those whose parents served in peacetime or in prior

conflicts?) In theory, another follow-up wave could be added to the NELS to help understand how long military children who opted for military careers themselves remained in the armed forces.

The National Longitudinal Survey of Youth (NLSY) consists of a nationally representative sample of approximately 9,000 youths who were 12–17 years old in 1997. They were interviewed annually at least through 2000, and the survey includes extensive information on military status and pay grade, meaning that the sample could be compared to new generations of youth who live in military families and choose military careers.[10]

In addition to more traditional surveys like the NELS and the NLSY, some newer surveys on early child care may be relevant for studying military families. For example, the National Opinion Research Center is conducting the National Survey of Early Care and Education (NSECE).[11] This study will include 20,000 eligible households and 30,000 child-care providers. The NSECE will gather information on early care and education from the perspective of parents, centers, teachers, and providers of home-based care. Presumably, data gleaned from this survey could be used to assess issues that military families face, though it is unclear whether the sample size will be sufficient.

Administrative data. In education, administrative data generally consist of school records and standardized test scores. School records can provide useful information about grades, school engagement, and disciplinary action. Although using school records is complicated by the fact that school districts code these data in different ways, they can still help track cognitive development and academic progress, and students in schools

with large concentrations of military children could be followed longitudinally.

Few national longitudinal surveys that include information on child social and emotional wellbeing have been used to assess military children's experiences.

Standardized test scores have been used for some studies on military children and youth. For example, one researcher examined test score data from two states heavily affected by deployment and observed a relationship between more cumulative months of deployment and lower reading and mathematics scores.[12] Similar methods could be used at later stages of adolescence, exploring both current and past military status in relation to ACT/SAT scores. But military status questions are not part of the background information consistently collected in these tests. A research team would need to link the test data with Defense Manpower Data Center files, or attempt to infer military status based on address (though this would limit the sample of Guard and Reserve families and would be likely to produce coding errors).

Social and Emotional Wellbeing

The area of military children's lives that has perhaps received the most attention in recent years is social and emotional wellbeing. The social and emotional effects of parental deployment have been examined in various smaller observational studies based on convenience samples and studies of particular

programs (for example, Families Overcoming Under Stress (FOCUS); see the articles in this issue by Ann Easterbrooks, Kenneth Ginsburg, and Richard Lerner and by Harold Kudler and Colonel Rebecca Porter). Such studies have principally found that greater exposure to parental deployment is linked to increases in anxiety symptoms and emotional stress.[13] Some studies have also assessed changes in social functioning in terms of peer and family relationships.

Three current studies—the Military Family Life Project, the Millennium Cohort Family Study, and the Deployment Life Study—include larger, more representative military samples and use participants' contact information from the armed services and from the Defense Manpower Data Center. The Department of Defense's Military Family Life Project in particular may eventually serve as a public-use data set. The project's survey includes items about parental perceptions of their children's social and emotional wellbeing. The Millennium Cohort Family Study, another Department of Defense's project, relies on parents' reports of child functioning, with particular attention to the perspectives of military spouses, and the RAND Corporation's Deployment Life Study includes both young people's and parents' reports.[14]

National survey data. Though they have promise, few national longitudinal surveys that include information on child social and emotional wellbeing have been used to assess military children's experiences. The National Survey of Children's Health (and its counterpart, the National Survey of Children with Special Health Care Needs), Add Health, and the Youth Risk Behavior Survey, all described above, include items about social and emotional functioning. The NSCH includes parent-reported items about children's social

engagement, as well as about emotional disorders (for example, autism or conduct disorders). Add Health has extensive data on peer functioning and positive social behaviors, and the YRBS includes items about depression and social support. For early childhood, studies such as FACES include items about emotional development.

Administrative data. As with physical health, data on use of health services can help understand emotional health. Specifically, use data on use of mental health services can help assess the level of mental health diagnoses among children and youth. School records are more complex and difficult to use in this area, but information from Individualized Education Programs developed for special-needs students can yield insights about some children's social and emotional functioning. And, increasingly, schools are tracking children's affect and other aspects of emotional regulation as part of preschool and elementary school assessments.

Challenges in Studying Military Children
Though the data sources described above can help us assess the health and wellbeing of military children, several challenges to studying this population need to be considered.

Access to Populations
As we've said, many findings about military children have emerged from studies of convenience samples based on researchers' relationships, proximity to a military installation, or use of military programs. Though these studies have illustrated some critical issues, researchers need broader access to data on military children. To some degree, the military is wary about broader access because of important concerns about whether

researchers are sufficiently sensitive to military culture and whether participation in such studies will place an undue burden on service members and their families. However, problems with access have limited the type and scope of research that can be conducted with this population, primarily because access restrictions have deterred researchers studying a range of topics from including military children and youth in their samples. In addition, many researchers who are particularly likely to enhance innovation in areas of great interest for child development broadly—such as socio-emotional competence, noncognitive outcomes or gene-environment interactions—have not routinely included military populations in their work for reasons that go beyond access restrictions. Other barriers include the required level and type of institutional human subjects review, as well as the fact that many academic researchers lack an understanding of military culture.

Representation in Existing Surveys

Even large national studies that collect data on military populations may not use the variables they measure as well as they could. Generally, sampling approaches in these studies have not purposefully accounted for military populations. For example, many studies consider a range of approaches to reach traditionally underrepresented or hard-to-reach populations in their sampling designs, but military populations are rarely included in these strategies unless the study is limited to a military cohort. Thus, even when military samples can be abstracted from larger studies, they often fail to distinguish differences across rank, pay grade, service branch, and other aspects of military service. Given that these factors affect military families' experiences, this lack of finer-grained detail constrains what we can learn from these surveys.

Quality and Appropriateness of Measures

Many of the measurements used in studies such as the NLSY, Add Health, and the NSCH have not been specifically evaluated (in technical terms, validated) to see whether they work well with military populations. This lack of validation may be acceptable—many measurements are not routinely validated for every subpopulation, and most surveys encompass diverse racial/ethnic and socioeconomic contexts that necessarily intersect with military populations. On the other hand, military children may have different perspectives on or experiences of academic, social, or emotional functioning, and some of the items in these surveys may be more or less relevant to them. For instance, questions about completing homework assignments and getting along with peers may have particular resonance for military youth who change schools every two to three years. Questions used to document the stresses that young people experience may not include some of the core events germane to military youth, such as a parent's deployment or injury. Working to better measure the experiences of military children could have benefits beyond the military population, because innovative measurements of vulnerability and resilience that are developed with military children in mind might later be expanded for broader use.

Tracking Military Children

Longitudinal studies are usually the best way to develop a comprehensive understanding of how temperament, environment, and life experience influence children's development across the life course. Longitudinal data are particularly valuable when researchers conduct early and regular assessments, as in, for example, the National Children's Study (NSC), a federal project that intends

to capture a comprehensive set of biological, genetic, social, and environmental indicators from before conception through age 21.[15] Yet, with the exception of the NSC, most large studies have not intentionally included robust military samples. Furthermore, military populations may be more difficult to track for follow-up, given the fact that service members move frequently. With increasing use of cell phones rather than land lines tethered to a particular address, this obstacle may be diminishing, though it is likely to remain a problem to some degree.

Making Appropriate Comparisons

Another obstacle for studies of military youth is identifying relevant comparison groups, both nonmilitary and historical, to help contextualize findings. For example, should comparisons to civilians be nuanced to attempt to mirror some of the mobility, exposure to parental stress, family structures, and parental roles that are central to military families? Or is it sufficient to compare military children to other children generally, given that many aspects of development cut across all children, regardless of military status? And no matter which groups are used for comparison, questions remain about how to select the participants and which measurements (for example, which indicators of academic performance) are best used to compare them.

A related issue of comparison exists within military populations. Given the frequency and length of military deployments since 9/11, can we directly compare the experiences of this generation of military children to those of military children during previous periods (for example, the Vietnam era or the first Gulf War)? As researchers analyze questions about today's military children

(for example, what are the lasting social and behavioral consequences of having a parent with traumatic brain injury?) within the context of the wars in Afghanistan and Iraq, we need to assess what earlier studies say about these questions and determine the extent to which today's military children are similar to or different from prior military generations.

Strengthening Data Infrastructure: Recommendations

There are many ways we could strengthen the existing support for studying military children and youth. Working from a life-course perspective, Jay Teachman identifies a number of principles that could guide future data collection.[16] In particular, he argues that future studies should be longitudinal; that they should include people who haven't served as well as those who have; that they should begin following people before the age at which they become eligible for military service; and that they should follow people during their military service. Studies that follow these principles would help policy makers better understand why people choose military service—a critical question for sustaining the all-volunteer force. Building on Teachman's arguments, future studies that focus on children should also regularly collect data on the nature of parents' military service. And, to the extent that such studies follow children into adulthood, they should measure the military experiences of those who volunteer to serve, because the intergenerational effects of military service have not been adequately studied, in part due to data limitations. Beyond these considerations, future studies of children should incorporate standardized measures that apply to all children, as well as measures of experiences specific to children who are connected to the military.

We recommend improvements in three principal areas.

Adding Military Status

Some of the longitudinal studies discussed above have added military-related questions to follow-up waves of their surveys. Even so, the quality and extent of the items they include limit our ability to robustly analyze the military portion of the sample. If surveys add military questions in the future, they should include, at a minimum: whether children live in a military family; whether military parents are on active duty or in the Guard and Reserve; whether children have experienced parental deployment; and whether children live in a veteran family (that is, whether one or both parents have ever served in the military). These four questions are likely the most sensitive indicators for military child experience. Less crucial but still important questions include how long a child has been part of a military family (for example, a parent may have joined the military after the child was born), whether a child aspires to serve in the military, and a child's experiences of military life and deployment. Given the constraints on survey space, however, these items could be secondary. Adding items about military status would offer a myriad of possibilities for linking these data to a range of physical, cognitive, social, and emotional measures, which heretofore has not been systematically possible.

Questions about military status should not be limited to large national surveys. In general, researchers conducting studies on children's wellbeing should be encouraged to add military status to the core demographic question battery, and to use standardized follow-up questions about military experience for those who have ever served on active duty.

Too often, researchers don't recognize the military or veteran subpopulations in their study samples, which means that potentially important sources of variation remain hidden.

For administrative data (for example, health insurance or school records), military status could be routinely collected simply by adding it consistently as an employer response option. Administrative data systems could consider including information about parental deployment as well, to alert pediatricians, teachers, counselors, and others. Some school districts with large numbers of military children have already begun adding these data fields to student files and back-to-school forms.

Testing and Expanding Measures

As we've said, survey items are rarely validated for use with military children. Cognitive testing before a survey is implemented in the field would tell us whether military children are interpreting items as intended and whether certain items are culturally appropriate in the military context.

Widely used psychological assessments, such as the Strengths and Difficulties Questionnaire, or SCARED, certainly should be validated for military children. Moreover, assessments that have been developed to document children's experiences with parental deployment, for example, still need to be rigorously tested and evaluated.[17] But we should also be discussing whether we need new measurement tools for military children and youth, particularly on topics that are specific to this population. For example, should a question or measure be created to assess support from the military environment, military peer relationships, or military academic transitions? It may be best to develop and test measurements for military children in

smaller studies before applying them in larger national surveys.

Too often, researchers don't recognize the military or veteran subpopulations in their study samples, which means that potentially important sources of variation remain hidden.

Expanding Research Questions

Finally, given the changing context of war, future analyses of the experiences of military children and youth should consider taking a life-course perspective and expanding the definition of what constitutes a military family. For example, if we more systematically collect data on parents' current and past military status, researchers will be able to follow children into adulthood, tracking how changes in military family roles and responsibilities affect children's social, emotional, and intellectual development. These data could be more readily linked to all types of questions, including what careers military children eventually choose, as well as their career growth and development; how they use

health, social, and economic resources and develop stature and wealth; and what happens when they marry and form families.[18] Researchers who conduct studies on smaller populations of military children may be better able to incorporate emerging research and policy questions in their studies. These researchers should be encouraged to use innovative sampling approaches and methods to explore how military children and youth fare across the life course.

Conclusions

If we optimize and expand the collection of data about military and veteran children, opportunities for research, intervention, and policy development will deepen. Two critical approaches in particular—routinely collecting data about military status and validating measurements for military populations—will not only improve our understanding of military families, but also enhance studies of risk and resilience among children and youth in general. Moreover, collecting data about parents' previous military experience in presumably civilian-only samples has the potential to reveal underappreciated intergenerational effects of military service. Long-term studies that follow military, veteran, and civilian children into adulthood promise to substantially enhance the field of life-course studies and bolster our understanding of how military service affects people's lives.

ENDNOTES

1. James Hosek, Jennifer Kavanagh, and Laura Miller, *How Deployments Affect Service Members* (Santa Monica, CA: RAND Corporation, 2006), *www.rand.org/pubs/monographs/2005/RAND_MG432.pdf*.

2. Anita Chandra et al., "Children on the Homefront: The Experiences of Children from Military Families," *Pediatrics* 125 (2010): 16–25, doi: 10.1542/peds.2009-1180.

3. Daniel Burland and Jennifer Hickes Lundquist, "The Best Years of Our Lives: Military Service and Family Relationships—A Life Course Perspective," in *Life-Course Perspectives on Military Service*, ed. Janet M. Wilmoth and Andrew S. London (New York: Routledge, 2013), 165–84.

4. "National Survey of Children's Health," Centers for Disease Control and Prevention, accessed Feb. 15, 2013, www.cdc.gov/nchs/slaits/nsch.htm.

5. Kathleen Mullan Harris, *The National Longitudinal Study of Adolescent Health (Add Health), Waves I and II, 1994–1996; Wave III, 2001–2002; Wave IV, 2007-2009* (Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill, 2009).

6. Add Health, *Wave IV Codebooks*, "Section 10: Military" (Chapel Hill, NC: Carolina Population Center, University of North Carolina at Chapel Hill, 2009), http://www.cpc.unc.edu/projects/addhealth/codebooks/wave4/sect10.zip.

7. Glen H. Elder et al., "Pathways to the All-Volunteer Military," *Social Science Quarterly* 91 (2010): 455–75, doi: 10.1111/j.1540-6237.2010.00702.x.

8. "Youth Risk Behavior Survey Fact Sheets," Centers for Disease Control and Prevention, accessed March 15, 2013, www.cdc.gov/HealthyYouth/yrbs/trends.htm.

9. "National Health Interview Survey," Centers for Disease Control and Prevention, accessed March 15, 2013, www.cdc.gov/nchs/nhis.htm.

10. Jay Teachman, "Race, Military Service, and Marital Timing: Evidence from the NLSY-79," *Demography* 44 (2007): 389–404, doi: 10.1353/dem.2007.0018.

11. NORC at the University of Chicago, "National Survey of Early Care and Education," accessed May 28, 2013, http://www.norc.org/Research/Projects/Pages/national-survey-of-early-care-and-education.aspx.

12. Amy Richardson et al., *Effects of Soldiers' Deployment on Children's Academic Performance and Behavioral Health* (Santa Monica, CA: RAND Corporation, 2011).

13. Patricia Lester et al., "The Long War and Parental Combat Deployment: Effects on Military Children and At-Home Spouses," *Journal of the American Academy of Child & Adolescent Psychiatry* 49 (2010): 310–20, doi: 0.1016/j.jaac.2010.01.003.

14. "The Deployment Life Study," RAND Corporation, accessed May 28, 2013, http://www.rand.org/multi/military/deployment-life.html.

15. Data Resource Center for Child and Adolescent Health, "The National Survey of Children's Health," accessed May 28, 2013, http://www.childhealthdata.org/learn/NSCH.

16. Jay D. Teachman, "Setting an Agenda for Future Research on Military Service and the Life Course," in Wilmoth and London, *Life-Course Perspectives*, 275–90.

17. Anita Chandra et al., *Views from the Homefront: The Experiences of Youth and Spouses from Military Families* (Santa Monica, CA: RAND Corporation, 2011).

18. Janet M. Wilmoth and Andrew S. London, "Life Course Perspectives on Military Service: An Introduction," in Wilmoth and London, *Life-Course Perspectives*, 1–18.

Afterword: What We Can Learn from Military Children and Families

Ann S. Masten

The wellbeing of military children and families in the United States has far-reaching significance for the nation as a whole, in addition to its importance for military capabilities and individual service members and their families. The articles in this issue underscore this message as they update what we know and what we need to know about the challenges and opportunities of military life for children and their families. Although military life has unique hazards and benefits, there are also many parallels in the lives of military and civilian families. Thus, the struggles and achievements of military families and the systems that support them hold valuable lessons for all of us. Based on this issue of the *Future of Children,* this commentary highlights lessons we can learn from military children and families that have the potential to help many families outside the military. It also suggests ways to build on those lessons through additional research and dissemination.

The articles in this issue are grounded in two sets of ideas: contemporary developmental systems theory and a resilience framework.[1]

Central to developmental systems theory is the idea that a person's adaptation and development over the life course is shaped by interactions among many systems, from the level of genes or neurons to the level of family, peers, school, community, and the larger society. Similarly, a family is shaped over time by many interactions among its members and other systems outside the family. This issue makes clear that the U.S. military has recognized the interdependence among systems as its leaders strive to shape and retain a highly effective all-volunteer force. Across the service branches, the military has acted to improve the systems that support service members and their families. These efforts reflect the military's implicit or explicit belief that children's wellbeing influences the successful functioning of their service member parents, and that the military's collective effectiveness depends, now and in the future, on the success of the children and families who serve along with their parents, spouses, and partners.

A resilience framework has compelling advantages for understanding and promoting success in military families and organizations.

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Such a framework accords well with the goals of military systems, service members, and their families, all of whom, in varying ways, share an interest in successful adaptation, resilience, and recovery in the context of challenging and traumatic experiences. When people face potentially life-ending or life-altering hazards, a resilience framework emphasizes positive objectives; building the capacity to respond effectively; the potential for recovery; and the power of relationships, families, communities, and other external resources to boost resilience, in addition to individual strengths and skills.[2] As a result, resilience-based approaches convey respect for human capabilities and optimism about the future, while they simultaneously recognize the suffering and devastation that can arise in situations of extreme adversity, including war.

Resilience refers generally to the successful adaptation of a system in response to significant challenges. This concept can be applied to any living organism, as well as a family, a community, a workplace, the military as a whole, a computer system, a country, or a global ecosystem. "Successful adaptation," of course, will be defined in different ways, depending on the values, goals, culture, and historical or scientific context of the people making judgments about success. For individual children, both developmental and cultural context play a role in defining good adaptation. Developmental scientists often define resilience with respect to expected achievements for children of different ages or stages of development, sometimes called developmental tasks.[3] Some of these expectations are universal, such as learning to walk or talk. Others are more specific to a culture or situation, such as learning to hunt or to read sacred scriptures in the original language. Families are often judged by how well they

promote the health, development, and goals of their members within their culture or society.[4]

Children's resilience depends on the adaptive functioning of their own internal systems as well as interactions among many other systems in their lives.

Resilience frameworks emerged from five decades of research on resilience in human development, supplemented in recent years by efforts to work across disciplinary boundaries.[5] Resilience frameworks typically encompass, delineate, and measure the following elements: positive objectives; positive factors or assets as well as challenges or risks; positive outcomes in addition to problems; protective influences as well as vulnerabilities; and strategies of intervention that reduce or mitigate risk, build assets and resources, and mobilize protective processes to promote resilience and recovery.

Research on disasters, wars, and terrorist attacks has underscored how systems are interdependent when they respond to life-threatening events.[6] Adaptive capacity for resilience is distributed across systems. For example, a community's resilience depends on the resilience of its constituent members as well as the capacities of larger emergency response systems. A family's resilience depends on the resilience of individuals within and outside the family as well as support systems in the community and beyond. Children's resilience depends on the adaptive functioning of their own internal

systems as well as interactions among many other systems in their lives. Disasters often bring a catastrophic breakdown of many interacting systems at many levels of scale, and the interdependence of systems that support everyday function and emergency response become evident. Failures at one level can cascade to affect other levels. Similarly, the capabilities and resilience of military service members, units, and organizations as a whole depend on the adaptation of many other interconnected systems, including service members' families.

Resilience researchers have studied how children and families respond to many kinds of adversity, including mass trauma (for example, war, terrorism, or natural disaster), situations arising within a family (for example, child maltreatment or domestic violence) or a neighborhood (for example, poverty or high levels of violence).[7] Their work has yielded extensive evidence that can guide efforts to promote resilience. At the same time, we need to keep building a solid knowledge base about what works in specific situations for specific individuals, families, or systems, and when. The reviews in this issue make clear that programs developed within the military have benefited from resilience concepts and studies. It also is clear that research on those programs has already contributed to the knowledge base on risk, resilience, and recovery and that it could contribute even more substantially. In many respects, the military's goals, resources, and organizational systems offer a unique opportunity to enhance resilience science and its applications for the common good.

The first section of this commentary focuses on the challenges of military family life and lessons from efforts to address those risks. The second section highlights the

opportunities of military life for children and families. The conclusion summarizes the potential of research on both naturally occurring resilience and interventions that promote resilience in military families to inform theory, practices, and policies on the development and promotion of success and resilience in all families and their children, as well as military systems.

Challenges Unique and Shared

Military children and families face unique hardships, such as deployment of a parent to a war zone. But they also share many challenges in common with other American families, including the struggle to find child care, make ends meet, or educate and discipline their children. Military families also share some challenges, such as frequent moves, with specific groups of civilians. Even in the case of relatively unique job hazards, the effects of adversity on military families—in the form of loss, stress, conflict, or suffering—may be very similar to effects on civilian families that stem from different causes. Therefore, all families can benefit from knowledge drawn from military families about how adversity and stress affect the family, how to protect children and their development, and how to foster healthy family function. Moreover, as Anita Chandra and Andrew London emphasize in their article, the contributions from research involving military children and families can be enhanced by careful attention to measurement, sampling, comparison groups, longitudinal design, and other methodological considerations that improve the quality of the data as it accumulates over time.

Moving and Mobility

Moving is a central feature of military family life. Military families typically move every

two or three years, considerably more often than civilian workers of the same age.[8] As many authors in this issue have noted, frequent moves create both challenges and opportunities for families. Children may face separation from parents or extended family, changes in day care or school, disruptions to friendships or other social ties, the loss of opportunities tied to a particular place, discontinuity in health care, and the stress of adapting to a new context. They may also experience indirect effects from the stress that moving places on their parents and other family members. Moving can also bring a financial burden, interfering with a family's efforts to build equity in a home or reducing employment or promotion opportunities for a spouse.[9]

From general studies of moving and academic achievement, there is considerable evidence that changing schools and homes can take a toll on learning.[10] However, the context is important. Moving associated with poverty and homelessness is a major risk factor for achievement problems, whereas moving related to better family opportunities appears to be less harmful.[11] Nonetheless, for children in military families, moving poses a number of widely recognized hazards for academic success, ranging from problems with transferring credits to constraints on opportunities for special programs.

Studies reviewed in this issue and elsewhere delineate educational hurdles that children in military families face, but they also document solutions, and these could prove helpful to other mobile populations.[12] For example, the Department of Defense Educational Activity (DoDEA) schools on bases or military posts have a uniform curriculum to foster educational continuity as students move from base to base.[13] Furthermore, the Military Child

Education Coalition (MCEC), a nonprofit organization, has worked with the military to develop programs that target some of the most common problems standing in the way of school success for military children.[14] These include "Student 2 Student," which helps students acclimate to their new schools, and an initiative called "Living in the New Normal: Helping Children Thrive though Good and Challenging Times," which provides training and resources to help communities support military families more broadly.

DoDEA schools are regarded as models of excellence. But large numbers of military-connected students—the children of Guard and Reserve members, as well as children of active-duty service members who don't live on or near a military base—have little or no access to DoDEA educational services. They are scattered all over the country, and they often attend schools with few other military-connected children. School and state policies can interfere with their academic success, for example, through policies about transferring credits. Over the past five years, the Department of Defense (DoD), the MCEC, the Obama administration, and the Department of Education have worked together to reduce such barriers and provide resources to support the academic achievement of military children throughout the country.[15] One product of this collaboration has been the development of an Interstate Compact on Educational Opportunity for Military Children. The Compact, which as of this writing has been signed by 46 states and the District of Columbia, aims to reduce barriers and facilitate achievement among military children by tackling issues such as placement, transfer of records, access to special programs and extracurricular activities, and on-time graduation.

Another broad initiative that bolsters educational success in military families is the military's commitment to high-quality child care for military families. Stable access to high-quality early child care and education is among the best investments any community or society can make in the academic success of its children and the quality of the future workforce.[16] In their article, Major Latosha Floyd and Deborah Phillips note that the military's child-care initiative is widely heralded as a model for the nation in promoting access and quality. Again, however, the most extensive and effective programs are on military bases, and the DoD is still striving to meet the extensive needs of military families who live away from military installations. The military's efforts in this area reflect the growing awareness that quality child care not only promotes children's competence and school success, but also the work effectiveness of their parents. Moreover, because a substantial proportion of military children grow up to serve in the armed forces themselves, the military is likely to reap the benefit of its investment in child care along with the larger society.

Solutions to other problems that frequent moving poses have garnered considerable attention in military families and among those concerned with their success. One focus has been employment resources for spouses (for example, the Military Spouse Employment Partnership and My Career Advancement Accounts).[17] Participants say they like these programs, but, as Molly Clever and David Segal note in their article, we need more research about the effectiveness of these programs beyond satisfaction ratings. Such programs could help us develop evidence-based practices that could be applied to people in civilian jobs with high relocation demands.

The Internet has given us an entirely new set of education resources that may hold special potential for mobile students. Many of the efforts described above that aim to facilitate learning and reduce educational barriers for military children depend on online technology. We need to identify the most effective uses of Internet-based technologies for the education of all children, including military and other mobile children.

Stable access to high-quality early child care and education is among the best investments any community or society can make in the academic success of its children and the quality of the future workforce.

Similarly, we have very little evidence about whether social media can be a resource or protective tool for military families. Social media are transforming the way people stay connected and making it possible to maintain and develop relationships across the globe. We need research on whether and how social media can ease the hardships that military families face, such as frequent moving and separation during deployment.

Separation and Reunification

Military family life includes cycles of separation and reunification related to deployment or training. These separation-reunification cycles are not common among civilian families, although neither are they unique to military life. Deployments to war zones,

particularly multiple deployments, pose particular hardships for military families.[18] This issue documents both direct effects on children, such as emotional suffering, and indirect effects, through the stress that deployment places on both the deployed parent and the parent who remains at home.

The evidence summarized in this issue shows that the impact of separations, reunification, and deployment follows a cumulative risk pattern of dose and response.[19] Multiple and prolonged deployments generally have worse effects than fewer and shorter deployments. Families who already struggle with emotional, relationship, or financial problems are more affected than families who function well before deployment. The returning parent's postdeployment functioning also plays a major role in the dose-response picture. A wounded, disabled, depressed, or traumatized parent creates additional challenges for the family during reintegration and recovery. These patterns of dose and response bear a striking resemblance to those observed in the broader research on extreme adversity and disaster.[20] At the same time, research suggests that certain fundamental protections can help families over the course of separations and reunifications. These protective factors include individual know-how and self-regulation skills, the quality of relationships among family members, and the social support and other community resources available to the family. Some of the most effective postservice supports for military service members and their families are concrete resources, including financial benefits and access to health care.[21] However, other, less tangible forms of support may play an equally powerful role in the resilience of military service members and their families. These include perceptions of broad societal appreciation for the value of military service,

pride in contributing to an important mission, a sense of belonging to a military culture, and awareness that support from communities of care will not cease when active service ends.[22] Some investigators have attempted to quantify these intangible but powerful belief systems in military families, but this is an area ripe for additional research.

For older children and youth, added responsibilities can have positive effects on their own perceived competence or maturity; on the other hand, a child may feel burdened with excessive or inappropriate responsibilities.

We would also expect developmental timing to play a significant role in the way military children and families confront and adapt to challenges, just as it does in the broader research on risk and resilience.[23] For example, deployment can come at a bad time for a family if it means missing or disrupting developmental milestones that happen only once in a child's life (first word, walking, confirmation, graduation). Bad timing of this kind can generate stress in different ways on all members of a family, including children as they grow older.

Separation's effects on children also vary markedly by age and development. A very young infant is unlikely to be aware of separations except indirectly through the effects on the at-home caregiver. As Joy Osofsky and

Lieutenant Colonel Molinda Chartrand note in their article, toddlers and preschoolers may experience acute anxiety when separated from primary caregivers, followed by symptoms of loss and depression, as a result of disturbances to the attachment system.[24] Children in this age group may be particularly vulnerable to separations because they are old enough to suffer from separation and loss but not old enough to have much coping ability, and they need adequate surrogate caregivers. Older children also suffer from the stress, sorrow, or anger engendered by separations, but they have more coping capacity and the ability to take on responsibilities in the absence of a parent. For older children and youth, added responsibilities can have positive effects on their own perceived competence or maturity; on the other hand, a child may feel burdened with excessive or inappropriate responsibilities. Older children also have greater awareness of dangers and the struggles of the parent left at home.

The Zero to Three (ZTT) organization and the Sesame Workshop have focused on the special needs of very young military children.[25] The ZTT has made a concerted effort through an initiative called "Coming Together Around Veteran Families" to respond to the needs of veteran families with young children, providing materials and guidance. The Sesame Workshop has created a series of multimedia materials entitled "Talk, Listen, Connect" that feature the popular Muppet character Elmo, among others. These materials help young children and their families through the stories of characters who are coping with deployment and reunification, or a parent's injury or death.

The developmental timing of family stress is important even for unborn children. An emerging issue that has great potential significance for military policy concerns the effects of a pregnant woman's stress during pregnancy on the developing child, which I discuss below in the section on stress.

Reintegration puts additional strains on family life.[26] Children and spouses may be very relieved and happy to have a parent or spouse safely back home, yet the whole family system must readjust. The DoD is funding research to adapt family interventions that have been shown to work for other populations for use with military families. For example, researchers are evaluating a program called "After Deployment: Adaptive Parenting Tools" (ADAPT), a military-tailored version of Parent Management Training–Oregon model (PMTO), one of the best scientifically verified parenting programs available.[27] The military version is designed for families with a service member returning from deployment; it uses some web-based training, and includes a team with at least one service member to facilitate parent groups. Osofsky and Chartrand describe ADAPT and other efforts by the military to tailor evidence-based practices for the military. The lessons the military gleans by adapting evidence-based programs and evaluating them through randomized controlled trials should help us learn how best to adapt and scale such interventions for other populations as well.

Injury, Disability, and Death

War and military service have always carried the risk of physical and mental harm, which can have devastating effects on children and families. U.S. military operations since 9/11 have produced large numbers of casualties, including visible and invisible injuries, life-altering disabilities, and deaths.[28] (Of course, many nonmilitary families experience death, injury, and disability as well.[29])

These tragic consequences of war and military service affect children and families in many ways. Injuries can change a parent in the short term or permanently, altering the quality of parenting as well as children's sense of emotional security. Chronic strains on the family, whether from changes in the wounded parent or the stress of caring for an injured family member, can undermine parenting and family systems or drain energy and emotional stamina from even the most capable parents or spouses. Bereavement can be complicated by depression or resettlement. Family finances can suffer. All of these problems generate stress on the family, which can interfere with multiple aspects of family function that support child development. Thus, it is not a surprise that research on children and families exposed to these adversities has found elevated symptoms and problems.[30]

But research with military families confronting difficult injuries and losses has also revealed resilience in many families, who carry on effectively or recover adaptive function in their roles at home and at work.[31] The resources and protective factors that military families tap to bolster their resilience in the face of injury and death are similar to those that many other families use.[32] They include strong relationship bonds among family members and other relational support; at least one capable parent or parent surrogate; positive attitudes and identity; positive beliefs about the meaning of life and service; and community support.[33]

Supporting children and families after a parent's injury or death has become a high priority of the U.S. military, spurring rapid implementation of programs intended to help. But the speed and scale at which such programs have been introduced have precluded "gold-standard" research to test for

efficacy.[34] Some efforts were built on evidence derived from research with nonmilitary families, while others were created from scratch. As the urgent need to help families in crisis recedes with the drawdown of troops from Iraq and Afghanistan, the numerous programs developed for military children and families could be tested, compared, and evaluated more thoroughly to build a better evidence base about what works best, for whom, and in what situations.

Stress and Resilience
Each of the challenges discussed above can generate enormous stress on a family system and the individuals within it, including service members, other parents, children, and extended family. Anticipating and managing stress is thus central to maintaining the effectiveness of military forces and the well-being of their children and families. Military systems collectively have made impressive strides in recognizing the toll that cumulative stress takes on service members and on their families. This issue describes numerous solutions developed to reduce stress, prepare soldiers and families to handle stress, provide support to counter and ameliorate stress, and transform military systems to promote competence and resilience in children and families, as well as in soldiers.

At the same time, our knowledge of the neurobiology of stress and resilience is expanding rapidly. Growing evidence suggests that prenatal exposure to stress can alter fetal development in ways that impair long-term health, and there are increasing worries about how toxic stress affects brain development.[35] Research indicates that prenatal stress and the timing of traumatic experiences, such as a terrorist attack or natural disaster, can alter stress-regulation systems

and possibly other systems in the developing fetus, with potentially lifelong consequences.[36] Moreover, increasing evidence suggests that some individuals are more sensitive to both bad and good experiences, and thus more affected both by adversity and by positive interventions.[37] Given the central importance of promoting resistance to stress and resilience in military families, further research on stress and resilience in these families should benefit military and civilian families alike.

Growing evidence suggests that prenatal exposure to stress can alter fetal development in ways that impair long-term health.

Opportunities and Personal Growth

Despite the challenges of military life, joining the military has long been recognized as a path to a better life for young people, especially those from high-risk backgrounds.[38] The military gives many young men and women economic, occupational, educational, and personal opportunities. Their children, present and future, stand to benefit from these opportunities indirectly, because the achievements of the people who are or will become their parents enhance the economic, human, and social capital of the families who rear them.

Children who participate in military life also have direct opportunities that are spelled out in this issue. Some attend the model child-care programs or schools that the military provides. Some have the opportunity

to experience diverse cultures, not only through the diversity of other children who are part of the military, but also by living in different cultures or countries. Traveling and exploring the United States and the world can be exciting for children.[39] Military children make friends with children from very different backgrounds and learn new languages. In the midst of the challenges they face, military children can also take on manageable responsibilities that can enhance their sense of efficacy and promote their personal development.

Many children also develop a strong sense of identity as part of the military.[40] At its best, military culture offers a powerful sense of belonging that transcends place and engenders pride in service along with patriotism. Life in the military can also foster the skills to handle moves or separations, adjust to new schools, and understand other cultures—skills that can come in handy later in life. The nature of military life offers a wealth of opportunities to conduct research on how young people build competence and how change affects children's development.

Conclusions

Research on military families and the systems that serve them not only can contribute to basic knowledge about stress and resilience, but can also help us create practices and policies that promote positive development. The potential benefits extend well beyond the military and its members to society at large. The U.S. military is in a unique position to back longitudinal research (that is, research that follows a group of people over time) on competence and resilience, as well as high-quality intervention research, including randomized controlled trials, to determine the best ways to promote positive adaptation

in the context of frequent moves, separation, injury, loss, and other hardships shared by many military and civilian families.

The scope of the military's systems, its logistical expertise, the diversity of its members, and even the cultural diversity of the different service branches offer a multifaceted context for research and innovative programming to solve some of the most important issues of our times. These include the delivery of quality health care, child care, education, and opportunities to a diverse population of individuals and families. Even hardships that are more salient in military than in civilian life on the whole—such as moving, deployment, or injury in the line of duty—have considerable relevance for substantial subpopulations in nonmilitary society.

The military also has the motivation, resources, and scope to identify the practices and interventions that work best to reduce stress and promote resilience, and to test their adaptability and scalability. By insisting on quality, the military raised a banner for excellence in early child care and education on bases. The success of that work is spreading beyond military installations as the military reaches out to help military families who don't have access to on-base services. Other domains of family life also hold the potential for innovative leadership by the military. These include efforts to prepare in advance for separations and major stress, to harness the power of the Internet for innovation in education, to mitigate the long-term health consequences of prenatal stress, and to support families through periods of acute distress and prolonged recovery.

The military's efforts to promote competence and resilience in the lives of military children and families underscore the following

principles and guidelines, which are highly congruent with the broad knowledge base about human development and resilience in the face of adversity:

- resilience in children and families can be bolstered in multiple ways at different system levels;

- effective strategies are well-timed developmentally and tailored to the people, the systems, and the situation at hand;

- protecting the wellbeing of parents promotes children's resilience, and, concomitantly, thriving children promote the work competence and resilience of their parents;

- the presence of a well-functioning caregiver has powerful protective effects on children;

- family separations should be minimized in length and frequency;

- all personnel who engage with children and parents in any way need basic training in child development, child responses to trauma, and protective factors for children and families;

- cultural rituals, practices, and routines, including play, school, and religious practices, support resilience; and

- children in families that are emotionally, socially, and economically secure are likely to weather adversity very well.[41]

The solutions emerging in the military to promote healthy families and child development herald a fundamental transformation in thinking and practices with respect to sustaining military preparedness and excellence. This transformation not only emphasizes resilience, it also recognizes that

effective engagement with families is essential to building resilience throughout the military. The limited evidence to date suggests that this transformation is going well. Certainly, the evidence justifies additional research to gather more and higher-quality data. Moreover, the potential benefits for the nation as a whole are compelling. Finding what works among military families to promote resilience and protect child development may have profound significance for the future of all American children.

ENDNOTES

1. Richard M. Lerner, "Developmental Science, Developmental Systems, and Contemporary Theories of Human Development," in *Handbook of Child Psychology,* 6th ed., vol. 1, ed. William Damon and Richard M. Lerner (Hoboken, NJ: Wiley, 2006), 1–17; Ann S. Masten, "Resilience in Children Threatened by Extreme Adversity: Frameworks for Research, Practice, and Translational Synergy," *Development and Psychopathology* 23 (2011): 141–54; Ann S. Masten, "Risk and Resilience in Development," in *The Oxford Handbook of Developmental Psychology, Vol. 2: Self and Other*, ed. Philip David Zelazo (New York: Oxford University Press, 2013), 579–607; Philip David Zelazo, "Developmental Psychology: A New Synthesis," in *The Oxford Handbook of Developmental Psychology, Vol. 1: Body and Mind*, ed. Philip David Zelazo (New York: Oxford University Press, 2013), 3–12.

2. Masten, "Resilience in Children"; Masten, "Risk and Resilience in Development."

3. Chris M. McCormick, Sally I-Chun Kuo, and Ann. S Masten, "Developmental Tasks across the Lifespan," in *The Handbook of Lifespan Development*, ed. Karen L. Fingerman et al. (New York: Springer, 2011), 117–40.

4. Herbert Goldenberg and Irene Goldenberg, *Family Therapy: An Overview,* 8th ed. (Belmont, CA: Brooks/Cole, 2012); Froma Walsh, *Strengthening Family Resilience,* 2nd ed. (New York: Guilford, 2011).

5. Masten, "Resilience in Children"; Masten, "Risk and Resilience in Development."

6. Ann S. Masten and Angela J. Narayan, "Child Development in the Context of Disaster, War, and Terrorism: Pathways of Risk and Resilience," *Annual Review of Psychology* 63 (2012): 227–57; Fran H. Norris et al., "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness," *American Journal of Community Psychology* 41 (2008): 127–50.

7. Dante Cicchetti, "Resilient Functioning in Maltreated Children—Past, Present, and Future Perspectives," *Journal of Child Psychology and Psychiatry 54* (2013): 402–22, doi: 10.1111/j.1469-7610.2012.02608.x; Walsh, *Strengthening Family Resilience*; Masten, "Risk and Resilience in Development"; Masten and Narayan, "Child Development"; Sam Goldstein and Robert B. Brooks, eds., *Handbook of Resilience in Children,* 2nd ed. (New York: Springer, 2013).

8. Molly Clever and David R. Segal, "The Demographics of Military Families and Children," *Future of Children* 23, no. 2 (2013): 13–40.

9. Clever and Segal, "Demographics"; James Hosek and Shelley MacDermid Wadsworth, "Economic Conditions of Military Families," *Future of Children* 23, no. 2 (2013): 41–60.

10. National Research Council and Institute of Medicine, *Student Mobility: Exploring the Impact of Frequent Moves on Achievement: Summary of a Workshop,* comp. Alexandra Beatty (Washington: National Academies Press, 2010).

11. J. J. Cutuli et al., "Academic Achievement Trajectories of Homeless and Highly Mobile Students: Resilience in the Context of Chronic and Acute Risk," *Child Development* 84 (2013): 847–57; Ann S. Masten, "Risk and Resilience in the Educational Success of Homeless and Highly Mobile Children: Introduction to the Special Section," *Educational Researcher* 41 (2012): 363–65; National Research Council and Institute of Medicine, *Student Mobility.*

12. Monica Christina Esqueda, Ron Avi Astor, and Kris M. Tunac De Pedro, "A Call to Duty: Educational Policy and School Reform Addressing the Needs of Children from Military Families," *Educational Researcher* 41 (2012): 65–70, doi: 10.3102/0013189X11432139; Nansook Park, "Military Children and Families: Strengths and Challenges during Peace and War," *American Psychologist* 66 (2011): 65–72, doi: 10.1037/a0021249.

13. Esqueda, Astor, and Tunac De Pedro, "A Call to Duty."

14. M. Ann Easterbrooks, Kenneth Ginsburg, and Richard M. Lerner, "Resilience among Military Youth," *Future of Children* 23, no. 2 (2013): 99–120; Harold Kudler and Rebecca I. Porter, "Building Communities of Care for Military Children and Families," *Future of Children* 23, no. 2 (2013): 163–86; Military Child Education Coalition (MCEC) Senior Research Team, *Education of the Military Child in the 21st Century: Current Dimensions of Educational Experiences for Army Children: Executive Summary* (Harker Heights, TX: MCEC, 2012), http://www.militarychild.org/public/upload/images/EMC21ExecutiveReportJune2012. pdf; Park, "Military Children and Families."

15. Esqueda, Astor, and Tunac De Pedro, "A Call to Duty."

16. Orla Doyle et al., "Investing in Early Human Development: Timing and Economic Efficiency," *Economics and Human Biology* 7, no. 1 (2009): 1–6, doi: 10.1016/j.ehb.2009.01.002; Beverly Falk, *Defending Childhood: Keeping the Promise of Early Education* (New York: Teachers College Press, 2012).

17. Clever and Segal, "Demographics."

18. Patricia Lester and Eric Flake, "How Wartime Military Service Affects Children and Families," *Future of Children* 23, no. 2 (2013): 121–42; William R. Saltzman et al., "Mechanisms of Risk and Resilience in Military Families: Theoretical and Empirical Basis of a Family-Focused Resilience Enhancement Program," *Clinical Child and Family Psychology Review* 14 (2011): 213–30, doi: 10.1007/s10567-011-0096-1.

19. Masten and Narayan, "Child Development"; Jelena Obradović, Anne Shaffer, and Ann S. Masten, "Risk in Developmental Psychopathology: Progress and Future Directions," in *The Cambridge Handbook of Environment in Human Development*, ed. Linda C. Mayes and Michael Lewis (New York: Cambridge University Press, 2012), 35–57.

20. Masten and Narayan, "Child Development"; Ann S. Masten and Joy D. Osofsky, "Disasters and Their Impact on Child Development," *Child Development* 81 (2010): 1029–39.

21. Allison Holmes, Paula Rauch, and Stephen J. Cozza, "When a Parent Is Injured or Killed in Combat," *Future of Children* 23, no. 2 (2013): 143–62; Kudler and Porter, "Communities of Care."

22. Kudler and Porter, "Communities of Care"

23. Easterbrooks et al., "Resilience among Military Youth"; Masten, "Risk and Resilience"; Masten and Narayan, "Child Development"; Joy D. Osofsky and Molinda M. Chartrand, "Military Children from Birth to Five Years," *Future of Children* 23, no. 2 (2013): 61–78.

24. Ososfky and Chartrand, "Military Children."

25. Ibid.

26. Clever and Segal, "Demographics"; Abigail H. Gewirtz et al., "Helping Military Families through the Deployment Process: Strategies to Support Parenting," *Professional Psychology: Research and Practice* 42: 56–62; Lester and Flake, "Wartime Military Service."

27. Gewirtz et al., "Helping Military Families"; Marion S. Forgatch and David S. DeGarmo, "Sustaining Fidelity following the Nationwide PMTO Implementation in Norway," *Prevention Science* 12 (2011): 235–46; Gerald R. Patterson, Marion S. Forgatch, and David S. DeGarmo, "Cascading Effects following Intervention," *Developmental Psychopathology* 22 (2010): 941–70.

28. Holmes, Rauch, and Cozza, "When a Parent Is Injured or Killed."

29. William Beardslee et al., "Family-Centered Preventive Intervention for Military Families: Implications for Implementation Science," *Prevention Science* 12 (2011): 339–48; Irwin N. Sandler et al., "Long-Term Effects of the Family Bereavement Program on Multiple Indicators of Grief in Parentally Bereaved Children and Adolescents," *Journal of Consulting and Clinical Psychology* 78 (2010): 131–43. doi: 10.1037/a0018393; Shelley M. MacDermid Wadsworth, "Family Risk and Resilience in the Context of War and Terrorism," *Journal of Marriage and Family* 72 (2010): 537–56; Froma Walsh, "Community-Based Practice Applications of a Family Resilience Framework," in *Handbook of Family Resilience*, ed. Dorothy S. Becvar (New York: Springer, 2013), 65–82; Walsh, *Strengthening Family Resilience*.

30. Holmes, Rauch, and Cozza, "When a Parent Is Injured or Killed."

31. William Beardslee et al., "Family-Centered Preventive Intervention"; Easterbrooks et al., "Resilience among Military Youth"; Lester and Flake, "Wartime Military Service"; Park, "Military Children and Families"; Saltzman et al., "Mechanisms."

32. Walsh, *Strengthening Family Resilience*; Margaret O'Dougherty Wright, Ann S. Masten, and Angela J. Narayan, "Resilience Processes in Development: Four Waves of Research on Positive Adaptation in the Context of Adversity," in Goldstein and Brooks, *Handbook of Resilience*, 15–37, doi: 10.1007/978-1-4614-3661-4_2.

33. Park, "Military Children and Families," and articles throughout this issue of *Future of Children*.

34. Holmes, Rauch, and Cozza, "When a Parent Is Injured or Killed."

35. W. Thomas Boyce, Marla B. Sokolowski, and Gene E. Robinson, "Toward a New Biology of Social Adversity," *Proceedings of the National Academy of Sciences* 109, no. S2 (2012): 17143–48; Jack P. Shonkoff, W. Thomas Boyce, and Bruce S. McEwen, "Neuroscience, Molecular Biology, and the Childhood Roots of Health Disparities," *JAMA: The Journal of the American Medical Association* 301 (2009): 2252–59.

36. Suzanne King et al., "Using Natural Disasters to Study the Effects of Prenatal Maternal Stress on Child Health and Development," *Birth Defects Research (Part C)* 96 (2012): 273–88; Masten and Narayan, "Child Development."

37. Bruce J. Ellis et al., "Differential Susceptibility to the Environment: An Evolutionary-Neurodevelopmental Theory," *Development and Psychopathology* 23 (2011): 7–28; Ann S. Masten, "Resilience in Children: Vintage Rutter and Beyond," in *Developmental Psychology: Revisiting the Classic Studies,* ed. Alan M. Slater and Paul C. Quinn (London: Sage, 2012), 204–21.

38. Ann S. Masten, Jelena Obradović, and Keith B. Burt, "Resilience in Emerging Adulthood: Developmental Perspectives on Continuity and Transformation," in *Emerging Adults in America: Coming of Age in the 21st Century,* ed. Jeffrey Jensen Arnett and Jennifer Lynn Tanner (Washington: American Psychological Association Press, 2006), 173–90.

39. Clever and Segal, "Demographics"; Easterbrooks, Ginsburg, and Lerner, "Resilience."

40. Park, "Military Children and Families."

41. Ososfky and Chartrand, "Military Children"; Ann S. Masten, "Ordinary Magic: Lessons from Research on Resilience in Human Development," *Education Canada* 49, no. 3: 28–32; Masten and Narayan, "Child Development."

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