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.

www.futureofchildren.org

Anita Chandra is a senior policy researcher and director of the Behavioral and Policy Sciences Department at RAND Corporation. Andrew S. London is a professor of sociology in the Maxwell School, a senior research affiliate of the Center for Policy Research, and a senior fellow of the Institute for Veterans and Military Families at Syracuse University.
In the past decade, during the conflicts in Afghanistan and Iraq, researchers have focused on military children and youth to an unprecedented degree. 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. 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. 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
Unlocking Valuable Data about Military Children and Families

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 surveys. 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). 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. 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. 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.

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. 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.

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

190 THE FUTURE OF CHILDREN
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. 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 well-being. 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.

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.\textsuperscript{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.\textsuperscript{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. 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. 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


