CLEARINGHOUSE FOR MILITARY FAMILY READINESS

Supporting Military Families: An Overview of Military Family Outcomes and Evidence Informed Practices Rapid Literature Review

Clearinghouse Technical Assistance Team

As of October 29, 2019

This material is the result of partnership funded by the Department of Defense between the Office of the Deputy Assistant Secretary of Defense for Military Community and Family Policy and the USDA's National Institute of Food and Agriculture through a grant/cooperative agreement with Penn State University



Table of Contents

Executive Summary	3
Introduction	3
Brain Development in Military Children: Implications and Protective Factors Stress Stress and Pregnancy Attachment	4 4 5 5
Supporting Military Families in the Areas of Relocation, Resiliency and Informa	_
 Sharing Best Practices for Supporting Mobile Military Families Building Resiliency in Military Families Table 1: Factors That Promote Resilience: Findings from the Literature Review (Mereo 	7 7 8 dith
et al., 2011) Building Resiliency in Children Table 2: The Seven C's Model of Positive Development in Children (Ginsburg & Jablow 2011)	9 10 /, 11
Best Practices for Sharing Information in Military Populations	12
Military Children's Progression to Higher Education	13
Long-term Outcomes for Military Families Millennium Cohort Family Study Mental Health of Children of Deployed and Non-Deployed US Military Service Meml The Millennium Cohort Family Study Military Life Stressors, Family Communication and Satisfaction: Associations with	15
Children's Psychosocial Outcomes Longitudinal Studies on Military Families within the United Kingdom Operational Mental Health Needs Evaluation King's Centre for Military Health Research Cohort Study RAND Deployment Life Study	15 16 16 16 17
Conclusion	18
Additional Assistance	18
Suggested Citation	18
References	19

Executive Summary

This report was conducted in response to a request from the Ministry of Defence. These findings address research related to best practices in working with and identifying outcomes in military children related to brain development, college-attainment, mobility, resiliency, information sharing, and long-term impact of military service on children.

Service members and their families face unique challenges and opportunities associated with military life. 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. 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 (Lester & Flake, 2013). This identity and the larger military community are important sources of resilience and support (Chartrand & Siegel, 2007).

This report provides:

- An examination of the factors that may impact brain development in military children
- An examination into the factors that impact military children's progression to higher education
- Suggestions for incorporating best practices in order to support mobile military families
- Evidence-informed suggestions for building resiliency in military families with an emphasis on children
- An outline of best practices for sharing information within military populations
- A brief description of current longitudinal studies examining military families

Please note that this rapid review is not intended to serve as a comprehensive review of the literature. The review provides a preliminary examination of the research on brain development in military children, mobility and resiliency in military families, college-attainment in military children, information sharing, and long-term outcomes in military children. Research cited throughout the literature review is based on U.S. service members and their families unless otherwise noted.

Introduction

The Technical Assistance team at the Clearinghouse for Military Readiness at Penn State (Clearinghouse) conducted a brief, rapid review of the literature on the topic of military child outcomes related to brain development, resiliency, and college-attainment. Further review was conducted in the areas of mobility and information sharing. Long-term outcomes in military children were also examined. However, a lack of research exists on outcomes for families over time.

A search was conducted utilizing peer reviewed journal articles with an emphasis on research published between 2000 and 2019. Search queries included various combinations of the terms military children, military families, United Kingdom, United States, brain development, relocation, mobility, resiliency, resilience, information sharing, social media, college-attainment, college readiness, higher education, outcomes, long-term studies, and longitudinal studies.

Results of a rapid scan of the literature indicate that research specific to British military families is limited. Current research on military family well-being relies heavily upon the experiences of U.S. service families. However, two studies based on U.K. service member perceptions of military family well-being were identified and are included in this review (Rowe, Keeling, Wessely, & Fear, 2014; Thandi, Greenberg, Fear, & Jones, 2017). In addition, due to insufficient research examining military families and our topics of interest (i.e., brain development in military children), pertinent research focusing upon civilian populations was also included in this report.

Brain Development in Military Children: Implications and Protective Factors

Infants have a fundamental need for consistent caretaking. Human relationships are essential to children's wellbeing and development (Osofsky & Chartrand, 2013). Specific research examining early brain development in military children is nonexistent; however, research examining the population as a whole is readily available. A review of the existing research may help to explain how military life can impact the development on a young child's brain and also suggest protective factors.

Studies suggest that brain development is affected by stress early in development (Gunnar, 1998) and that the quality of maternal care may serve to have an impact on brain development in infants (Bernier, Calkins & Bell, 2016). The quality of parent-child interactions is presumed to be the key factor influencing children's brain development (Bernier et al., 2016). Factors that may negatively affect brain development in children include stressful life events in the family and maternal depression (Bernier et al., 2016). Research is limited on the impact of father-infant interaction on brain development.

Stress

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 (Osofsky & Chartrand, 2013). Infants and toddlers may be particularly vulnerable to the stressors associated with their family's deployment experience due to their limited coping skills and strong dependence on the adults in their lives (Cozza & Lieberman, 2007). Lincoln, Swift, and Shorteno-Fraser (2008) noted that infant response is related to the stress and anxiety displayed by the remaining caregivers during a deployment period. They suggested that infants may react to this caregiver stress "by becoming more irritable

and unresponsive, vulnerable to sleep disruption, eating problems, and increased periods of crying" (p. 987). Young children do not yet have the language, emotional regulatory capacity, or copings skills to effectively express and moderate strong emotions.

Stress and Pregnancy

Osofsky & Chartrand (2013) examined the literature available on the impact of stress and pregnancy in military populations. Their findings suggest that research is limited in studying the effects of stress on pregnant military populations. Research on both animals and humans have demonstrated that sustained or frequent activation of the stress hormonal systems can have serious developmental consequences. The effects of prenatal stress can be worsened or improved by the mother's level of family support, individual resistance factors, diet, mental illness, use of alcohol and drugs, and infection (Osofsky & Chartrand, 2013). Prenatal stress is associated with an increased likelihood of physical, cognitive, behavioral, and emotional problems in the child. Pregnant women whose spouse is deployed report higher levels of stress than do other pregnant women and are also more susceptible to depression both during and after pregnancy. Osofsky & Chartrand (2013) claim that increased stress and depression during deployment and reintegration may put the developing brain of the fetus at risk.

Attachment

Lester and Flake (2013) identified longitudinal research showing 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. Attachment security also buffers physiological stress responses in early childhood and protects early brain development (Gunnar, 1998). 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 (Osofsky & Chartrand, 2013). For some, however, disruptions in primary relationships and support systems can impede social and emotional development. Developing secure attachments between the at-home caregiver and infants may help buffer the stress associated with military life (Osofsky & Chartrand, 2013).

Implications for Military Families:

- Military children may be exposed to a heightened amount of stress due to parental separations and deployments, relocation, and other factors common in military life. For military families with very young children, deployment-related stressors include lengthy and multiple parent-child separations, risks associated with deployment to war and conflict areas, and the strain of parenting and increased responsibilities for the at-home parent (Devoe, Paris & Acker, 2016; Lester et al., 2011).
- 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 (Osofsky & Chartrand, 2013).

- During deployment, exposure to added stress may impede a mother's ability to form attachments and positively interact with children (Lester & Flake, 2013).
- Children are more likely to be maltreated or neglected in families affected by deployments, especially families consisting of younger parents with young children (Rentz et al., 2007).
- In pregnant military spouses, increased stress and depression during deployment and reintegration may put the developing brain of the fetus at risk (Osofsky & Chartrand, 2013).
- 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 these instances, children may be left in the care of extended family members or others, suggesting that these children may be vulnerable to stress and attachment issues (Lester & Flake, 2013).

Protective Factors and Strategies to Support Military Children:

The quality of parent-child interactions is presumed to be the key factor influencing children's brain development (Bernier et al., 2016). Devoe, Paris, & Acker (2016) state that the quality of parenting has long been understood to mediate the effect of children's experiences of trauma, stress, loss, and adversity on child adjustment. Deployment may disrupt the attachment relationship, but there are some things the athome parent can do to maintain or strengthen the parent-child relationship and provide buffers to stress.

- The presence of a strong military community and a family's identification with military life may protect against the associated uncertainties and stressors associated with frequent relocations and deployments (Maholmes, 2012).
- The availability and use of resources such as health care and family supports may help families deal with the stress of separation and deployment (Maholmes, 2012).
- The well-being of at-home parents and their ability to manage parenting and family roles during deployment can contribute greatly to child well-being (Devoe, et al. 2016; Osofsky & Chartrand, 2013).
- Maintaining communication and connection with the deployed parent via social networking and online video services can be beneficial to both children and athome parents (Devoe et al., 2016).
- The at-home parent's ability to remain emotionally and physically available to children, taking time to listen to them, and responding to worries the children are experiencing can help alleviate stress and build connection during deployment (Devoe et al., 2016).

Supporting Military Families in the Areas of Relocation, Resiliency and Information Sharing

Research suggests that most military families can positively adapt to the challenges experienced by military life. Social support and other resources can facilitate this positive adaptation. Military populations are embedded in and deeply influenced by their families, neighborhoods, schools, the military itself, and many other interacting systems (Kudler & Porter, 2013). Creating and strengthening existing systems of care in civilian communities is central to building resilience in military families (Lester & Flake, 2013). Initiatives and partnerships have been developed or expanded among local, state, and national organizations to provide additional support to meet the needs of military families (Lester & Flake, 2013). Best practices and suggestions for meeting the needs of the military population in the areas of relocation, resilience, and information sharing are described below.

Best Practices for Supporting Mobile Military Families

In a review of military family relocation patterns, Aronson, Caldwell, Perkins, & Pasch (2011) discovered that, on average, military families relocate every 2 to 3 years, a rate three times that of the civilian population. Further, these moves come with little advance notice, include relocating to overseas locations, and may not be welcomed by family members (Aronson et al., 2011). Frequent relocations associated with military family life can be stressful because they disrupt family routines and social relationships. However, steps can be taken to buffer the negative impact of relocation on military families, primarily in military children:

- Establish military identifiers in schools, hospitals, and other service areas in order to best serve military families (Kudler & Porter, 2013).
- Encourage utilization of a School Liaison Program (SLP) in families with schoolage children (Aronson et al., 2011). The SLP brings together military, school, and community resources to help military families and their school-aged children make smooth transitions from one school to another when they relocate.
- Educate military families on their rights and protections legislated by local and national government agencies. For example, the United States Interstate Compact on Educational Opportunity for Military Children aims to reduce the education challenges that frequently exist for military families by facilitating educational transitions for military-connected children.
- Encourage military child participation in peer support groups with other military kids such as the Military Child Education Coalition's Student to Student Program.
- Encourage student involvement in clubs as these extracurricular activities are often on-going and not exclusive (Milburn & Lightfoot, 2013).
- Highlight the benefits of living on military installations: access to resources, being surrounded by others who may be experiencing similar challenges, safety and potential for more freedom, and closer proximity to recreational facilities, shopping, and other social outlets (Milburn & Lightfoot, 2013).

- Create opportunities to meet and interact with other families from both civilian and military communities. Social connections are important for all members of the military family- particularly adolescents- to cope with relocation and deployment (Mmari, Bradshaw, Sudhinaraset, & Blum, 2010).
- Focus attention on positive aspects of relocation such as the opportunity to "reinvent" oneself: try out new activities, explore different social relationships, and develop new interests and talents (Finkel, Kelley, & Ashby, 2003).
- Highlight the positive aspects of relocations- opportunities to develop selfconfidence, cultural competence, and other skills for families of active-duty personnel who have the chance to live abroad, where they can travel, learn new languages, and experience new cultures (Blaisure, Saathoff-Wells, Pereira, Wadsworth, & Dombro, 2012).
- Foster positive family relationship. Families characterized by greater marital satisfaction and more effective parenting tend to report better adjustment to relocation (MacDermid, Samper, Schwarz, Nishida, & Nyaronga, 2008).

Building Resiliency in Military Families

Many definitions of resilience exist in relation to examining military family members. Easterbrooks, Ginsburg, & Lerner (2013) define resilience as the "sustained competence or positive adjustment in the face of adversity" (p. 100). Further, these authors state that resilience allows people to either recover successfully from trauma or to maintain appropriate or healthy functioning even when they are under considerable stress. Resilience involves a fit between a person's individual characteristics and the supportive features of his or her environment (i.e., family, school, and community) (Easterbrooks et al., 2013).

The Department of Defense (DoD) has implemented a number of programs and strategies to promote resilience among service members. Although the value of resilience programming is widely accepted, little empirical evidence exists in support of the programs' effectiveness. To assist the DoD in understanding factors and methodologies that are informed by social and psychological research and promote psychological resilience in service members and their families, the RAND National Defense Research Institute (NDRI) conducted a study to identify evidence-informed practices for promoting factors that foster psychological resilience. The study also assessed selected resilience programs to determine whether they incorporated evidence-informed practices to promote resilience and includes both a literature review and a program review (Meredith et al., 2011).

Of the 270 studies examined, 20 evidence-informed factors were associated with increased resilience. The RAND NDRI research team categorized these resilience factors according to whether they operated at the individual, family, organization (or unit), and community levels. These factors were rated as having either moderate evidence, based on cross-sectional correlational or observational design; or strong evidence, based on a randomized design or other longitudinal design (Meredith et al., 2011). Resiliency factors with the strongest evidence-base are denoted with a (+). Each resilience factor is listed and described below (see Table 1).

Table 1: Factors That Promote Resilience: Findings from the Literature Review (Meredith et al., 2011)

Level	Resiliency Factor	Description
Individual Level Factors	Positive Coping+	The process of managing taxing circumstances, expending effort to solve personal and interpersonal problems, and seeking to reduce or tolerate stress or conflict, including active/pragmatic, problem-focused, and spiritual approaches to coping. (Spiritual coping may include the adoption of faith-based beliefs and values as a form of positive coping, receiving support that draws upon those beliefs and values, and also as a form of belongingness through participation in spiritual/faith-based organizations, protocols, ceremonies, etc.)
	Positive Thinking+	Information processing, applying knowledge, and changing preferences through restructuring, positive reframing, making sense out of a situation, flexibility, reappraisal, refocusing, having positive outcome expectations, a positive outlook, and psychological preparation
	Positive Affect+	Feeling enthusiastic, active, and alert, including having positive emotions, optimism, a sense of humor (ability to have humor under stress or when challenged), hope, and flexibility about change
	Realism+	Realistic mastery of the possible, having realistic outcome expectations, self-esteem and self-worth, confidence, self-efficacy, perceived control, and acceptance of what is beyond control or cannot be changed
	Behavioral Control+	The process of monitoring, evaluating, and modifying emotional reactions to accomplish a goal (i.e., self- regulation, self-management, self-enhancement)
	Physical Fitness	Bodily ability to function efficiently and effectively in life domains
	Altruism	Selfless concern for the welfare of others, motivation to help without reward
Family- Level Factors	Emotional ties	Emotional bonding among family members, including shared recreation and leisure time
shared recreation and leisure time Communication The exchange of thoughts, opinions, or including problem-solving and relations		The exchange of thoughts, opinions, or information, including problem-solving and relationship management

r	_	
	Support++	Perceiving that comfort is available from (and can be
		provided to) others, including emotional, tangible,
		instrumental, informational, and spiritual support
	Closeness	Love, intimacy, attachment
	Nurturing	Parenting skills
	Adaptability	Ease of adapting to changes associated with military life, including flexible roles within the family
	Positive	Facilitating and fostering intra-unit interaction, building
el s	command	pride/support for the mission, leadership, positive role
	climate++	modeling, implementing institutional policies
e i	Teamwork	Work coordination among team members, including
Jnit-Level Factors		flexibility
	Cohesion	Unit ability to perform combined actions; bonding
		together of members to sustain commitment to each
		other and the mission
	Belongingness++	Integration, friendships, including participation in
ý		spiritual/faith-based organizations, protocols,
to		ceremonies, social services, schools, and so on, and
ac		implementing institutional policies
	Cohesion	The bonds that bring people together in the community,
S S		including shared values and interpersonal belonging
-Le	Connectedness	The quality and number of connections with other
Community-Level Factors		people in the community; includes connections with a
		place or people of that place; aspects include
		commitment, structure, roles, responsibility, and
		communication
	Collective	Group members' perceptions of the ability of the group
	Efficacy	to work together

(+) indicates strongest evidence-base

To build resilience in service members and their families, incorporate these evidenceinformed factors into the components of flexible-curriculum programming and engage senior military leaders in resilience-building efforts (Meredith et al., 2011).

Building Resiliency in Children

Military life, along with its hardships, offers many opportunities for resilience development. For military children to develop their resilience and thrive, Easterbrooks, Ginsburg, & Lerner (2013) state that children should be given opportunities to develop a strong sense of competence, experience a deep 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. These skills and attributes are outlined in the Seven C's Model of Positive Development and may be applied to military-connected children. This model is outlined and described below (see Table 2).

Table 2: The Seven C's Model of Positive Development in Children (Ginsburg & Jablow, 2011)

Key Area of Support	Definition	How to Support
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. Guide youth 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.
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.	• Encourage children to not give up during challenges. 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.	 Believe in children unconditionally and hold them to high expectations. Create opportunities for youth to positively interact with others.
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 children more comfortable asking for help in time of personal need. 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.	 Adults, especially parents, need to model appropriate coping strategies. A wide repertoire of positive, adaptive coping strategies may offer

		protection against unsafe, worrisome behaviors.
Control	Control (or self-efficacy) is about believing in one's 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. Allow children opportunities to make some of their own decisions. This encourages self-discipline and self- responsibility. Parents can teach and model self-control and delayed gratification.

Best Practices for Sharing Information in Military Populations

Military families, particularly those who live far from military installations, can be difficult to reach through traditional program delivery strategies (Lester & Flake, 2013). Social media is a communication channel utilized by service members, military families, and service providers to connect with one another and to give and receive information. Social media is often used as a method for maintaining relationship connections, regardless of whether the relationship is professional, platonic, familial, or romantic (Rea, Behnke, Huff, & Allen, 2015). The majority of U.S. adults access social media sites daily (Brenner & Smith, 2013). Additionally, the Pew Research Center reported that among American teens aged 13-17 years of age, most were on a social media platform, and the majority used more than one social networking platform (Lenhart et al., 2015). Overall, social media may improve resilience in the face of a range of stressors by helping to improve communication between military families and other individuals in their social network, such as friends and peers, teachers, and service providers (McGuire & Steele, 2016).

The DoD has recognized and approved social media use as a tool to share information and build connections between service providers, military leadership, and military families (Military Community & Family Policy, n.d.). Guidelines about usage and how to observe operational security measures have been developed and disseminated by each U.S. service branch. In general, military families and those communicating with and about service members-- particularly those who are deployed-- should not share information related to specific dates, locations, and casualties on social media (Military Community & Family Policy, n.d.).

Additionally, online learning platforms and information sharing tools can help service provides deliver education, prevention, and intervention to geographically dispersed children and their families. This delivery format may reach greater numbers of children

and families by reducing physical barriers, easing the burden of travel and minimizing the stigma associated with mental health (Lester & Flake, 2013).

Suggestions to help maximize information-sharing via social media and virtual platforms:

- Disseminate information intended for military populations via social media platforms such as Facebook (Military Community & Family Policy, n.d.; McGuire & Steele, 2016). Social media can be used to share events, trainings, workshops, photos, news and policy updates, and urgent messages in order to maximize reach and timeliness of delivery.
- Develop delivery platforms that engage service members and families online as well as physical communities (Lester & Flake, 2013). Suggestions include webinars and online video-conferencing systems and meeting spaces such as Zoom and Adobe Connect.
- Encourage and foster opportunities for real-time communication through online communication and social media platforms, such as Facebook and Skype. Real-time communication exchanges may promote wellbeing and happiness for both the deployed and the at-home spouse (Matthews-Juarez et al., 2013).
- Understand and encourage safe use of social media platforms. Each service branch has established guidelines for practicing operation security.

Military Children's Progression to Higher Education

Several factors have been linked to the likelihood of preparation for and enrollment in college among civilian children, including academic ability, parental encouragement and involvement, and socioeconomic status (SES) (Cabrera, Peralta, & Kurban, 2018). Research on civilian children suggests that changes in familial home environments such as moving, parental absence, and low SES are risk factors that influence the success of students in being prepared for college and successfully completing high school (Cabrera et al., 2018).

Academic preparation for college among U.S. military children has not been widely researched. A study conducted by Cabrera, Peralta, & Kurban (2018) sought to discover if military and civilian children displayed differences in their attainment of milestones toward college. The authors found that military children attained milestones toward college at levels comparable with those of their civilian peers (Cabrera et al., 2018). The role of military families' involvement in academic socialization behaviors is credited with buffering the aspects of military life that may be perceived as a disadvantage such as frequent moves and periods of parental absence. Other significant findings from this study include:

• Although the data for the study were taken during a time of increased deployments, parental involvement for children of deployed service members remained steady.

- Military families were able to foster an academic socialization climate that positively impacted their children's academic readiness for college during a period of intensive familial havoc prompted by the September 11 terrorist attacks.
- Embedded in the military culture are networks that may assist military families in their efforts to support a climate conducive to a college-going culture.
- Military families may encourage their children to attain academic milestones toward college irrespective of their SES—a finding that stands in sharp contrast to that among civilian families.
- Military organizational structures provide access to resources that are not tied to familial SES. For example, a common policy across military installations allows soldiers to take time off without formal leave to meet with their child's teachers (Fort Bragg Policy, 2010).

Long-term Outcomes for Military Families

Longitudinal studies (i.e., studies focused on long-term outcomes) on military children are limited, however the need for long-term study of this population has been elevated by researchers for many years. The Millennium Family Cohort Study, which seeks to gain a more complete understanding of the military experience and its impact on the health and well-being of Service members and their families launched between 2011 and 2013, aims to follow the same families over the course of a 20-year period and has recently begun to release findings. In another study, perceptions of UK service members on the impact of military service on their families were evaluated based on data collected from longitudinal studies such as the Operational Mental Health Needs Evaluation and the King's Centre for Military Health Research (KCMHR) cohort study. Additionally, in 2009 the RAND Corporation conducted a Deployment Life Study, a longitudinal study of military families across a deployment cycle in order to assess family readiness. Military children-related findings from these studies are described below.

Millennium Cohort Family Study

Initiated in 2011-2013 and in conjunction with the Millennium Cohort Study, the Millennium Cohort Family Study seeks to gain a more complete understanding of the military experience and its impact on the health and well-being of service members and their families. The Family Study also aims to explore the impact of relationship quality on the physical and psychological health of service members, their spouses and children. With this knowledge, policy makers, military leadership, and service providers may be able to develop more effective interventions and support programs (Crum - Cianflone, Fairbank, Marmar, & Schlenger, 2014). Individuals included in the Family Study are the spouses of participants in the Millennium Cohort Study. Participation is voluntary and encouraged even if the service member is no longer in the service or has separated or is no longer co-residing with a spouse.

More information about the Millennium Cohort Family Study can be found by visiting <u>www.familycohort.org</u>

Mental Health of Children of Deployed and Non-Deployed US Military Service Members: The Millennium Cohort Family Study

The objective of this study was to investigate the associations between service member deployment experiences and family demographic factors and children's mental health, using baseline data from the Millennium Family Cohort Study (Fairbank et al., 2018).

Brief Summary of Findings:

- Regardless of family experience with deployment, most military spouses reported that their children were functioning well.
- Parental combat deployments were generally more strongly associated with children's ADD/ADHD as diagnosed by clinical providers than parental deployments without combat and/or no deployments.
- Children's odds of any mental health diagnosis or a diagnosis of depression by clinical providers were significantly higher in both the combat and the noncombat deployment groups than the no deployment group.
- Multiple and longer deployments in families with deployed service members may potentially serve as a protective factor for children's mental health. Further study to understand this association between length and number of deployments and children's mental health is needed.

Military Life Stressors, Family Communication and Satisfaction: Associations with Children's Psychosocial Outcomes

This study explored how family demographic characteristics, deployment characteristics, military life stressors, and parent and family functioning were associated with children's mental health conditions and impairments in psychosocial functioning (Briggs et al., 2019). An adapted version of the Strengths and Difficulties Questionnaire (SDQ) was used throughout this study.

Brief Summary of Findings:

- National Guard/ Reserve families did not differ greatly from active duty families in the overall number of military-related stressors spouses reported.
- Active duty families reported slightly higher numbers of family-related stressors.
- For both active duty and National Guard/Reserve families, military-related family stressors were associated with higher SDQ hyperactivity/inattention scores and depression/anxiety diagnoses, while injury-related stressors were associated with higher child conduct problems and diagnoses and overall child functioning on the SDQ.
- Higher levels of parental social functioning were consistently associated with fewer child problems, as well as with lower odds of each child diagnosis.
- Lower family satisfaction was a significant predictor of SDQ conduct problems, emotional symptoms, and total SDQ scores.

- Family communication was only associated with depression/anxiety and conduct diagnoses in the fully adjusted models, and not the other diagnoses or domains assessed in the present study.
- Active duty status was a significant risk factor for all of the child diagnoses considered in the study. This difference was only noted for diagnostic history. Active duty at-home parent reports of a child's functioning was not identified as being a significant risk factor.
- Deployment-related military and deployment status and history were each only significant in predicting emotional problems and ADD/ADHD, respectively.
- Across outcomes, having more children at home and older children were associated with higher odds of child difficulties and mental health/behavioral diagnoses.

Longitudinal Studies on Military Families within the United Kingdom

Operational Mental Health Needs Evaluation

In 2009, the U.K. armed forces established a mental health research team to evaluate the mental health of deployed service members. The project, known as the Operational Mental Health Needs Evaluation, collected data during operations in Iraq in 2009 and in Afghanistan in 2010, 2011 and 2014. Participants from all U.K. armed services were surveyed from the middle to the end of their deployment. The data collected included measurements of mental health symptoms, help-seeking and combat events, participants' perceptions of how their current deployment impacted their intimate relationships and the potential effect on their children (Thandi et al., 2017).

Brief Summary of Findings:

- A significant number of deployed UK service members perceived their deployments to have a negative effect on their intimate relationships and on their children.
- The perceived negative effect of deployment was related symptoms of psychological distress and traumatic stress symptoms among deployed military personnel, and stressful events occurring at home during the deployment.
- Reservists were less likely to report negative effects of deployment on their children compared with active duty personnel.
- Perceived insufficient support from the Ministry of Defence was associated with poor mental health during deployment in addition to holding a junior rank.

King's Centre for Military Health Research Cohort Study

In the second phase of the King's Centre for Military Health Research (KCMHR) cohort study, active duty and reserve service members with one or more children were asked to report whether they viewed their military career as having a positive, negative or no impact on their children. Rowe et al. (2014) evaluated the data taken from the KCMHR cohort study completed between 2007 and 2009 to examine the views of military

personnel about the impact their career has on their children in relation to sociodemographic variables, military characteristics and mental health symptoms.

Brief Summary of Findings:

- Just over half (51%) of service personnel perceived their military career as having a negative impact on their children.
- Not being in a relationship, deployment for 13 months or more within a 3-year period, symptoms of common mental health disorders, and probable post-traumatic stress disorder were associated with perceiving a military career as affecting children negatively.
- Reservists were less likely than active duty personnel to report negative effects of their military career on their children.
- Non-commissioned officers were more likely than other ranks to report negative effects of their military career on their children.

RAND Deployment Life Study

The RAND Deployment Life Study gathered data over a three-year period to evaluate the effects of deployment on service members, spouses, and their children in order to identify which families are best able to withstand the strains of deployment and the kinds of coping strategies that characterize these families, and which families are most vulnerable to the negative consequences of deployment so that those families might be targeted for extra support (Meadows et al., 2017). Study findings related to the emotional, behavioral, social, and academic functioning of children- as reported by spouses- and teens, across 40 outcomes are described below.

Brief Summary of Findings:

- Three child outcomes (reported by spouses) showed significant changes over the deployment cycle: total difficulties, emotional problems, and depression screener scores. Spouses reported elevated symptoms in their children during deployment.
- Teen reports of drug use were very low before and during deployment (hovering around "never"), but increased afterward (to just slightly more than "never" on average).
- Teens reported higher-quality relationships with their parents who deployed before and during deployment, with lower quality upon return.
- The study found no significant effect of deployment on child and teen outcomes.
- Spouses in families that experienced a study deployment reported elevated child difficulties at the end of the study, as well as a higher need for child mental health services, as compared with spouses in matched families that did not experience a study deployment. This was only found for spouse concerns about their children younger than age 11 following a study deployment; there was no evidence of an effect for spouse concerns on teens or in teen self-reports.
- Spouses reported that, the longer the study deployment, the more emotional problems and depressive symptoms children had. For teens, these factors were not related to spouse report of teen outcomes or for most of the teen self-reported outcomes.

- Parental experience of trauma during the study deployment was associated with teen reports of their functioning and family relationships. The pattern of findings indicates that combat traumas were related to poorer functioning and relationships, whereas psychological traumas were related to better functioning and relationships.
- Socialization with other military children during deployment was strongly protective and associated with more positive outcomes at the end of the study.

Conclusion

Service members and their families face unique challenges and opportunities associated with military life. Recent research suggests the most critical protective factors for military children's well-being and resilience are sensitive and responsive parenting, the at-home parent's psychological well-being, and a supportive family or other social and environmental networks (Bernier et al., 2016; Devoe, et al. 2016; Easterbrooks et al., 2013; Meredith et al., 2011; Osofsky & Chartrand, 2013). While service members and family members from both the U.K. and the U.S. may perceive their military service as detrimental to their children's overall well-being, empirical research does not always support these claims (e.g., Meadows et al., 2017; Rowe et al., 2014; Thandi et al., 2017). Further study will help to accurately define the unique needs of service families and the impact of military service on child and family well-being, not only by country of origin, but also in regard to rank, time in service, and length and longevity of deployment.

Additional Assistance

The technical assistance specialists at the Clearinghouse for Military Family Readiness at Penn State are happy to assist you. We provide support to professionals in making informed decisions about which programs fit specific situations and are worth the investment. Whether it's connecting you with the resources and tools to conduct a needs assessment in your community, suggesting the best evidence-based program or practice for your situation, or developing an evaluation plan, our team of experts is simply a call or email away.

Please visit our website at <u>www.militaryfamilies.psu.edu</u> or call 1-877-382-9185 to speak with a technical assitance specialist.

Suggested Citation

Clearinghouse for Military Family Readiness. (2019). *Rapid literature review: Supporting military families: An overview of military family outcomes and evidence informed practices*. University Park, PA: Clearinghouse for Military Family Readiness.

References

- Aronson, K. R., Caldwell, L. L., Perkins, D. F., & Pasch, K. W. (2011). Assisting children and families with military-related disruptions: The United States Marine Corps school liaison program. *Psychology in the Schools*, 48(10), 998-1015.
- Bernier, A., Calkins, S. D., & Bell, M. A. (2016). Longitudinal associations between the quality of mother-infant interactions and brain development across infancy. *Child Development*, 87(4), 1159-1174. <u>https://doiorg.ezaccess.libraries.psu.edu/10.1111/cdev.12518</u>
- Blaisure, K. R., Saathoff-Wells, T., Pereira, A., Wadsworth, S. M., & Dombro, A. L. (2012). Serving military families in the 21st century. Routledge.
- Brenner, J., & Smith, A. (2013). 72% of online adults are social networking site users. Washington, DC: Pew Research Center Internet & American Life Project.
- Briggs, E. C., Fairbank, J. A., Tunno, A. M., Lee, R. C., Corry, N. H., Pflieger, J. C., ... & Murphy, R. A. (2019). Military Life Stressors, Family Communication and Satisfaction: Associations with Children's Psychosocial Outcomes. *Journal of Child & Adolescent Trauma*, 1-13.
- Cabrera, A. F., Peralta, A. M., & Kurban, E. R. (2018). The Invisible 1%: A comparison of attaining stepping stones toward college between military and civilian children. *The Journal of Higher Education*, 89(2), 208-235.
- Chartrand, M. & Siegel, B. (2007). At war in Iraq and Afghanistan: Children in US military families. *Ambulatory Pediatrics*, 7, 1-2.
- Cozza, S. J., & Lieberman, A. F. (2007). The young military child: Our modern Telemachus. *Zero to Three*, 27, 27-33.
- Crum-Cianflone, N. F., Fairbank, J. A., Marmar, C. R., & Schlenger, W. (2014). The Millennium Cohort Family Study: a prospective evaluation of the health and well - being of military service members and their families. *International Journal of Methods in Psychiatric Research*, 23(3), 320-330.
- DeVoe, E. R., Paris, R., & Acker, M. (2016). Prevention and treatment for parents of young children in military families. *Parenting and Children's Resilience in Military Families*, 213-227.
- Easterbrooks, M. A., Ginsburg, K., & Lerner, R. M. (2013). Resilience among military youth. *The future of children*, 23(2), 99-120.

- Finkel, L.B., Kelley, M.L., & Ashby, J. (2003). Geographical mobility, family and maternal variables as related to the psychosocial adjustment of military children, *Military Medicine*, 168, 1019-1025.
- Fort Bragg Policy. (2010). Master Policy No. 115: Support for parent/teacher conferences. Retrieved from <u>https://bragg.armymwr.com/application/files/9514/9582/0398/brgg-slo-poli</u> ciesprogramsmemorandums-masterpolicy115.pdf
- Fairbank, J. A., Briggs, E. C., Lee, R. C., Corry, N. H., Pflieger, J. C., Gerrity, E. T.,
 ... & Murphy, R. A. (2018). Mental health of children of deployed and
 nondeployed US Military service members: the Millennium Cohort Family
 Study. Journal of Developmental & Behavioral Pediatrics, 39(9), 683-692.
- Ginsburg, K. R. & Jablow, M. M. (2011). Building resilience in children and teens: Giving kids roots and wings (2nd ed.). Elk Grove Village, IL: American Academy of Pediatrics.
- Gunnar, M. R. (1998). Quality of early care and buffering of neuroendocrine stress reactions: Potential effects on the developing human brain. *Preventive Medicine*, 27(2), 208-211.
- Kudler, H., & Porter, C. R. I. (2013). Building communities of care for military children and families. *The Future of Children*, 23(2), 163-185.
- Lenhart, A., Duggan, M., Perrin, A., Stepler, R., Rainie, H., & Parker, K. (2015). *Teens, social media & technology overview 2015*. Washington, DC: Pew Research Center Internet & American Life Project.
- Lester, P., & Flake, L. C. E. (2013). How wartime military service affects children and families. *The Future of Children*, 23(2), 121-141.
- Lester, P., Leskin, G., Woodward, K., Saltzman, W., Nash, W., Mogil, C., ... & Beardslee, W. (2011). Wartime deployment and military children: Applying prevention science to enhance family resilience. In *Risk and resilience in US military families*, 149-173.
- Lincoln, A., Swift, E., & Shorteno Fraser, M. (2008). Psychological adjustment and treatment of children and families with parents deployed in military combat. *Journal of clinical psychology*, *64*(8), 984-992.
- MacDermid, S. M., Samper, R., Schwarz, R., Nishida, J., & Nyaronga, D. (2008). Understanding and promoting resilience in military families. West Lafayette, IN: Military Family Research Institute.

- Maholmes, V. (2012). Adjustment of children and youth in military families: Toward developmental understandings. *Child Development Perspectives*, 6(4), 430-435.
- McGuire, A. B., & Steele, R. G. (2016). Impact of social networking sites on children in military families. *Clinical child and family psychology review*, 19(3), 259-269.
- Meadows, S. O., Tanielian, T., Karney, B., Schell, T., Griffin, B. A., Jaycox, L. H., ... & Hengstebeck, N. (2017). The deployment life study: Longitudinal analysis of military families across the deployment cycle. *Rand health quarterly*, 6(2).
- Meredith, L. S., Sherbourne, C. D., Gaillot, S. J., Hansell, L., Ritschard, H. V., Parker, A. M., & Wrenn, G. (2011). Promoting psychological resilience in the US military. *Rand Health Quarterly*, 1(2).
- Milburn, N. G., & Lightfoot, M. (2013). Adolescents in wartime US military families: A developmental perspective on challenges and resources. *Clinical Child and Family Psychology Review*, *16*(3), 266-277.
- Military Community & Family Policy. (n.d.). Social media guide. Retrieved from <u>https://download.militaryonesource.mil/12038/MOS/ResourceGuides/Social-Media-Guide.pdf</u>
- Mmari, K. N., Bradshaw, C. P., Sudhinaraset, M., & Blum, R. (2010). Exploring the role of social connectedness among military youth: Perceptions from youth, parents, and school personnel. *Child & Youth Care Forum*, 39(5), 351-366.
- Osofsky, J. D., & Chartrand, L. C. M. M. (2013). Military children from birth to five years. *The Future of children*, 23(2), 61-77.
- Rea, J., Behnke, A., Huff, N., & Allen, K. (2015). The role of online communication in the lives of military spouses. *Contemporary Family Therapy*, *37*(3), 329-339.
- Rentz, E. D., Marshall, S. W., Loomis, D., Casteel, C., Martin, S. L., & Gibbs, D. A. (2007). Effect of deployment on the occurrence of child maltreatment in military and nonmilitary families. *American Journal of Epidemiology*, 165(10), 1199-1206.
- Rowe, S. L., Keeling, M., Wessely, S., & Fear, N. T. (2014). Perceptions of the impact a military career has on children. *Occupational Medicine*, *64*(7), 490-496.
- Thandi, G., Greenberg, N., Fear, N. T., & Jones, N. (2017). Perceived effect of deployment on families of UK military personnel. *Occupational Medicine*, 67(7), 562-568.