

The Well-Being of Young Children in Military Families:
A Review and Recommendations for Further Study

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Executive Summary

Half-a-million American young children (from birth through five years of age) have one or both parents on active duty in the military services. It is likely that at least half of this group will experience the deployment (sometimes multiple deployments) of one or both parents. Children in military families are asked to adopt a unique and demanding lifestyle, involving multiple sources of potential stress for all family members. Because early childhood is widely seen as a critical time to make investments in our nation's future, it is especially important to examine what we know (and don't know) about the well-being of these youngest military dependents.

Child Trends, a non-partisan, non-profit research organization with a 30+-year history of conducting research on all aspects of children's lives, was asked by CNA to review and summarize the scientific literature relevant to understanding the health and well-being of young children in military families, and to make recommendations for further study. Following our literature search, we reviewed more than 40 documents, including original research studies, research reviews, reports, and program descriptions. Some of these did not directly address the circumstances and conditions of military young children, but had applicability because of their focus on issues that are central to the experience of military families: childcare, parental separation/deployment, residential mobility, and trauma and loss.

The Department of Defense (DoD) maintains a childcare network for military families that is the envy of many in the civilian sector. In contrast to the "non-system" that characterizes early care and education services in the U.S. generally, the DoD system requires high quality standards of all programs, and supports its childcare workforce in ways that make for a professional staff with relatively low turnover. Nevertheless, there is room for improvement in meeting military families' childcare needs. There are inequities, by geographic location, soldier rank, and spouse's employment status, in access to the care-options parents would most like to use, and affordability remains an issue. We recommend that further study focus on ways to address some of these gaps, as well as on testing the links between measures of childcare quality, and school readiness outcomes for children.

Separation from a parent, whether through deployment or otherwise, can be a threat to the healthy development of young children, particularly if adults do not prepare children adequately for the disruption. Many of children's reactions to events, including separation and deployment, are highly individualized, mediated by the reactions and coping styles of the remaining parent. This makes it incumbent on those concerned with children's welfare in these circumstances to also address the well-being of the adults who remain at home. Young children with single parents, and children

with dual-deployed parents, face special challenges, since they are likely, for a time, to be in the care of relatives, some of whom may be inadequately prepared for that role. The military provides a number of services, both formal and informal, to meet the deployment-related needs of families, but few (other than childcare) are designed to meet the health and well-being needs of young children. We recommend looking further, in particular, at the routine pediatric health care visit as a promising “touch-point” for identification of possible concerns (related to both physical and behavioral health), and provision of help, or referral to other specialists. In addition, mental and behavioral services should be more widely available to the at-home parent. More attention also needs to be given to outcomes associated with the temporary care of children by extended family members.

Residential moves are a fact of life for most military families. As with other kinds of disruption to normal routines, young children do best when parents and other caring adults take time to prepare them for the move, and model positive coping. The military provides many relocation services to families; however, very little is known specifically about the impact that these moves (which may be frequent) have on young children. We recommend closer examination of the role of residential moves in children’s well-being, including the loss of familiar childcare staff, and the variety of parental circumstances and experiences that may attend the move and, indirectly, affect the child’s experience.

Young children experience and understand trauma (death of a loved one has been the most studied) in ways conditioned by their incomplete capacity for abstract thought and other cognitively-mediated coping skills. While awareness—by health care providers, and even the general public—of trauma as a condition has increased markedly, we found a paucity of research dealing specifically with young children’s reactions to death and other trauma within military families. While children can experience trauma directly, they are also at risk of negative effects from parents who have experienced trauma. Children of veterans returning from combat, particularly those with severe mental distress, may be at risk for diminished parenting, including experiencing family violence. We recommend more study of these issues, with attention to how these reactions are affected by a variety of factors, including the well-being of other family members, exposure to media portrayals of violence and death, and the formal and informal supports (medical, psychosocial, financial, etc.) offered to these families.

Finally, we recommend a comprehensive survey of military families with young children, in order to obtain a fuller picture of their well-being. We mention two subgroups—adopted children, and children with special needs—about whom we know little. Further, we recommend that data systems be enhanced by linking well-being data on the youngest children with those on school-age dependents, to create the capacity for an integrated, longitudinal view of the development at all ages of military children.

The Well-Being of Young Children in Military Families: A Review and Recommendations for Further Study

Introduction

America is engaged in fighting two wars, one of which is now of longer duration than any previous U.S. military engagement. As always in war, behind the battle-lines, the headlines, and the policy debates are the lives of many individuals, including soldiers and their families. In the U.S., about 500,000 children under the age of six are part of such families (Department of Defense, 2008). It is appropriate to examine what we know about the well-being of young children within a population that shoulders more than its share of our society's expectations and responsibilities.

Research on the earliest years of children's development increasingly highlights this period as a critical one for later well-being (Shonkoff & Phillips, 2000). Our current knowledge of brain development, language and early literacy, social relationships, and settings for early learning all argue for targeting a significant portion of our society's resources toward supporting our youngest children and their families.

Young children (birth to five years of age) may need assistance to cope effectively with the stressors (e.g., residential moves, parental deployment, trauma, and loss) that can be associated with living in a military family. By understanding the developmental needs of children in military families, decision-makers and practitioners will be more likely to identify and provide

programs and services that will promote their healthy development.

Americans, and the military forces in particular, have a tradition of valuing, and providing in many ways for the needs of military families. However, there are several features of the present time that warrant fresh attention to the well-being of young children. More women—many of them mothers of young children—are serving in the military, often in close-to-combat roles. Some of these families have two deployed parents, or experience frequent multiple deployments. Soldiers who return home with injuries are often seriously and permanently disabled. The recent economic recession has strained resources for young families in ways not seen for a generation or more.

Children of military families are asked to adopt a unique and demanding lifestyle—from combat readiness preparations, to the realities of active-duty deployment of their parents—to name a few of the extraordinary stressors associated with military service. This report focuses on the following topics that concern military families with young children: childcare, parental separation/deployment, residential mobility, and trauma and loss.

Key characteristics of young children's development

Some core concepts of development of particular relevance to young children include the following¹:

- Children's development (in particular, brain development) during the first five years of life, is rapid and cumulative, with early brain connections and simple skills providing the foundation for more advanced brain circuitry and skills.
- Relationships—first primarily with parents and other adults, and later including peers—are paramount in shaping the young child's experience. The way the young child understands the world, and his or her emotional responses to it, are “filtered” through the medium of relationships.
- Because of their stage of development, young children experience and understand the world differently from how adults (and older children) do.
- Development is holistic; all aspects (physical, emotional, social, cognitive) are interrelated.
- Most children can withstand successfully a degree of “normal” stress; what is harmful to development is a “cumulative load” of stress (multiple simultaneous or serial stresses).

¹ See, for example, National Scientific Council on the Developing Child. (2007). The science of early childhood development. Retrieved from <http://www.developingchild.net>

A note on pathways of influence.

In discussing the contributions that childcare, residential moves and other circumstances may make to children's well-being, it is often helpful to consider the roles of *mediating* and *moderating* factors. These concepts take account of the fact that effects on children are often indirect, or are “buffered” by the presence of other factors.

For example, mothers' depression can be associated with children's social-emotional problems (Center on the Developing Child at Harvard University, 2009). This is not a *direct* effect (after all, depression is not a “contagious disease”), but may be *mediated* through changes in the mother's behavior that are brought on by her depression—for example, symptoms of depression (e.g., mood swings and apathy) may impair her relationship with her child, which in turn can contribute to later difficulties for the child in relating to peers and others (Kam et al., 2010).

Alternatively, or in conjunction, the effect of maternal depression on the child may depend, for example, upon characteristics of the other parent. Supportive fathers with a depressed partner may in fact ameliorate to a degree her depression (Hossain et al., 1994); on the other hand, an unsupportive father may exacerbate such effects. In such cases, the degree of father-support is a *moderating* factor.

Palmer's pathway model (see Figure 1) suggests that “the effects of military life on

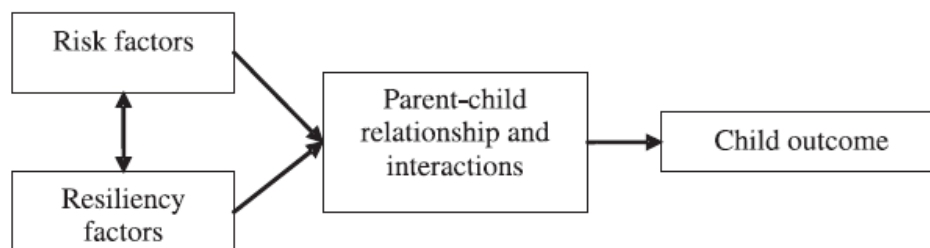
child psychosocial and academic outcome may follow an indirect pathway involving parental stress and psychopathology” (Palmer, 2008, p. 206).

This model is consistent with the idea that children are more likely influenced by indirect effects of the military setting (that is, by its effects upon the parents) than they are by direct effects of the military experience upon themselves. The model thus has implications for the design of future

research, as well as for preventive interventions.

Unfortunately, many research studies do not address all, and some not any, of such mediating and moderating factors—thus limiting our ability to draw definitive conclusions from their findings. In this report, we try to describe such factors where we can, and in our recommendations identify where increased knowledge about such factors would be particularly helpful.

Figure 1. Pathway of Indirect Effects of Military Risk and Resilience Factors on Child Outcome



(Source: Palmer, 2008).

More broadly, an ecological model of development (Bronfenbrenner, 1979) posits that, in addition to the parent-child relationship, children are affected by their parents’ relationship with each other, and by relationships that parents have with others. Other influences on children’s well-being are the settings and relationships they experience beyond the immediate family (e.g., childcare, homes of friends and relatives). Families themselves inhere within a particular subculture—in this case,

most prominently the military culture—which in turn is part of the wider shared culture that includes dominant social norms, traditions, and policies, as well as the products of the “popular” media. Effects on children’s development, both beneficial and detrimental, can stem from any one, or multiples, of these spheres.

This report reviews the research relevant to the well-being of young children in military families, focusing on family functioning, the stressors that children in military families

may face, and the factors that may improve outcomes for these children. The sections that follow describe the methodology used for the literature review, summarize the findings (drawing particular attention to several key issue areas), and recommend directions for further study.

Method

Identification and inclusion of documents

For this review, government documents, program descriptions, and studies published in peer-reviewed journals between 1990 and 2010, and focused on military families and children, were included. Relevant literature was identified in two ways. First, a keyword search of several electronic databases (PubMed, JSTOR, and EBSCOHost) was conducted. Keywords included “military family and children,” “military family and child care,” and “military family and early childhood.” In addition, works cited in articles reviewed for this project, including previously-conducted literature reviews on these topics (Black, 1993; Cozza, Chun, & Polo, 2005; Drummet, Coleman, & Cable, 2003; Fitzsimons & Krause-Parello, 2009; McFarlane, 2009; Palmer, 2008; Paris, DeVoe, Ross, & Acker, 2010; Savitsky, Illingworth, & DuLaney, 2009) were located and reviewed.

Results of literature search, and coding of documents

The application of the inclusion criteria as noted above resulted in 42 documents reviewed. The documents were coded as described below.

Study Design. The literature reviewed was coded according to the sample size (if applicable), sample characteristics, and type of document (literature review, original study, program description, report/brief, and other) (see Appendix). The findings from the literature are presented here as follows:

- Basic demographic information on this population
- Key issues affecting this population:
 - Child care
 - Parental separation/deployment
 - Residential mobility
 - Trauma and loss

We identified relatively few documents that met our criteria for scientific rigor, and that dealt specifically with young children in military families. In some, the focus was on older children, or on issues pertaining exclusively to military adults or their spouses. In other cases, we drew on the general child development research literature for insights into the ways experiences shared by many young children, military and non-military alike, may have special relevance for those in military families.

Basic Demographics

There are currently 1.7 million children and youth under the age of 18 who have a parent in the military, and before those children reach adulthood, approximately 900,000 of them will experience the deployment of one or both parents at multiple times (“Military family services program,” n.d.). Women make up approximately 16 percent of the active-duty force (APA, 2007). According to the Department of Defense (DoD) (2008), nearly half (41.5 percent) of minor dependents from military families with at least one active-duty member are between birth and five years of age (N= 496,727).

In 2008 (the latest data available), there were just under 600,000 military families with a least one child age 23 or younger and with at least one active-duty parent (DoD, 2008) (Table 1). Of those, more than 80 percent were married to a civilian.² Nearly 73,000 (12 percent) were single parents. Dual-military parents were the smallest percentage (6.6 percent), yet such the number of such families still approached 40,000.

Table 1: Status of active-duty military families, 2008

	Number	Percentage
All with at least one child, 0-23	599,475	
Active-duty parent, married, civilian spouse	487,004	81.2
Active-duty parent, single	72,968	12.2
Dual-military parents	39,503	6.6
Total	599,475	

(Source: DoD, 2008)

² The majority (54 percent) of all civilian spouses are employed, but figures specifically on the employment status of civilian spouses *with children* are lacking.

Issues Related to Childcare

Use of non-parental childcare is now the norm among U.S. families with young children (National Household Education Surveys Program, 2005), but quality (in terms of safety, staffing, and programs' reflecting developmental knowledge of young children) varies widely (Adams, Tout, & Zaslow, 2007). Moreover, there is no single system for childcare comparable to that of K-12 public education. Rather, services are offered in a variety of settings (centers, daycare homes, after-school programs, and others), delivering care and education activities that also vary widely, and funded through a patchwork of public and private financing that chronically falls short of meeting optimal market considerations of supply and demand. Childcare providers, in general, are among the lowest-paid workers and have high job turnover, and many have symptoms of depression (American Federation of Teachers, 2010; National Survey of Child and Adolescent Well-Being, n.d.; Whitebrook, Phillips, & Howes, 1993).

Formal childcare (that is, paid, non-relative care) that is of high quality conveys multiple benefits to children, as well as facilitates the employment of their parents. Children in all socio-economic groups, but especially those who are low-income, who participate in high-quality childcare, improve their cognitive, social, and academic skills (Child Trends, 2010). Having childcare that is high-quality, accessible, and affordable is important to military families, just as it is for civilian families.

Childcare quality is typically assessed in three ways: structural measures (e.g., class size and staff-child ratio), process measures (e.g., quality of the teacher-child interaction), and global measures (which incorporate both structure and process) (Child Trends, 2009). Thus, high-quality settings generally have appropriately trained providers who are responsive to children's needs, and who promote through their interactions the cognitive and social-emotional development of children. About 50 percent of the children in military childcare programs are under the age of three (Lucas, 2001). High-quality infant-toddler care requires providers who have additional skills, and smaller child-to-adult ratios.

Unfortunately, research suggests that much of the childcare that is currently provided to families in the U.S. "falls below a rating of 'good' on widely used observational measures" (Adams et al., 2007, p. vii).

Childcare issues for military families.

Over the past twenty years, military childcare has gone through dramatic changes. Before the early 1990s, the military childcare system was not meeting the needs of children and their families. As a result of the changing makeup of the workforce, with many families having two working parents, the demand for childcare increased. Long waitlists developed at military center-based childcare programs, and fees were increasing; yet the quality of centers was not keeping up with these trends. Some childcare centers were "unsafe and unsuitable," the system lacked standards

that addressed class size and teacher qualifications, and there was high staff turnover (Campbell, Appelbaum, Martinson, & Martin, 2000). In response to these deficiencies, the Military Child Care Act of 1989 (MCCA) was passed, mandating changes to improve the quality of military childcare throughout center-based, family childcare, and school-age programs.

The new quality standards included pre-service and ongoing training for providers, basic health and safety requirements, and regular on-site inspections, including unannounced visits. The military's requirements now exceed licensing rules for childcare centers in all states, and for family day care homes in all but three states. Moreover, the military system provides a great deal of support to child care workers, including wage incentives for meeting training goals and guidelines (Smith & Sarkar, 2008). To achieve these results, increased funding was allocated, and new priorities, including a focus on parent involvement, were developed and implemented. Childcare centers were made more affordable by introducing sliding scales linked to family income. DoD created a system to measure families' unmet needs for childcare, and as a result of its findings, increased the number of center-based slots (Campbell et al., 2000).

A follow-up report in 2004 (Pomper, Blank, Campbell, & Schulman) found that compliance with DoD inspection standards remained high since implementation, and 91 percent of military childcare centers were accredited. In addition to these quality

improvements, childcare was more affordable and available to families. In 2004, depending on family income, the average weekly fee for fifty hours of childcare ranged from \$43 to \$126³, which was less expensive than civilian care.

Further enhancements to the military system were made in 1998 and 2004 (Smith & Sarkar, 2008). In 1998, DoD gained the authority to partner with non-profit organizations to expand military families' access to childcare beyond those facilities operated on military installations. In 2004, coinciding with increased rates of deployment, the military addressed persistent shortages of child care for its families by partnering with the National Association of Child Care Resource & Referral Agencies on a number of initiatives that have increased affordability and quality of care within the civilian community—resulting in benefits for both military and non-military families (Smith & Sarkar, 2008).

The Department of Defense (DoD) currently maintains a childcare network that consists of more than 800 programs in the U.S. and overseas, grouped into four main categories:

- Child development centers (accredited center-based programs serving children ages six weeks to 12 years)
- In-home childcare (licensed providers providing care to children ages birth to eight years in the provider's home)

³ Using the Consumer Price Indexes inflation calculator provided by the Bureau of Labor Statistics, the rates in 2004 are the equivalent of \$49.64 to \$145.45 in 2010.

- School-age care (programs provided in youth centers or schools for grades K-12, and generally available before and after school)
- Youth programs (extra-curricular activities such as clubs and sports teams that are provided to children ages 6-18) (“DoD military child development system,” n.d.).

These programs offer an array of services for children and youth in part- and full-day care. The childcare network uses an integrative approach to link “centers, family childcare homes, before- and after-school programs, and resource and referral services to assist parents in finding care through a single point of entry” (Campell et al., 2000, p. 2). Fees are set according to parents’ income-level, and are generally lower than in the civilian sector (Pomper et al., 2004); as a result, many military families prefer to use the DoD system. However, a number of factors (military rank, application date, deployment status, and parental employment status) determine how long some military families may have to be on a waitlist for these programs (“DoD military child development system,” n.d.).

Responding to military families’ childcare needs.

Despite these changes, as of 2006 not all military families were using their first choice of childcare (Gates, Zellman, Moini, and Suttrop, 2006). In that year, 1,137 active-duty military families were surveyed about their childcare use. Though the response rate was relatively low (34 percent), twenty-two percent of the parents

reported “unmet preferences,” defined as parents’ not using their first preference for childcare. A smaller proportion of parents (nine percent) reported an “unmet need,” defined as wanting to use formal childcare rather than rely on themselves or family members to provide care. Parents of preschoolers were more likely than their counterparts with school-aged children to report “unmet preferences.”

Of those families that reported “unmet preferences,” one-third reported wanting to use a DoD childcare center. Among families with children ages birth to 5 years, dual-military-parent families were less likely to report “unmet needs” than were military families with one civilian, nonworking parent. Families with higher incomes were also less likely to report “unmet needs,” and families living on-base were more likely to use DoD childcare. Significantly, one-third of families responding reported that childcare issues would “likely” or “very likely” prompt them to leave the military (Gates, Zellman, Moini, and Suttrop, 2006).

Even within the military system parents may have unequal access to the best-quality care. According to one study (Lakhani & Ardison, 1991), an increase in the civilian spouse’s employment, the civilian spouse’s volunteering time, and the soldier’s rank were all positively correlated with an increased use of childcare. Soldier rank was positively correlated with the use of higher-quality childcare. Because lower-rank soldiers have lower incomes, they tended to use more informal care (e.g., in-home

childcare), whereas those ranked as captains, for example, used center-based childcare.

Parents and other stakeholders in the military system vary in what they consider important features of childcare. One study (Zellman & Johansen, 1995) involved interviews with DoD policymakers, childcare staff, and parents; and observations of military childcare settings. The desired features of childcare these informants named had to do primarily with flexibility, rather than with the quality of the childcare setting. When considering the flexibility of formal care arrangements (e.g., having flexible hours, and the capacity to care for and administer medications to sick children), on-base family childcare was rated best, while center-based care (either off-base or on-base) was considered the least flexible. However, on-base centers were still the top preference among parents, suggesting that flexibility of care may not be the primary factor in parents' choice of a childcare setting.

Recommendations for further study.

The military has taken steps to improve the quality and accessibility of childcare. Indeed, some believe the military's childcare system should be a "model for the nation" (Campbell et al., 2000). However, military families are still reporting unmet needs, and not all families have access to high-quality programs. Despite changes made to the military system, some states, facing cost constraints, have limited—or even eliminated—initiatives that focus on developing high-quality military programs. Other states offer childcare tax credits rather

than subsidies, which mean that military families have to pay for childcare upfront before receiving reimbursement. Still other states have encountered limits to federal funding, which have restricted the availability and affordability of military childcare (Pomper et al., 2004).

Areas where there is a particular need for more research are:

- Comparing the relative quality of the four types of military childcare, using validated measures, and including parental perceptions (of access and quality) and satisfaction;
- Child outcomes (for example, as assessed by valid school readiness assessments) associated with attending military childcare programs; and
- The relative effectiveness of strategies to reduce inequities in access to high-quality care.

Issues Related to Parental Separation and Deployment

The healthy development of young children is intertwined with family structure and functioning. Young children are particularly sensitive to separations from primary caregivers, and to any changes that alter their regular routines. For all children, stressors such as parental absence, or parents' mental distress, can negatively affect well-being. However, the way children comprehend and react to changes is linked to their developmental level. Younger children's reactions are closely attuned to those of the adults in close physical proximity, whereas older children are capable of thoughts, understandings, and behaviors that are more independent of adults' (Paris, et al., 2010; Pincus, et al., n.d.).

The emotional bond between parents and their children provides a foundation for the development of children's coping skills in response to separations and other family changes (Cassidy & Shaver, 1999). As young children develop, healthy attachment normally occurs when parents and other consistent caregivers are available, reliable, and nurturing (National Scientific Council on the Developing Child, 2004). Young children who experience the prolonged absence of a parent, or who have a parent whose emotional health is compromised (or both), may become clingy and overly dependent, and may experience enduring interpersonal difficulties (Paris et al., 2010).

While the level of distress a child experiences in relation to separations or

major life changes is strongly linked to the parent's own distress-level, children generally have the capacity for adaptive skills and coping strategies (Black, 1993; Drummet et al., 2003; Jensen, Martin, & Wantabe, 1996; Lester et al., 2010; Murray & Kuntz, 2002). Also, family strengths, such as good parental communication, or parents' planning skills, can mitigate harmful effects.

Parents have numerous responsibilities in managing their lives and raising their children. Many of these are common to all families, including needs for childcare, elder care, and education; and help with parenting concerns, workplace and career issues, and finances (Drummet et al., 2003). The degree of success with which parents navigate these issues varies. Formal services in such areas as social work, health care, and economic assistance are often relied upon by families, and many military families rely on the same array of supports to help them meet the challenges of family life (Savitsky et al., 2009).

Many families use a variety of relatives as care providers (for instance, while a parent works). In some cases, relatives function as surrogate parents—for example, when there is an extended absence or death of a parent, or in cases where child welfare authorities have determined that parents are currently unfit to care for the child. Parents who rely on extended kin to care for children in their absence may face challenges and/or benefits associated with such arrangements. The influence on children of having grandparents or others who regularly provide a significant

amount of quasi-parental care has not been well studied.

Separation and deployment issues for military families.

For young children in military families, deployment can interfere with the opportunity to develop and maintain relationships with a parent during a critical developmental period (Paris et al., 2010). For a young child, separation issues are particularly important, because a typical separation episode accounts for a relatively larger proportion of his or her life.

If children are not prepared for, or are unable to cope with the deployment of a parent, there can be negative effects. In one cross-sectional study of children attending a childcare center on a Marine base, those ages three years and older, who had a deployed parent, had higher externalizing scores (“acting out” behaviors) on the Child Behaviors Checklist and Teacher Report Form (an indication of serious behavior problems), when compared to their peers without a deployed parent (Chartrand et al., 2008).

While separations and disruptions to routines are regular experiences of military family life, families with a deployed parent typically experience multiple stresses—ranging from anxieties associated with being in a dangerous locale, to the ordeal of frequent relocations, to the challenges of adjusting to the different phases of deployment, reunion, and injury or death. As one observer summarized, "military families are charged with the difficult task of balancing military demands with family

needs, a process that amplifies family stress when a service member is deployed to a dangerous area" (Savitsky et al., 2009, p. 329).

All of this happens in a context of heightened anxiety, of which even young children can be aware (Lester et al., 2010). For example, children may become sensitive to any mention of the separation, or to signs (such as wearing the uniform, or working late) that a family member may be leaving again. Because young children’s reasoning is not fully rational, they may not always make appropriate distinctions, and may also have worries about losing the civilian as well the military parent.

At the same time, children with parents who are able respond sensitively to their needs, whose parents have a strong couple relationships, and who have siblings who help give emotional support during predeployment, deployment, and reintegration are likely to do best. Conversely, when the at-home parent is not able to manage his or her own distress or mental health problems, children may not receive the kind of parenting they need to thrive (Paris et al., 2010).

The at-home parent has responsibility, not only to maintain the household, but to help children cope with the absence of the other parent and the threat of potential injury or death of that parent (Savitsky, et al., 2009). Repeated and lengthy deployments can be particularly problematic for children’s well-being, increasing the risk of attachment disturbances, depression, and anxiety responses (Paris et al., 2010).

The departure and return of a military member typically involves a series of events that occurs with varying amounts of notice but in a fairly predictable pattern (American Psychological Association [APA], 2007). The Deployment Cycle⁴ occurs in four distinct phases, including: (1) Pre-Deployment (from notification to departure), (2) Deployment⁵ (the period from departure to return), (3) Reunion (often termed “redeployment” by the military) and (4) Post- Deployment.

Children’s responses to extended deployment are very individualized, and depend on their stage of development (DeRanieri, Clements, Clark, Kuhn, & Manno, 2004; Murray & Kuntz, 2002; Pincus et al., n.d.). Their reactions are also closely linked to the at-home parent’s emotional state. Infants with a sad or depressed parent pick up on those feelings, and may “mirror” them, or become unresponsive, irritable, or even hyperactive. Infants of depressed caregivers are also at risk for apathy, refusal to eat, and weight loss.

Toddlers also take emotional cues from primary caregivers. They may cling to the actively caregiving parent and/or may withdraw from others or from normal activities. Other possible negative responses

include becoming sullen or tearful, throwing tantrums, or disturbed sleep (Murray & Kuntz, 2002).

Preschoolers’ reactions can be independent of their caregiver’s. They may become clingy or demonstrate regressive behaviors such as bedwetting, thumb sucking, and/or baby talk. They may also articulate their fears about their parents or others leaving (Pincus et al., n.d.). Preschoolers may feel that the separation is their fault and, therefore, experience guilt (Murray & Kuntz, 2002). One study of this literature concludes that preschoolers may be uniquely vulnerable, because they are old enough to be aware of the risks facing a deployed parent, but too young to understand the specifics (Paris et al., 2010).

Some Possible Responses of Young Children to Parental Deployment

Infants (0-1 years)

Listless or irritable mood; hyperactivity; apathy; refusing eating; weight loss

Toddlers (2-3 years)

Clingy and/or withdrawal behavior; sullen/sad mood; tantrums; sleep problems

Preschoolers (4-5 years)

Clingy behavior; regressive behaviors; voicing fears; feeling guilt

(Sources: Paris et al., 2010; Pincus et al., n.d.)

Others (Pincus et al., n.d.) have also described young children’s emotional reactions associated with each stage of the deployment cycle. During the first stage, or *pre-deployment*, as the adults struggle to adjust, children may develop doubts that parents will be able to care for them. Children may also exhibit poor coping behaviors (e.g., excessive crying or

⁴ This cycle was first proposed by Logan (1987) and subsequently refined by others (Pincus et al., 1999; Pincus et al., 2001).

⁵ Some authors (Pincus, n.d.; Fitzsimons & Krause-Parello, 2010) report a 5 stage cycle: (1) Pre-Deployment, (2) Deployment, (3) *Sustainment* (4) Reunion/Redeployment and (5) Post- Deployment. “Sustainment” refers to the second month of deployment through the month before redeployment/reunion.

tantrums) as the family prepares for the departure of one parent, and various parental responsibilities and routines begin to shift. During the initial *deployment* stage, children may express mixed emotions and may have a change in appetite. During *sustainment* (part of the deployment phase) children have highly individualized reactions. Infants may refuse to eat, or be listless. Toddlers may cry or tantrum unpredictably, or develop sleep disturbances. Preschoolers may have toileting accidents or seem irritable or sad. During *reunion/redeployment* children may have intense waves of emotion as they anticipate the family member's return. Finally, during the stage of *post-deployment*, reactions can vary and may include disobedience to the returning parent, or fear of the (unfamiliar) parent.

Several factors related to separation and deployment may compound difficulties for families and put them at greater risk for experiencing a crisis when the various stressors reach the point of "overload." The departure of the active-duty parent may require the remaining parent to quit or reduce their employment in order to assume childcare or other family responsibilities. This may in turn affect family income and induce additional stress as the family adjusts to these new circumstances (Angrist & Johnson, 2000). The isolation of National Guard and Reserve families in particular may exacerbate the burdens imposed on the at-home parent (Paris et al., 2010).

Adults in the midst of their own distress often struggle to respond supportively to a child who has already had an important person in their life sent off to war (Murray

& Kuntz, 2002). Honesty and reassurance at a level appropriate to children's understanding are essential when parents discuss separations, and associated war and violence, with their children. However, explanations the child receives about these situations are often not developmentally appropriate – parents may share too much or too little information, either of which can affect the child's ability to comprehend the seriousness or implications of the events (DeRanieri et al., 2004).

The health care system can be an important gateway for monitoring family and child well-being. Because of the importance of well-child visits and immunizations, families of young children are likely to regularly visit health care providers. As doctors and nurses interact with parents and their children, they can address concerns that have arisen and recommend appropriate supports and interventions. Pediatric care providers can serve as intermediaries to develop plans to help children and their families cope with separations. This includes advising parents with information about developmentally appropriate, comforting activities and routines they can engage in with their children, as well as assisting the parent who may be distressed.

Health care providers may be in a position to develop a familiarity with the family and their personal situation, including knowing whether they family live on or off base, where the child is enrolled in childcare or school, how far away their closest relatives are, and the availability of other support networks. This information can help professionals better understand and evaluate

a child's reactions to family stresses, and advise the family on how best to respond to their child's needs (Murray & Kuntz, 2002).

The evidence is mixed regarding the effects of deployment on children's routine health care. In one recent large study of health care visits of children younger than two (Eide, Gorman, & Hisle-Gorman, 2010), rates for all outpatient pediatric visits and for well-child visits were affected by deployment; however, the effects differed by family structure. Children of *married* parents had an increased number of well-child and outpatient visits during a parent's deployment, compared to visit patterns when the parent was not deployed. In contrast, for children of *single* parents in this study deployment was associated with *fewer* well-child and outpatient visits.

Such inconsistent findings prompt several possible explanations. Researchers proposed that deployment-related stressors could result in children's symptoms that prompt more frequent medical visits. Alternatively, the visits might be a reflection of the non-deployed parent's own stress, which lead him or her to become overly concerned about the child's health (Eide et al., 2010). Parents may also find social support in their contact with the child's pediatrician.

In the case of deployed single or dual-deployed parents, children may be cared for by an alternate caregiver, who may either be less likely to arrange these visits, or have less access to or information about the

military health care system (Eide, Gorman, & Hisle-Gorman, 2010).

In contrast to the findings regarding routine health care visits, visits related to children's emotional-behavioral health may be *more* frequent when a parent is deployed. In a second, larger study (Gorman, Eide, & Hisle-Gorman, 2010), researchers linked the medical and deployment records of three- to eight-year-old children and their parents (N=642,497 children, and 422,722 parents). They found that the number of outpatient visits for mental and behavioral health complaints *increased* by 11 percent when a parent was deployed, and identification of pediatric behavioral and stress disorders increased by 18 and 19 percent, respectively, compared to when a parent was home. However, the number of *all* health care visits *declined* by 11 percent during deployment. A reduction in the number of routine visits for well-child care could have negative effects for children.

There are other reports where findings raise related concerns. According to one of the studies cited above (Gorman et al., 2010), older children, children of deployed fathers, and children with married parents, had increased rates of visits for mental and behavioral health concerns during parent deployment, relative to the incidence of such visits while parents were home.

These findings merit the attention of non-military as well as military pediatricians, because the former provide almost two-thirds of outpatient care for the children of military parents (Gorman et al., 2010). As previously noted, pediatricians have a

unique role in being able to observe the well-being of young children, since health care visits are one of the few nearly-universal “touch points” between social services and children in this age group.

One sub-population of children deserves separate mention: children in families with single parents, or in families where both parents are active-duty. Concurrent with the social changes of the late twentieth century (including federal legislation) an increasing number of women are serving in active-duty or combat roles in the military, and the traditional primary caregiver role is no longer assumed to be the mother’s.

One study (from the 1990s) found that children who experienced maternal separation as a result of deployment were not more adversely affected than children who were separated by their father’s deployment (Bunch, Eastman, & Moore, 2007). The focus on the mother-child relationship may still result in an underestimation of the influence of father-absences on a child’s development (Applewhite & Mays, 1996). Child development research over the past few decades has firmly established that fathers play important, and unique, roles in the optimal development of young children (Day & Lamb, 2004).

When children come from dual-military families, and both parents are deployed, there is clearly an interruption in usual care, and children may need to stay with relatives (Drummet et al., 2003). This caretaking role is increasingly assumed by grandparents (Bunch et al., 2007). Bunch and colleagues found that grandparents caring for their

grandchildren while the parent was deployed reported high levels of stress and significant changes to their current social and intimate relationships; however, findings did not reach statistical significance, due to a small sample size. Effects on their grandchildren were not studied.

While families generally anticipate reunion following deployment as a joyful time, there may in fact be difficulties associated with this period. Especially in the case of first-time parents, the returning deployed parent may be challenged by adapting to a new developmental period in the child’s life (Paris et al., 2010). For some active-duty fathers, their deployment may coincide with the birth of their child, and the earliest months of their child’s life, an experience that will forever be lost to them, and which may contribute to their sense of loss.

Parents also may fear that their child will “reject” the returning parent, or be anxious around them (Blaisure & Man, 1992). In fact, young children can be confused by the reappearance of the formerly absent parent, although most adjust within a few weeks. However, in one study examining the experiences of children ages birth to five, nearly one-third of children remained distressed for an extended period of time (Barker & Berry, 2009). Children’s behaviors included not sleeping in their own bed, avoiding the returning parent, objecting to the recently returned parent’s leaving the house, refusing to accept the returning parent as a disciplinarian, and showing a preference for the more consistent caregiver.

Children may also be fearful, increasing the difficulty for the veteran parent in re-

establishing the relationship (Sayers et al., 2009). Of course, these difficulties are intensified if the returning parent has symptoms of mental distress. In a clinical sample, major depression among vets was associated with increased likelihood of feeling unsure of one's responsibilities in the home; post-traumatic stress disorder (PTSD) was associated with children acting afraid, or not acting warm toward the returned parent; marital discord were reported by more than half of partnered returning soldiers (Sayers et al., 2009).

When the deployed parent returns home with physical and mental injuries, children are also affected. A family member's injury or death often leads to the child's separation from the caregiver parent, as he or she deals with the aftermath. Such events may result in further family disruption, usually involving relocation (Cozza et al., 2005).

Although military families are frequently exposed to these stressors, only one study has specifically examined their impact on young children (Chartrand, Frank, White, & Shope, 2008). This cross-sectional study is described as the first rigorous evaluation to study the effects of deployment on the behaviors of very young children (aged one-and-a-half to five years). Participants included 169 families and their childcare providers, who completed checklists of troublesome child behaviors. In addition, the parents completed a stress measure and a depression screener.

Overall in this study, baseline levels of emotional problems in children with deployed parents were no higher than for children in civilian families. However,

when the analysis controlled for the responding parent's age, the number of children in the home, and the deployed service-member's rank (a proxy for socioeconomic status), children ages three years or older with a deployed parent showed greater evidence of externalizing behaviors (such as attention difficulties or aggression), compared to their peers without a deployed parent. Interestingly, children younger than three years exhibited *lower* externalizing and total problem scores. The authors speculate that this may be due to the fact that for 92 percent of the children the deployed parent was the father. During infancy and toddlerhood mothers are generally the primary caregivers. Thus, the father's absence may have had less effect in these early years, and may even have promoted an increased closeness between mother and child (Chartrand et al., 2008).

Some children in military families—especially those with a deployed parent—may experience behavioral and academic problems, stress, anxiety, and difficulties coping (Savitsky et al., 2009). Lester and colleagues' (2010) study showed increased levels of anxiety in school-age children of deployed families (relative to community norms). The duration of deployment was significantly related to depressive symptoms in the at-home parent; both duration and parental distress predicted child behavior problems (externalizing and internalizing). Child depression was predicted by the at-home parent's depression, but not by months of deployment (Lester et al., 2010).

Finally, a number of factors may mediate or moderate the effect of deployment on

children's well-being. In a survey of 57 families with a young child (less than four) and an active-duty family member, parents reported on children's behavior problems during separation, and their attachment behaviors at reunion (Barker & Berry, 2009). Three important findings emerged. First, the non-deployed parents who were struggling to cope with increased stress reported their children showed more behavior and attachment problems following deployment. Second, the child's difficulty adjusting to separation from a parent was related to the child's temperament and behavioral history. Specifically, children with less flexible dispositions, or with a history of behavior challenges, had a harder time coping, and their negative behaviors were exacerbated. Third, there was a relationship between frequent family relocation and increased child behavior problems.

There are clear implications here for policy and practice. First, interventions which can reduce stress for the non-deployed parent may reduce the number of difficult behavioral reactions of young children. Second, since temperament is not likely to change, families and professionals should plan carefully where these children are concerned, and seek additional support if problems escalate. Finally, military commands and families may want to avoid scheduling relocations near in time to deployment episodes, given that multiple stressors have cumulative negative effects (Barker & Berry, 2009).

Responding to military families' deployment-related needs.

While parental separation may be an expected and normative aspect of a child's development in a military family (Angrist & Johnson, 2000), much remains to be learned about its effect on children's psychosocial functioning. Indeed, the behavior of military children who experience parental separation, compared to that of children who have not been separated from one or more parents, has not been closely examined.

The military provides for families a rich array of social supports, both formal and informal. In fact, "in contrast to the civilian sector, the military, in the name of mission readiness, is highly involved in the personal lives of those who serve" (Savitsky et al., 2009, p. 329). Because young children "mirror" the feelings of their parents, parents need to have the resources to help their children, as well as themselves, cope effectively with the separation (Black, 1993). When unresolved, family concerns may have serious negative consequences, including a caregiver's inability to tend to children's needs.

There are some promising practices with anecdotal evidence of success. For example, mandating the preparation of separation plans prior to deployment can reduce families' confusion regarding various responsibilities, including childcare arrangements, financial planning, or legal arrangements concerning decision-making around the adult's or child's medical care (Drummet et al., 2003). Support groups that operate during all stages of deployment can help spouses and older children deal with

separations (Black, 1993; Drummet et al., 2003).

However, interventions designed specifically for young children are few. Programs that focus mainly on helping spouses cope, only indirectly support children's adjustment to the separation. For example, Fitzsimons and Krause-Parello (2010) call for the training of school nurse practitioners to be watchdogs for children who present concerns, so that prompt counseling and referrals can be provided. This recommendation could apply equally to childcare providers and support staff serving younger children.

Formal Programming. Three formal programs for families experiencing deployment were described in the reviewed literature. The Return and Reunion (R&R) program focuses on providing education to Navy personnel and their families. The goal of the R&R program is to provide ways to respond sensitively when a deployed parent returns home. It is led by team members who have extensive training in pre-deployment programs, as well as specific training in, and knowledge of resources (Navy Relief and Red Cross) available to families and Navy staff. The team members make presentations to on-board Navy staff, on topics such as reunion, intimacy with spouses, returning to children, and money management. The presentations focus on talking about feelings, typical reactions, and effective ways to work through any difficulties surrounding reunion with the family. Unfortunately, little research has been done on the effectiveness of this program (Blaisure & Arnold-Mann, 1992).

Operation READY is a multi-media curriculum that helps military families deal with deployment and other stressors associated with their military involvement. Operation READY presents modules on pre-deployment, post-deployment, the Family Assistance Center, and the Family Support Group. The pre-deployment module focuses on ways families and deployed parents can cope with separation, and addresses financial concerns the family may have. The post-deployment module is geared towards reunion of the family once the deployed parent returns. Deployed parents and their families are taught about typical reunion feelings and reactions, and how to work through those challenges. The last two modules are geared towards the Family Assistance Center and the Family Support Group. These teach families about resources that are available to them. Again, little research has been done on the evaluation of the program's effectiveness (Knox & Price, 1995).

The U.S. Navy New Parent Program offers parenting classes and home visits. The researchers surveyed active-duty members, spouses, DoD civilians, and retirees, from 27 Naval sites. Results suggested that parents were satisfied with the program and experienced improved parenting and coping skills, as well as improved feelings of community (Kelley, Schwerin, Farrar, & Lane, 2006).

Informal Interventions. In addition to these formal programs, there are other less formal ways military families use to cope with

stressors associated with pre- and post-deployment of a parent. The use of resources and social supports seems to positively influence family adaptation to military life. Community needs assessment data from 82 US Air Force bases were used in one study to examine how formal and informal social networks affected the adaptation of military families. When families felt a sense of community and were offered informal community supports, it positively influenced their family adaptation (Bowen, Mancini, Martin, Ware, & Nelson, 2003). Similarly, the availability of family, community, and army support resources is positively correlated with family adaptation skills (Bowen, Orthner, & Zimmerman, 1993).

In another study, the utilization of family services, and feeling a sense of community, were positively associated with “external adaptation” (absence of army-related problems, satisfaction with the army, daily coping, and obtainment of self-made goals), and with “internal adaptation” (absence of negative family issues, ability to adjust, frequency of reuniting with military parent, and quality and satisfaction of marriage), respectively (Pittman et al., 2004). Yet another study finds that when parents access military services, or community or family supports, they report fewer child emotional and behavioral problems (Flake, Davis, Johnson, & Middleton, 2009).

Recommendations for further study.

Because many potential effects for children are likely mediated by parents’ well-being, there is a need to study both the emotional

health of *non-deployed* caregivers and the stressors they experience, and to conduct further analyses on how the *active-duty* parent’s mental health (including serious conditions such as PTSD) may affect children and the family (Chandra et al., 2010). More generally, the high number of risk factors that military communities can experience concurrently, or in close succession—such as stress due to the nature of the work, frequent separations, geographic isolation, and families being separated from their usual social supports—warrants further study (APA, 2007).

Maintaining continuity in children’s use of health care services is a concern. Studies should explore further whether parental deployment leads to changes in use-patterns, and if so whether they reflect changes in need for medical care, the stress felt by the remaining caregiver, or other factors. Likewise, discrepancies in the use of medical care by children of single vs. married parents, and of younger vs. older parents, warrant attention.

With respect to children in the care of extended family members, research should examine how children are affected by living with grandparents, or other extended-family members, when their parents are deployed, and how the stressors experienced by these surrogate parents affect the well-being of the children in their temporary care. Such research should include children from diverse family structures, including those with single and married parents, those with one or two deployed parents, and those with older or younger parents.

Many researchers call for larger, longitudinal studies on a variety of topics, including:

- Whether the cumulative duration of parental deployment influences the severity of children's problems. Is there a critical time-threshold at which these start to diminish? (Chandra, et al., 2009);
- Can anticipatory guidance (information and advice to parents typically given in the context of a well-child visit) and

other clinical interventions promote family and child adjustment across phases of the deployment and reintegration cycle? (Chartrand et al., 2008); and

- Do effects of deployment on parent-child attachment during infancy and the preschool years persist into middle childhood, adolescence, or adulthood? (Gorman et al., 2010).

Issues Related to Residential Mobility

From a very young age, children recognize the environment with which they are familiar, and their home is where they feel the most comfortable and secure. Consequently, relocating to a new home can be an especially difficult experience for young children. Reactions vary depending on the child's age, ranging from excitement to apathy to resentment (Drummet et al., 2003). Children may act out or rebel during the moving process, because they feel they have no control over the situation. Younger children in particular may not understand what is going on. In addition, parents are usually more stressed during the moving process, and children may reflect these negative emotions in their own behavior. Other factors related to children's ability to adjust to relocation are the frequency of moves, and the distance involved, with negative effects more likely under circumstances of more frequent moving, and long-distance moves (Finkel, Kelley, & Ashby, 2003).

Certainly, moving need not always have damaging effects on a child's development. While some children may experience a stressful adjustment period starting before a move and continuing for some time after the move is completed, few children experience negative long-term effects of relocation (Cornille, cited in Drummet et al., 2003). Some children perceive a move as a positive adventure that the family shares together. Moving can also provide new opportunities for stimulation, learning to adjust, and

making new friends (Marchant & Medway, cited in Drummet et al., 2009).

Mobility issues for military families.

Although most children experience moving at least once during childhood, military families typically move every two to three years (Finkel et al., 2003). Reviews have examined the commonly-held view that, as a result of relocation, children may experience high levels of emotional/behavioral problems—a.k.a. “military family syndrome.” In fact, difficulties associated with relocation are probably time-limited, and research does not support the existence of such a syndrome. In general, it finds that, compared to children in other families that relocate, military children are *less* negatively affected, because of the structured military environment, which includes features such as job security, a school curriculum standard across military-base schools, and similar base-housing across locations (Jensen et al., and Marchant & Medway, cited in Drummet et al., 2009). However, coupled with other military-service-related stressors, the stress of relocation may still burden military families disproportionately because of the number of times they are required to move (Black, 1993).

Responding to military families' mobility-related needs.

Moving unquestionably disrupts young children's routines and social connections. Therefore, adults responsible for the care of children should be prepared for them to be emotionally vulnerable and to require

additional adult supports, including time and attention during and immediately following the move. In the case of school-age children of military families, positive mother-child relationships can serve as a buffer against negative effects associated with the disruption of relocation (Finkel et al., 2003). Similar findings may be expected in the case of younger children. Nevertheless, it is likely that there are at least some negative effects of mobility on infants, toddlers, and preschoolers, and they will require age-appropriate supports and transition planning

Although military programs currently provide some relocation services, areas remain for which families need more information and assistance in finding solutions. One report suggests that "if assistance is provided, then parents can maintain a more positive attitude about the move, avoid over dependence, and maintain appropriate child-parent boundaries, which, in turn, may positively influence the post-relocation adjustment of the children" (Humke & Schager, cited in Black, 2003, p. 285).

Recommendations for further study.

Research on the specific effects of mobility on very young children in military families is virtually non-existent. A great deal more documentation is available about implications and interventions for school-age children (e.g., Finkel et al., 2003; Lyle, 2006; Simpson & Fowler, 1994).

One particular issue that has prompted a call for more information is the benefits or harms that may be associated with relocation

following the death of a military family member (Cozza et al., 2005). When a service member dies, many formal supports and benefits (for example, free or subsidized military housing, access to the commissary, provision of comprehensive health care, etc.) are either lost or become less accessible, with effects on the family that are unknown. Although we can assume that losing these benefits would have negative effects (both direct and indirect) on all family members, including the youngest children, additional research is needed to document such results.

Future research should also examine whether children's social-emotional adjustment following a move varies across different types of military families, such as dual-career couples, single-parent families, and active-duty mothers. According to one study, increased mobility did not affect school-age children negatively, if they were living with both biological parents (Tucker, Marx, & Long, cited in Finkel et al., 2003). Examination of any such effects for children of different ages would expand our knowledge of this issue.

In addition, longitudinal research is needed, following families from when the military member receives new orders and throughout the relocation process (Finkel et al., 2003).

Whether military families and children develop greater "resilience" with respect to the routine of the relocation process has not been examined. Parents' attitudes and their own ability to adjust during the moving process influence parent-child interactions. Understanding this dynamic may help explain how relocation can be a risk factor

for some military families, and not for others
(Palmer, 2008).

Issues Related to Trauma and Loss

Children may experience trauma directly, such as in the case of child maltreatment, or (more commonly) indirectly, for instance by living with a parent who has experienced trauma. Much of how well or poorly a child responds to directly or indirectly experienced trauma depends on the consistency and nurturance of the care provided by at least one parent (Paris et al., 2010).

Children who experience *frequent* traumatic events are especially at risk for negative behavioral and physical outcomes (National Scientific Council on the Developing Child, 2007). In terms of neurological chemistry, experiencing traumatic or highly stressful situations is related to high blood-levels of cortisol (Bevans, Cerbone, & Overstreet, 2008), frequent exposure to which can have negative effects (e.g., osteoporosis, obesity, and diabetes) on the physical health of children (Arnaldi et al., 2003).

A recent report (Zero to Six Collaborative Group, National Child Traumatic Stress Network, 2010) summarized the effects that traumatic stress has on young children. Even though children may not be able to articulate their feelings associated with losing a parent, or with having a deployed parent return with mental health problems, they may still be experiencing the negative effects related to trauma. Children interpret stress differently; thus, their needs should be met on an individual basis.

The form of childhood trauma most studied is death of a family member. Understanding death is especially difficult for young children. Piaget (1960) provides a useful framework for appreciating some important developmental features of children's understanding. Infants (birth to 2 years) are in the sensori-motor stage, when they do little conscious weighing of information. During this stage, children *respond* to the absence of a parent without fully *comprehending* the notion of death. Caregivers of children in this age group need to maintain routines, acknowledge the feelings of the child, and provide reassurance and comfort (Pearson, 2005). Children two to six years old are within Piaget's pre-operational stage. Children in this group are "magical" thinkers, and "egocentric"—that is, unlikely to appreciate perspectives other than their own. They may believe they are responsible for the death of their parent; they also do not understand the permanence of death and may think it is reversible. During this stage of development, families need to maintain routines, provide various outlets for children to express themselves and their feelings (e.g., art, music, and dramatic play), and offer continuing verbal and physical comfort (Pearson, 2005).

Another useful developmental framework for thinking about young children's understanding of death is provided by Erikson (1950). During infancy, issues of *trust vs. mistrust* are paramount, as children learn to trust (or not trust) the people and physical features of their environment. Primary issues of the next stage are

autonomy vs. shame and doubt. During this time, toddlers are learning how to master their environment. Preschoolers characteristically experience tensions between *initiative* and *guilt*. Family relationships are critical during this time, because preschoolers are beginning to learn more about their own capabilities for independent activity (Fitzsimmons & Krause-Parello, 2009). During these stages of development, parents and caregivers can provide their children reassurance and support.

Pearson (2005) recommends specific practices parents and other adults should use when talking to children about death. For example, families are encouraged to use the “D” words (death, dead, and dying) when talking about death. Because children in the sensori-motor and preoperational stages are concrete thinkers, using euphemisms, such as “gone away,” “passed away,” and “gone to sleep,” can confuse them.

When answering children’s questions, caregivers should respond in age-appropriate and concrete language. For example, if a parent dies in the hospital, and the child asks “why,” the other parent can respond by saying “We go to the hospital when we are sick, and the doctors give us medicine to feel better. Daddy was really sick. The doctors gave him medicine but the medicine didn’t help him get better.” This explanation is brief, concrete, and demonstrates to the child that going to the hospital doesn’t always mean death will follow.

Trauma and loss issues for military families.

Young children in military families are at risk for increased levels of behavior problems, because their family experience may include separation, strained parental functioning, parents’ mental distress, and trauma. These circumstances can contribute to child maltreatment, intimate partner violence, reduced family cohesion, parents’ diminished effective coping, and parenting that is controlling or overprotective, disengaged, or overly enmeshed with the child (Paris et al., 2010; Lester et al., 2010).

For a very young child, separation from a service-member parent can be a source of trauma in itself, unless the child receives the support of a sensitive caregiver. In the case of more serious disruptions to family functioning, involving distress to parents, the child, or both, families need to have access to evidence-informed behavioral health services. Regrettably, the level of need for mental health treatment among returning service members has overwhelmed the capacity of the U.S. mental health care system (civilian as well as military). Access to such services for children in military families is even poorer (Savitsky et al., 2009).

The literature suggests most negative effects of deployment on families are associated with war trauma and associated psychiatric symptoms (Sayers, Farrow, Ross, & Oslin, 2009). Rates of mental health problems among soldiers recently returning from

deployment in Iraq and Afghanistan are widely reported as high. Estimates are that about 18 percent of these have acute stress, depression, or anxiety (Paris et al., 2010). Among a cohort of veterans of the Iraq conflict served in Veterans Administration hospitals, more than one in four received a mental health diagnosis; the most frequent of these was PTSD (Savitsky et al., 2009). Among the symptoms associated with PTSD are “avoidance” and “numbing,” both of which can interfere with parenting. These effects may include a parent’s diminished ability to initiate or sustain activities that foster a healthy child-parent connection.

Alternatively, symptoms of hyper-arousal and hyper-vigilance, also associated with PTSD, can lead to reactions to children’s behavior that are not in line with the actual intensity or content of the child’s behavior. Other responses to war-zone trauma may not rise to the severity of PTSD, but nevertheless impair the parent-child relationship upon return (Paris et al., 2010).

Traumatic brain injury (TBI) has been called “the signature injury” of the current wars, found in more than one in four of those medically evacuated from combat (Savitsky et al., 2009). Symptoms of TBI can include aggression, irritability, emotional instability, and “frequently contribute to family turmoil” (Savitsky et al., 2009, p. 332).

The stresses on the at-home parent during the deployed parent’s absence, including increased household and parenting responsibilities, anxiety about the absent parent, and social isolation, can contribute to an elevated risk of child maltreatment. According to one study (Gibbs, Martin,

Kupper, & Johnson, 2007), when spouses were deployed rates of substantiated child abuse and neglect more than tripled; nearly half of these incidents involved children under five years of age. Gibbs and colleagues cite two earlier studies which also found elevated child abuse rates among families with a deployed parent (Gibbs et al., 2007).

According to a high-level review, mental and behavioral health services in particular are under-provided for military families (APA, 2007). Variability in the provision, coherence, and quality of such programs is attributed to differences in the number of mental health professionals assigned to military units, and to inconsistencies in command support for such programs. Overall, very few high-quality mental health programs exist, and the ones that do lack evidence of their effectiveness (APA, 2007). Moreover, when available, these programs are underutilized. This may be because families vary in their familiarity with the array of military support programs; because parents are unprepared to contend with the increased physical and emotional demands of their children; or because parents may not effectively use the supports and resources available to them (APA, 2007).

Soldier-parents returning home may also be at risk for interpersonal violence, including intimate partner violence, as well as child maltreatment. War-zone deployment intentionally cultivates a “battlemind” set of coping and survival skills that includes directed aggression. Upon returning home, soldiers may not be able quickly to shed, or at least moderate, these responses, which

can be exacerbated if accompanied by PTSD (Savitsky et al., 2009). The possible results may be reflected in the number of reports of spousal abuse—approximately 16,000—made annually to the DoD Family Advocacy Program (Savitsky et al., 2009).

Responding to military families' needs around trauma and loss.

Because military families have an increased risk of exposure to trauma, they can particularly benefit from programs that teach ways to cope with the stressors associated with deployment, separation, and loss. Such strategies would appear to offer multiple positive outcomes, since when families feel able to cope with a deployment, they report being able to meet the family-related demands associated with being in the army (Pittman, Kerpelman, & McFayden, 2004).

One reason mental health services may not reach all the young children in military families who need them is that they are insufficiently tailored to their special circumstances. Paris and colleagues (2010) point out that traditional mental health treatment models often rely upon an individual's ability to talk about his or her concerns (which very young children, of course, are not able to do), or they were developed to serve children who have experienced direct trauma. To better meet the needs of military families, interventions should be adapted to serve young children who have been affected by separation and deployment. Paris and colleagues (2010) summarize selected treatment models that are appropriate for use with very young

children who have experienced disrupted attachments, parental trauma symptoms, or both during reintegration.

The programs have a family-systems orientation, and work both separately with individuals, and with children and parents together. These models⁶ have been shown to reduce parents' emotional distress and to improve parent-child interactions, and they could serve as models to support children's adjustment during times of deployment and combat-related stress.

Paris and colleagues offer three arguments for providing such programs in the child's home. First, because home visiting is a service strategy rather than a specific intervention, many treatment models originally designed for a clinical setting can be adapted to the home setting. Second, there is ample evidence of the success of home-visiting models in military settings (e.g., Family Advocacy Program, New Parent Support Program⁷), which have been credited with reducing the incidence of reported child maltreatment in military

⁶ As cited by Paris et al., the selected, intensive interventions focusing on babies and toddlers include: Interaction Guidance by McDonough, 2004; Minding the Baby by Slade et al., 2005; and Child-Parent Psychotherapy by Lieberman & Van Horn, 2005. Interventions focusing on preschoolers include: Trauma Focused Cognitive Behavior Therapy by Cohen & Mannarino, 1993; and Parent-Child Interaction Therapy by Eyberg & Matarazzo, 1980.

⁷ For more information on the Family Advocacy Program see: http://www.militaryhomefront.dod.mil/portal/page/portal/MHF/MHF_HOME_1?section_id=20.80.500.188.0.0.0.0.0; for more information on the New Parent Support Program, see: http://www.militaryhomefront.dod.mil/portal/page/portal/MHF/MHF_HOME_1?section_id=20.40.500.420.0.0.0.0.0

populations, and with improving quality of life and self-reported parenting skills. Third, home visits allow for more privacy, thus reducing the stigma associated with such services. Further, in the context of home visits, professionals look out for previously unidentified or emerging concerns, and provide appropriate and timely supports (Paris et al., 2010).

Paris and colleagues describe three interventions that could be readily applied to home-based work with military families post-deployment. They are relationship-based, and are thus appropriate for addressing problems associated with disrupted attachments, parental trauma, or both during reintegration. However, most were designed for older (school-aged) children, and for situations where the child was directly exposed to trauma.

For preschool-aged children who have experienced trauma, two cognitive-behavioral programs show promise of effectiveness for children of military families: Trauma-Focused Cognitive Behavior Therapy (which teaches children strategies such as reframing and relaxation), and Parent-Child Interaction Therapy, which focuses on the parent-child relationship, promoting positive behavior, consistency, and routines for behavior management (Paris et al., 2010).

Recommendations for further study.

As noted earlier, there is little research that specifically examines the reactions of children ages five years and younger who experience trauma and loss as a result of

being in a military family. Most of the literature to date covers childhood trauma (e.g., child abuse, maltreatment, and witnessing violence) and loss (death of a parent) that can be experienced by children regardless of military status. It is an empirical question whether the reactions to trauma of children in military families differ from those in non-military families.

Additional research should focus on:

- How the effects of trauma on children are mediated by how one or both parents respond to the events;
- Whether pervasive media portrayals of actual and simulated violence and death may uniquely affect young children with a deployed parent; and
- Development, implementation, and evaluation of programs that focus on responding to trauma, including loss of a parent, and exposure to family violence, among young children of military families.

In addition to more research on trauma affecting military children, there is a need for more trained mental health professionals in early education settings. These advocates can help with identifying children who are having difficulties (Sogomonyan & Cooper, 2010).

Conclusion and Overall Recommendations

A number of prestigious economists (Dickens, Sawhill, & Tebbs, 2006; Heckman, 2009; Rand Corporation, 2008), developmental scientists (Shonkoff & Phillips, 2000), business executives (Committee for Economic Development, 2006), and military leaders (Shalikashvili, 2011) have recently joined a chorus of early childhood professionals in calling for substantially increasing our nation's investment in its youngest children. In hard, dollars-and-cents terms, the social return on investments made in health and early care and education for this age group exceeds not only standard returns on stock market equity, but returns calculated to follow from investments in K-12 schooling, or job training. This economic argument is based on yields in later academic achievement, lowered teen pregnancy, delinquency, and crime rates, and greater labor market success (Dickens, Sawhill, & Tebbs, 2006; Heckman, 2009; Rand Corporation, 2008). Of course, human capital investment in these earliest years has incalculable benefits in terms of quality of life, particularly for those children in the most disadvantaged families.

Nevertheless, public investments in the preschool years trail far behind those for school-age children, resulting in a "portfolio" that is seriously unbalanced. A recent analysis shows that, on average, about \$9,500 in federal and state funding goes to children ages six to 18, compared with \$2,400 for children three to six, and only

\$600 for infants and toddlers (Bruner, 2010). For the reasons we have identified, these youngest children deserve better; and children in military families have needs, and potential threats to healthy development, that extend beyond those of typical children.

There is great promise within the military system, which can leverage its generally high levels of discipline, dedication, organization, communications and data systems, access to technology, and other resources to accomplish its goals. The early care and education system created by DoD has been held up as a model for the counterpart civilian "system," which is little more than a patchwork of poorly coordinated services, inadequately funded (largely through private funds), and of widely varying quality. While there is still room for improvement, the example of the DoD child development centers illustrates the potential within the military system for "getting the job done."

There are several ways, beyond those already addressed in our recommendations above, where we think the military could take steps to improve knowledge about its youngest dependents. Often, having better information is necessary before moving forward with new practices and programs.

We recommend a strategic plan to collect systematic, comprehensive, ongoing data on the well-being of young children and their families in the military. A periodic household-level survey would include information (provided by parental report) on children's health, educational, and

emotional/behavioral status, as well as the health care and childcare services children access. It would include information from parents on their perception of the quality of these services, and the barriers to access they have experienced. Areas of additional focus would be the family's experience with residential moves, with parental deployment, with the use of "surrogate" parents (grandparents, for example), and with service-related death, injury, or disability of a parent.

There are several national surveys that could provide a model for this effort, including the upcoming National Survey of Early Care and Education (Administration for Children & Families, 2010). The latter could provide national benchmarks against which to compare responses from a sample of military families. Child Trends staff are co-principal investigators on this project.

Child Trends has extensive, and respected, experience designing, conducting, and analyzing data from surveys, both national and local. Child Trends staff develop and test survey items (including Spanish-language versions), field-test surveys, solicit participant feedback through focus groups, and analyze results, drawing on a deep knowledge-base in child development research, psychometrics, and data-analytic techniques.

In the area of programs to address the particular needs of young children in military families, we recommend the military adopt, throughout the deployment cycle, evidence-based approaches that

include interventions that address attachment relationships, deployment separations, and parental combat-related stress, substance abuse, and injury or disability, incorporating a sensitivity to military culture, and drawing on a number of coordinated community supports.

A few family-related topics were not addressed in the literature we reviewed, but are ones we believe warrant further investigation, perhaps through the household survey. One is the status of adoption, and adopted children. We are aware of no data on the numbers of military families that include adopted children, or who are interested in adoption. We suspect that there may be special barriers that are faced by military families wanting to adopt, related to conflicting state jurisdictions, re-locations, and other special circumstances of military life. The same issues likely affect families interested in providing care to foster children; again, as far as we can determine, data are lacking on this issue.

Another area of natural concern is young children who have special needs. This is a group that often poses multiple, complex challenges (medical, emotional, and educational) for families. A reported 220,000 service members have a special-needs dependent (of any age), but only a minority of these are enrolled in the primary program the military has to serve this population (Brown, 2009). We have no information on how many of these children are of preschool age. Particularly as military parents face the transition of their special-needs child to the public school system where they reside, they may need extra

assistance understanding the services for which they are entitled. The 2010 Defense Authorization Act, signed in October of 2010, calls for a new DoD office to support families with special needs. There will be a continuing need to monitor the well-being of this group of children.

Finally, we recommend, in addition to more data on military children, data that are more useful to researchers and policymakers. One of the desirable characteristics of data systems designed to monitor well-being is the capability to link information, across data systems, and across time. Ideally, for example, data about young children's early childhood care, health, and education would be tied to the data in the K-12 education system. Having longitudinal, child-level data permits examination of a much broader range of research questions covering the trajectories of children than point-in-time "snapshots" of information provide.

The "home front" has always been recognized as critical to the success of the military mission. The youngest children of military families, however, lack a voice. Thus, we run a risk that their needs will be overlooked, unless we speak for them. Because they will be the citizens—and soldiers—of the next generation, we would do well to see that they have the opportunities for optimal development during a critical period of life.

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Appendix: Documents Included in the Review

Authors and Publication Date	Sample	Sample Characteristics	Type of Document
Angrist & Johnson, 2000	59, 930 military respondents	Dependents of military personnel ages 1 to 22 years	Original study
Applewhite & Mays, 1996	110 children from military families	Ages 4 to 18 years	Original study
Barker & Berry, 2009	57 military families	Respondent had at least one young child (ages 0 to 47 months) and a deployed active-duty spouse	Original study
Bevans et al., 2008	68 children (military status not specified)	Ages 7.6 to 13.8 years	Original study
Black, 1993	NA	NA	Literature review
Blaisure & Arnold-Mann, 1992	NA	Not specified	Program description
Bowen et al., 2003	82 US Air Force bases; 58,732 individuals (35,732 active-duty)	The majority of the sample were male, in active duty, married, and had at least one child in the home	Original study
Bowen et al., 1993	238 military parents	50% with children ages 0 to 5 years	Original study
Bunch et al., 2007	23 grandparents of military families	Caregivers of their grandchild(ren) as a consequence of their child's military deployment; grandparents ranged in age from 54 to 66 years	Original study
Campbell et al., 2000	NA	Early childhood care	Report/brief
Chandra et al., 2010	1,507 parents and youth from military families	Ages 11 to 17 years	Original study
Chartrand et al., 2008	169 military families	Ages 1.5 to 5 years	Original study
Cozza et al., 2005	NA	Not specified	Literature review
DeRanieri et al., 2004	NA	All ages	Report/brief
Drummet et al., 2003	NA	Not specified	Literature review
Eide et al., 2010	169,986 children from military families	Ages less than 2 years	Original study

Authors and Publication Date	Sample	Sample Characteristics	Type of Document
Finkel et al., 2003	86 mother-child dyads from military families	School-aged	Original study
Fitzsimons & Krause-Parello, 2009	NA	NA	Literature review
Flake et al., 2009	101 military families	With children ages 5 to 12 years	Original study
Gates et al., 2006	1,137 military families	With children ages 0 to 12 years	Original study
Gibbs et al., 2007	1,858 parents in 1,771 military families	Families with an enlisted Army soldier who was deployed at least once between September 2001 and December 2004	Original Study
Gorman et al., 2010	642,397 children from military families, and 442,722 military parents	Ages 3 to 8 years	Original study
Jensen et al., 1996	383 children from military families	Ages 4 to 17 years	Original study
Kelley et al., 2006	27 Naval sites, 821 individuals (active duty members, spouses, DoD civilians, retirees) surveyed	Not specified	Original study
Knox & Price, 1995	NA	Not specified	Program description
Lakhani & Ardison, 1991	NA	NA	Original study
Lester et al., 2010	272 children from military families; 163 at-home civilian parents; 65 parents that returned from active duty	Ages 6 to 12 years	Original study
Lucas, 2001	NA	NA	Program description
Lyle, 2006	120 active-duty soldiers; 5 officers	With children ages 6 to 19 years old	Original study
McFarlane, 2009	NA	NA	Literature Review
Murray & Kuntz, 2002	NA	NA	Other
Myers-Walls et al., 1993	71 civilian and military parents	With children ages 3 to 13 years	Original study

Authors and Publication Date	Sample	Sample Characteristics	Type of Document
Palmer, 2008	NA	NA	Literature review
Paris et al., 2010	NA	Limited to studies involving children ages 0 to 5 years	Literature review
Pincus et al., n.d.	NA	NA	Other
Pittman et al., 2004	1,064 military families	Not specified	Original study
Pomper et al., 2004	NA	NA	Report/brief
Savitsky et al., 2009	NA	NA	Literature Review
Simpson & Fowler, 1994	10,362 children (family military status not specified)	School-aged	Original study
Sogomonyan & Cooper, 2010	NA	NA	Report/brief
Zellman & Johansen, 1995	Interviews with military parents from 16 military installations	Families with young children	Original study
Zero to Six Collaborative Group, National Child Traumatic Stress Network, 2010	NA	Ages 0 to 6 years old	Report/brief

Note: NA: Information not available.