The impact of familial and contextual factors on the emotional health of children, ages 0-3:
A study of military families

A DISSERTATION

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The impact of familial and contextual factors on the emotional health of children, ages 0-3:
A study of military families

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Over the past 13 years, the U.S. has been engaged in “the long war,” a battle that has been chronicled by many, but fought by few. The burden of carrying the long war, marked by repeated and extended deployment, has taken its toll on service members and their families. Many psychologically injured service members are parents returning home to their families, tasked with rebuilding relationships with children who have grown physically and developmentally. Indeed, over 42% of children of active duty parents are between the ages of 0 to 5. Young children are particularly vulnerable to environmental stress and impaired parental capacity. Nonetheless, research focusing on the experiences of young children affected by their parents’ deployment experiences is limited.

The study utilized secondary analysis of data derived from the first wave of the 2010 longitudinal Military Family Life Project (MFLP), conducted by the Human Resources Strategic Assessment Program (HSRAP), Defense Manpower Data Center (DMDC). Bivariate and multiple regression analysis were used to examine the interplay of risk and protective factors influencing the emotional health of young children, ages 0-3, affected by post-deployment
circumstances. Several psychosocial variables emerged as predictors of young children’s emotional health in the context of reintegration, including the civilian parent’s (CP’s) perception that the public supports the war, CP stress, couple readjustment, community support, military satisfaction, imminent deployment, perception that deployed service members are making a difference, family support, military parent (MP) distress, and marital satisfaction. The findings suggest that both interdisciplinary professionals and policy makers should consider the needs of both the parent and child in fostering resilience across the family unit. Furthermore, professionals and policy makers are urged to strengthen family and community resources, as well as programs and services across systems, on behalf of families and their young children. These mechanisms of support can be leveraged to reduce parental stress, foster optimal couple readjustment, and promote positive family schemas that, in turn, contribute to the emotional health of the military’s youngest family members.
This dissertation by Dorinda Williams fulfills the dissertation requirement for the doctoral degree in social work approved by Joseph J. Shields, Ph.D., as Director, and by Susanne Bennett, Ph.D., and Sherry Heller, Ph.D., as Readers.

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To my dear friends and colleagues who have supported me, listened to me, cried with me, laughed with me, and just plain put up with me…a huge thank you!!! Each and every one of you has played a huge role in keeping me going and I feel truly blessed.
Chapter 1: Introduction

Over the past 13 years, the U.S. has been engaged in “the long war,” a battle that has been chronicled by many, but fought by few. The nation has relied on an all-voluntary force, comprised of service members who continue to bear the full weight of their nation’s battles (Kitfield, 2011). These men and women have endured months, even years, away from home—exposed to both the physical and emotional perils of separation and war. The burden of carrying the long war, marked by repeated and extended deployment, has taken its toll on service members and their families (Flake, Davis, Johnson, & Middleton., 2009; Sheppard, Malatras, & Israel, 2010).

The psychological health of Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) veteran parents has specifically been identified as a growing concern within the military community (Cozza, Chun, & Polo, 2005; Lester et al., 2010; McFarlane, 2009; Tilghman, 2011; Tinney & West, 2011). The data from multiple studies suggest that many OEF/OIF veterans have returned home with physical injuries, as well as psychological and behavioral health issues, including depression, traumatic stress responses, and substance abuse (Dedert et al., 2009; Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Jakupcak et al., 2007; Schell & Marshall, 2008). According to a 2008 RAND study by Schell and Marshall, in which the authors randomly surveyed a large sample of previously deployed Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF) personnel (n = 1,965), 14% met the screening criteria for probable post-traumatic stress disorder (PTSD). In addition, 14% met the criteria for probable major depression (MDD). The findings reflect a strong co-occurrence of disorders, with approximately two-thirds of those meeting criteria for PTSD also exhibiting major...
depression. Another study suggests a depression rate of 16.6% in service members who were screened one-year post-deployment (Hoge et al., 2007). Although the reported numbers vary, estimated rates of PTSD and depression appear higher in combat deployed U.S. service members than in the general U.S. population (Compton, Conway, Stinson, & Grant, 2006; U.S. Department of Veterans Affairs, 2007). Increased rates in suicide underscore the psychological distress that service members endure; suicide in the Army has doubled since 2003 and now exceeds civilian rate when matched by age, sex, and race (Insel, 2013).

According to recent data, almost 44% of Department of Defense (DoD) military personnel are parents. A substantial number of the children of active duty parents are very young, with over 350,000 children of Active Duty members between the ages of 0–3 (The Office of the Deputy Under Secretary of Defense, 2012). Over 42% of children of active duty parents are between the ages of 0 to 5, representing the largest percentage of minor dependents. Over 29% of children of Selected Reserve parents are also between the ages of 0 to 5. Over the course of the past 13 years, the families of these young children have navigated the unique circumstances of war-time service, with parent-child relational repair and relationship building set against a backdrop of separation(s), stress, and injury (Cozza & Lieberman, 2007; Gorman, Fitzgerald, & Fitzgerald, 2010; Lieberman & Van Horn, 2013).

**Problem Statement**

**Early Experiences**

Given their rapid developmental growth and complete reliance on the important adults in their lives, young children are particularly vulnerable to environmental stress and impaired
parental capacity (Bowlby, 1988; Cicchetti, Rogosch, & Toth, 2000; Forman et al., 2007). For parents who are coping with feelings of severe or chronic distress, the capacity to be fully responsive and attuned to their young children may be compromised (Lyons-Ruth & Block, 1996; Schechter et al., 2004; Schwerdtfeger & Goff, 2007). Parental depression has been associated with actual or parental perceptions of challenging child behaviors (Forman et al., 2007; Green, Stanley, & Peters, 2007), lower child cognitive functioning (Cicchetti, Rogosch, & Toth, 2000), difficult child temperament (Eiden, Edwards, & Leonard, 2002; Forman et al., 2007), poorer child emotional regulation development (Maughan, Cicchetti, Toth, & Rogosch, 2007), lower child self-perceptions of competence (Maughan et al., 2007), greater adolescent depressive symptomatology (Duggal, Carlson, Sroufe, & Egeland, 2001), and poorer parent-child attachment (Eiden et al., 2002; Toth, Rogosch, Sturge-Apple, & Cicchetti, 2009). In addition, a mother’s history of interpersonal trauma has been associated with problematic interactions in the mother’s current relationship with her child (Lieberman & Van Horn, 2008; Lyons-Ruth & Block, 1996; Schwerdtfeger & Goff, 2007).

These early relational perturbations can have lasting effects for the developing child, as well as the larger community in which he/she lives and participates. Early relational experiences inform lifelong patterns of interaction (Bowlby, 1988) that can promote, or impede, the quality of one’s relationships and contributions to the larger society. Adverse childhood experiences, such as household dysfunction, relational trauma, or child emotional distress, have been associated with increased psychological (Felitti et al., 1998; Kim, Ford, Howard, & Bradford, 2010; Mirsch, Kalyoncu, Pektas, Tan, & Beyazyurek, 2004; Pitzer, Jennen-Steinmetz, Esser,
Schmidt, & Laucht, 2011; Rayburn et al., 2005), as well as physical health difficulties (Dong et al., 2004; Felitti et al., 1998), which can play out across the lifespan (Felitti et al., 1998; Larkin, Beckos, & Shields, 2012; Mirsal et al., 2004). In this respect, parental psychological distress can influence long-term child wellness in ways that affect, not only the child’s immediate family, but also society as a whole.

**Limited Research**

Nonetheless, there is limited literature focused on the youngest child in military families, with even less research specifically investigating the effects of military contextual stressors on infant/toddler relational outcomes (Clever & Segal, 2013; Lieberman & Van Horn, 2013). With so many active duty and Guard and Reserve parents of young children having experienced multiple and extended combat deployments, there is a sense of exigency in examining the effects of parental emotional health compromised by these extraordinary circumstances, as well as in identifying protective familial factors that might mitigate these effects. In addition, safeguarding the health and well-being of children of military families has implications for societal, as well as individual resilience. The literature suggests a relationship between having a parent who has served and the likelihood of joining the military in the future (Kelty, Kleykamp, & Segal, 2010; Kleycamp, 2006). This intergenerational legacy of military service further underscores the importance of understanding and promoting the emotional health and well-being of young children of military families—not only for the sake of the individual family, but as a long-term investment in our nation’s future.
Interest in the Problem

The current study represents a confluence of personal and professional experiences, across levels of service and areas of interest, which have brought me to this point in my career. As both a military spouse and a social worker who has devoted her career to military families, I have experienced, first hand, the stressors and sacrifices that can accompany military service. I have also observed, and been deeply humbled by, the strengths and resources that military families bring to their everyday situations and, at times, extraordinary events. Having begun my professional career almost 20 years ago on a military installation, I have been impressed by the comprehensive array of family oriented programs and services that have continued to grow and keep pace with the demands of wartime service. I hope that these programs and other mechanisms of support—cultural safeguards during periods of high operational tempo—will be maintained long after our service members return home from the long war.

My direct service experiences as a social worker in the military’s Family Advocacy Program, as well as a home visitor in the New Parent Support Program, directly informed my interests in relational trauma and infant mental health. Recognizing how parents’ experiences of family violence or relational trauma influenced their interactions with their children, I grew increasingly aware of the risk factors associated with early parenting. At the same time, I grew mindful of the power of protective and restorative factors. If parental trauma could compromise parent-child interactions, then providing family support as an opportunity to strengthen burgeoning parent-child relationships could foster intergenerational resilience.
After almost 10 years at a national, non-profit organization and, more specifically, as the Director of its Military Family Projects division, my interest in identifying and responding to the needs of infants and toddlers of military families has continued on a macro level. Indeed, my focus has both deepened and widened, to include the unique considerations of parental trauma in the context of deployment-related injury and loss. I am grateful for the relative surge in military families research, which has helped to guide and shape our work. Nonetheless, I have been frustrated by the limited number of studies focusing specifically on the youngest children of military families. The needs of the youngest children are unique; extrapolation can only take us so far. In order to be fully responsive, we must fully understand, or at least begin to understand, the unique experiences and perceptions of new parents and their very young children, as well as the direct and indirect pathways to promoting resilience in the face of adverse circumstances. I am extremely grateful to the Defense Manpower Data Center (DMDC) for conducting a large-scale study that, through the design of its survey, allows the voices of the youngest children to be heard. I feel privileged to be conducting this study and hope that it will help to advance the unique considerations of our youngest, and most vulnerable, military family members.

**Purpose of the Study**

This study will explore the complex interplay of risk and protective factors of military families’ well-being on the emotional health and well-being of their children (ages 0-3). Through the use of secondary analysis of data from the Military Family Life Study, the author will examine families’ post-deployment contextual stressors and family factors that are predictive of child outcomes. For the purposes of this study, the respondent, who is the non-
active duty spouse, is referred to as the civilian parent (CP). The active duty service member is referred to as the military parent (MP).

**Research Question**

How might military families’ psychological, relational, and social resources influence the effects of parents’ post-deployment distress on the emotional health and well-being of their children, ages 0-3?

**Hypothesis**

Controlling for socio-economic status, children (ages 0-3) whose civilian parent (CP) experiences more positive perceptions of military life, social support, emotional health and well-being, familial coping capacity, military parent’s (MP) post-deployment emotional health and well-being, marital health, and less imminent deployment are more likely to experience better CP-reported emotional health and well-being.

**Significance of the Research to Social Work**

This study’s findings contribute to social workers’ understanding of the complexities of the issues affecting military families and their young children. In keeping with social workers’ person-in-environment (Barker, as cited in National Association of Social Workers, 2005) approach to serving vulnerable populations, the findings reflect the intricate interplay of familial and situational dynamics that inform the direct and indirect pathways to young children’s emotional health and well-being in the context of parental combat deployment. Furthermore, the study specifically contributes to the literature by informing theory, practice, and research, as follows.
Theory. The study serves as an opportunity to examine the effects of military families’ post-deployment factors through the dual lenses of family stress theory (FST) and attachment theory (both described in Chapter 2). FST takes into consideration the role of familial resources, as well as familial perceptions, in managing stressors (Lavee, McCubbin, & Patterson, 1985). As such, the theory is consistent with social workers’ strengths-based orientation to serving individuals and families affected by environmental stressors. Family stress theory was utilized in this study to explicate the complicated interplay of factors that can mitigate, or exacerbate, the effects of families’ deployment experiences on the emotional health and well-being of their young children. FST has been used in previous studies examining the risk and protective factors associated with military family life (Everson, Darling, & Herzog, 2013; Lavee et al., 1985). The utilization of FST in the current study helps to broaden its application to military families who are parenting infants and toddlers.

Attachment theory was used to help inform the selection of variables and the interpretation of findings in the study. Attachment theorists posit that childhood social-emotional development unfolds within a relational framework (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1988). Infants and toddlers depend on the important adults in their lives to cultivate emotionally safe and nurturing environments in which to grow, discover, and connect with others. Parents or caregivers who are preoccupied with their own distress may be compromised in their capacity to be fully engaged, responsive, or attuned to their young children. These impaired relational interactions can place infants/toddlers at risk for sub-optimal outcomes across developmental domains (Davé, Sherr, Senior, & Nazareth, 2008; Duggal, Carlson, Sroufe, & Egeland, 2001; Eiden, Edwards, & Leonard, 2002). Attachment theory
provides, not only a conceptual framework for examining the potential effects of veteran parents’ compromised psychological functioning on early childhood emotional health, but also a rich roadmap for navigating the preventive strategies and clinical interventions that help foster adaptive child and family outcomes. Given its proponents’ emphasis on the protective and restorative powers of the caregiving milieu, attachment theory is strongly aligned with the social work profession’s ethical principle of recognizing the importance of human relationships (NASW, 1996, 2008). Consequently, the use of attachment theory in helping to guide and inform the study further underscores the value of integrating social work-laden concepts and principles into the military family literature.

**Practice.** The findings will be used to inform the development and use of best practices aimed at mitigating risk factors and building on familial strengths in the interest of promoting emotional health and wellness. If, for example, the findings support a relationship between parents’ distress and their infants’ and toddlers’ emotional health, then interventions that take into consideration both individual and dyadic constructs, such as child-parent psychotherapy (CPP) (Lieberman & Van Horn, 2008), are warranted. Family interventions, such as CPP, that foster therapeutic holding environments can facilitate parents’ capacity to reflect, not only on their war experiences, but also on earlier relational interactions and patterns that help shape their parental responses.

**Research.** The scarcity of literature focusing on parental deployment from the perspective of the youngest family members warrants research that focuses on early childhood outcomes. The findings from this study will inform a model that helps explicate the relationship
between combat deployment, family factors, and early childhood outcomes. In addition, the findings will be used to help fill a major gap in the military family knowledge base, as well as to strengthen social workers’ leadership role in advancing the psychosocial needs of military service members and their families.

**Policy.** From a macro perspective, the study findings will be used to help equip social workers with the data to promote informed dialogue, engage key stakeholders, and promote policies aimed at balancing mission readiness with family and child readiness. In addition, the possibility of family programs being downsized, commensurate with budget cuts and a considerable reduction in forces (Zoroya, 2014), looms large on the horizon. The robust infrastructure of programs and services, designed, in part, to maintain force multiplication, are vulnerable in an atmosphere of force attrition. Research that elucidates risk and protective factors affecting new parents and their infants/toddlers can be used by advocates to underscore the need for continued family programs and services that mitigate the long-term residue of combat deployment-related stress and trauma, even in a post-war environment.

**Summary**

Over the past decade, service members and their families have been exposed to repeated and extended combat deployments marked by stress, uncertainty, injury, and loss. Based on their developmental vulnerabilities and complete reliance on the adults in their lives, very young children may be particularly susceptible to the deleterious effects of their families’ deployment experiences. Nonetheless, research on the impact of parental deployment on early childhood outcomes is sparse. This study specifically examines how military families’ psychological,
relational, and social resources mediate and moderate the effects of military parents’ post-deployment distress on the emotional health and well-being of their children, ages 0-3.

An exhaustive review of the literature, as well as a comprehensive overview of family stress theory and attachment theory, is provided in the next chapter.
Chapter 2: Literature Review

This chapter provides a robust and comprehensive overview of the literature relating to military families and their young children in the context of parental combat deployment. Given the paucity of research specifically addressing the emotional health and well-being of infants and toddlers of military families affected by deployments in Afghanistan (Operation Enduring Freedom, OEF) and Iraq (Operation Iraqi Freedom, OIF), the literature is reviewed from a range of historical, contemporary, sociopolitical, theoretical, and empirical perspectives that, taken together, paints a vivid picture of the factors under examination.

Military Families and Deployment

As indicated in the previous chapter, military families have been navigating OEF and OIF deployments for over 13 years. For both the service member and their loved ones, deployment to a combat zone carries unique—as well as shared—risks, sacrifices, and uncertainties.

Impact on Service Member

Every deployment carries the risk of exposure to traumatic circumstances and events that can impact the service member’s psychological health. Military service members who serve as part of OEF/OIF are at risk for developing combat deployment-related psychological distress (Aralis, Macera, Rauh, & MacGregor, 2104; Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Kitfield, 2011; Kline et al., 2010; Schell & Marshall, 2008). Psychological symptoms may be overlaid with, or complicated by, comorbid injuries or sequela, including traumatic brain injury (TBI) (Aralis, Macera, Rauh, & MacGregor, 2104; American Psychological Association, Presidential Task Force on Military Deployment Services for Youth, Families and Service Members, 2007; Kennedy, Jaffee, Leskin, Stokes, Leal, & Fitzpatrick, 2007; Schell & Marshall,
2008; Vasterling, Proctor, Amoroso, Kane, Heeren, & White, 2006); physical injury (Goldman, Radntiz, & McGrath, 2008; Grieger et al., 2006; Moriatis & Bucknell, 2010) substance use (Dedert et al., 2009); anger or hostility (Jakupcak et al., 2007); and chronic pain (Kline et al., 2010). The sustainment of multiple wounds, or “polytrauma,” is also recognized as a common phenomenon in OEF/OIF deployment, prompting researchers to examine the potentially interactive effects of comorbid combat injuries. In their recent consideration of PTSD, TBI, and chronic pain as a “clinical triad of symptoms” (Walker, Sanders, and Clark, 2010, p. 136), Walker and colleagues conceptualized this specific combination of injuries as “postdeployment multi-symptom disorder” (p. 138). While any one of the individual components of this disorder may significantly impact the veteran’s psychosocial functioning, the authors emphasized the additional layers of complexity associated with postdeployment multi-symptom disorder, including its potential resistance to treatment.

Recent literature has revisited the ancient construct of moral injury—the psycho-bio-spiritual suffering that stems from one’s action, inaction, or bearing witness to, ethically-ambiguous situations or events. For service members who are exposed to the extraordinary life and death situations of wartime deployment, the concept of moral injury seems particularly resonant; high-stakes, rapid-fire decision-making in the face of ethically fraught circumstances can instill feelings of guilt, shame, betrayal, and regret that tear at one’s moral integrity—contributing to a deep and lasting psychic wound. While the normalizing effects of the wartime climate might temporarily anesthetize the service member from the painful consequences of the moral transgressions of self or other, the post-deployment return home can unearth internal conflicts that can no longer be accommodated within the family setting (Litz et al., 2009). The
emerging battle scars bear implications, not only for the individual service member, but for the entire family exposed to the contaminant effects of moral conflict and betrayal of self and other (Nash & Litz, 2013).

Impact on Families

Many psychologically injured service members are returning home to their families and children, tasked with rebuilding relationships with children who have grown physically and developmentally, or forming new bonds with babies born during the course of a long deployment (Schachman, 2010; Williams & Rose, 2007). Parenting very young children can be inherently challenging; parenting young children in the face of prolonged separation, uncertainty, and the service member’s impaired emotional health can pose additional challenges—creating risk factors for the family as a whole (Cozza & Lieberman, 2007; Gewirtz, Polusney, DeGarmo, Khaylis, & Erbes, 2010; Sayers et al., 2010).

As of 2007, approximately 700,000 children had experienced the deployment of at least one parent in support of operations in Iraq or Afghanistan (American Psychological Association, Presidential Task Force on Military Deployment Services for Youth, Families and Service Members, 2007). By 2009, that number had grown, with over one million children having experienced the deployment of a parent (Ramirez, 2009). With a substantial percentage of veterans returning home with psychological injuries (Grieger et al., 2006; Kline et al., 2010; Schell & Marshall, 2008; Shanker, 2008), there is an urgent need to consider the effects of parents’ emotional health on the emotional health and well-being of their children.
Historical Research

The focus on child and family issues in relation to deployment-related events and circumstances has evolved tremendously over the past several decades. Prior to the Vietnam War, researchers and interventionists focused primarily on the individual Service member’s health and well-being—often in the interest of safeguarding force-retention. However, the increased number of military family members, precipitated by the shift in policy from conscription to an all-voluntary force, prompted a gradual focus on the family as unit of attention. Even so, the transition was slow, with a substantial lag between the time of the Vietnam War and researchers’ eventual examination of child and family outcomes (Jakupcak et al, 2007).

In 1990, Kulka et al. released findings from the National Vietnam Veterans Readjustment Study (NVVRS), a large-scale, nationwide survey, described by the authors as the most ambitious epidemiological study “…ever attempted with any population” (p. xxvi). Findings indicated that children of male veterans with PTSD were more likely to have behavioral problems in the clinical range than children of male veterans without PTSD. In a 1998 study, Rosenheck and Fontana investigated the relationship between veteran parents’ use of “abusive violence” (p. 732) during the Vietnam War and the behavioral and emotional outcomes of their children, ages 6-16. The authors found that children whose veteran fathers engaged in abusive war violence had significantly higher Child Behavioral Checklist (CBCL) scores than did children of veterans whose fathers did not; children of veterans who participated in abusive
violence were twice as likely to score in the clinical range of the CBCL (Rosenheck & Fontana, 1998).

In a 2002 study that focused on Vietnam veterans’ PTSD in relation to family violence and hostility, the authors found a positive correlation between veterans’ report of PTSD symptoms and their adolescent and/or adult children’s reported hostility and engagement in violent behaviors (Glenn et al., 2002). In a later study by Gold, Taft, Keehn, King, King, and Samper (2007), the authors mined data from the National Vietnam Veterans Readjustment Study (Kulka et al., 1990) to examine family adjustment, including veteran mothers’ parental satisfaction, in the context of parental PTSD. Parent satisfaction was defined as the veteran’s assessment of her child as being problematic, her degree of satisfaction with her child, her feelings of efficacy in parenting, and her enjoyment in parenting. The authors found a significant, negative relationship between PTSD symptom severity and the veteran mothers’ parenting satisfaction, with higher rates of symptom severity associated with lower parenting satisfaction (Gold et al., 2007).

Additional insights can be gleaned from findings and anecdotal information from Matsakis (1988), in her book about Vietnam spouses and children. Her survey of counselors from 100 Vet Centers, in combination with her own experiences working as a therapist at Veteran Administration Centers and the Vietnam Veteran Outreach Center, elucidated painful, haunting experiences of veteran parents as they negotiated the dual and, sometimes, irreconcilable role of war survivor and caregiver. Counselors reported Veteran parents struggling to reconcile their traumatic war experiences with parenting duties, including having
difficulty tolerating children’s noise and play, tolerating typical two-year old behavior, engaging in emotional distancing from family members, overprotecting their children, perceiving their children as symbols of what they lost in the war, assigning their core reason for living to their children, and seeing their children as traumatic reminders of war experiences (Matsakis, 1988).

Caution must be taken in extrapolating Vietnam War-related findings to today’s military family landscape, as every conflict has its own unique personality, embedded in the sociopolitical and psychological context of its time and place in history (Sheppard, Malatras, & Israel, 2010). In addition, most of the Vietnam studies occurred years, even decades, after the veteran’s return home (Jakupcak et al, 2007), limiting the nature and scope of the data. Nonetheless, these studies serve as empirical crosswalks, identifying associations between veteran parents’ emotional injury and problematic family outcomes (Glenn et al., 2002; Gold et al., 2007; Kulka et al., 1990; Rosenheck & Fontana, 1998; Ruscio, Weathers, King, & King, 2002), as well as urging researchers to examine the unique implications of 13 years of extended and repeated combat deployments on OEF/OIF veterans and their children. Fortunately, as delineated in the next section, contemporary research on military families has started to emerge.

Contemporary Research

Military Family and Child Outcomes

In more recent years, researchers have recognized the need to document and examine the implications of service members’ combat deployment on their families and children. Studies emerging from the wars in Afghanistan (OEF) and Iraq (OIF) have been unprecedented in
capturing child and family outcomes across a wide range of factors and circumstances, including the reintegration of the modern day military family whose service member has experienced psychological injury (Gewirtz et al., 2010; Gorman et al., 2010; McFarlane, 2009; Lester et al., 2010; Sayers et al., 2009). In one of the first studies to contemporaneously study active duty (AD) fathers’ post-deployment psychological health in relation to their children’s emotional health, Lester et al. (2010) found that AD parents’ PTSD symptoms predicted child depression, internalizing behaviors, and externalizing behaviors. In another study, researchers found that service member parents’ post deployment PTSD had both direct and indirect effects on self-reported parenting behaviors, with the presence of PTSD associated with impaired parenting (Gewirtz et al., 2010).

In a study relating to veteran psychological functioning and family adjustment, Sayers, Farrow, Ross, and Oslin (2009) surveyed recently returned OIF/OEF veterans, most of whom had screened positive for depression, PTSD, or alcohol misuse. Seventy-five percent of the veterans reported adjustment issues. In addition, the authors found a relationship between veterans’ major depression and PTSD and the increased risk of feeling like a guest in one’s home. For those respondents with children, there was an association between veterans’ PTSD and veterans’ perception of their children acting afraid of, or not warm towards them, a finding of particular salience in examining the dynamics of parent-child reintegration in the context of parental psychological injury.

Studies suggest that spouses, as well as active duty service members, are affected by deployment-related stressors (Blow et al., 2013; Lowe, Adams, Browne, & Hinkle, 2012;
Everson, Darling, & Herzog, 2013; Renshaw, Rodrigues, & Jones, 2008). These deployment effects, in turn, have implications for parenting dynamics. Longer deployment has been associated with spouses’/partners’ report of increased parenting stress (Everson et al., 2013), as well as decreased attachment to their children. While these findings are concerning, it’s important to note that additional factors, such as spouse’s affiliation with the military and parent-child communication, have been found to mediate family distress—suggesting potential ports of entry for building on family strengths and buffering the family system (Lowe et al., 2012).

**The Vulnerabilities of Very Young Children**

Young children are particularly vulnerable to environmental stressors that influence family dynamics and interactions (Gorman, Fitzgerald, and Blow, 2010; Lieberman & Van Horn, 2013). Research that reflects the unique needs and perspectives of young children affected by contextual stress, including their parents’ deployment-related circumstances, is warranted.

**Young Children of Military Families**

The emerging literature on military parents and their children is testament to society’s evolving understanding of the plight of the service member and the recognition that exposure to combat-related trauma and loss can have lasting effects, not only for the military member, but for his or her entire family. While these recent studies have helped to elucidate the experiences of military families and their school-aged or older children, there remains a substantial gap in the literature examining the effects of veteran parent deployment on infants and toddlers. The needs of very young children are unique, informed by a tremendous vulnerability to, and dependence
Chartrand, Frank, White, and Shope conducted a 2008 comparison study of children, ages 1½ to 5 years, enrolled in childcare centers on a Marine Corps base. The children, ages 3 to 5 with a deployed parent, had higher reported internalizing and externalizing behavioral problems than their counterparts without a deployed parent. There were no differences in reported behavioral problems in the younger children, ages 1½ to 3 years. While the latter findings might seem puzzling given the robust literature on the criticality of early relationships in the lives of infants and toddlers, the authors theorized that the non-military parent’s caregiving might have buffered the effects of the deployment on the study’s younger children (Chartrand, Frank, White, & Shope, 2008). Additional research is needed to tease out the risk and protective factors, unique to infants’ and toddlers’ developmental needs and considerations, which might influence outcomes in the youngest members of military families.

In a study of service member fathers previously deployed to a combat zone, the authors explored fathers’ relational experiences with their young children, ages 6 and under. Findings from the qualitative portion of the study, grounded in a larger investigation focused on the efficacy of a post-deployment parenting program, yielded key themes relating to fathers’ parenting motivations and challenges. Fathers expressed a strong desire and openness to reconnect with their child, learn new parenting skills, manage their tempers in order to serve as
calming influences for their children, and infuse their parenting with nurturance and affection. At the same time, fathers expressed feelings of loss and regret relating to their deployment-related separation from their children, as well as difficulty in reconciling military life norms with their children’s behaviors (Walsh, Dayton, Erwin, Muzik, Busuito, & Rosenblum, 2014).

**Young Children in the General Population**

With such a scarcity of military studies that specifically capture early childhood considerations, data must be mined from extant research on psychologically vulnerable parents and their young children in the general population. There is a wealth of research that articulates the deleterious effects of maternal depression on child and relational outcomes (Cicchetti, Rogosch, & Toth, 2000; Eiden, Edwards, & Leonard, 2002; Duggal, Carlson, Sroufe, & Egeland, 2001; Forman et al., 2007; Green, Stanley, & Peters, 2007; Maughan et al., 2007). While there is still limited research on paternal depression, the literature is growing increasingly more robust as researchers try to keep pace with the expanding role of the father in a post-modernist society. In a large-scale baseline and 1-year follow-up survey of unmarried and married parents of newborns (Huang & Warner, 2005), the authors found that fathers can, indeed, experience depression following the birth of their children, with approximately 10% of fathers experiencing a major depressive episode within their baby’s first year of life. Furthermore, researchers have found relationships between paternal depression and fathers’ diminished involvement with their children (Roggman, Boyce, Cook, & Cook, 2002), children’s prosocial difficulties, children’s peer behavioral problems (Davé, Sherr, Senior, & Nazareth, 2008), and father-attachment security. Findings from Buist, Morse, and Durkin (2002) suggest a relationship between
heightened paternal distress and compromised father-child attachment. Given the large percentage of military parents who are fathers (The Office of the Deputy Under Secretary of Defense, 2012), research that specifically investigates paternal depression as it relates to early childhood outcomes is particularly salient to understanding the needs of military families and their infants and toddlers.

The literature paints a vivid picture of the potentially devastating effects of parental trauma on early childhood social emotional health and development. The majority of the research focuses on the “ghosts in the nursery” (Fraiberg, Adelson, & Shapiro, 1975, p. 387), memories and representations of parents’ early experiences that can distort or impair their developing relationships with their own children. Indeed, the research on parental interpersonal trauma, as it relates to compromised parental capacity and responsiveness, is rich and vigorous (Lyons-Ruth & Block, 1996; Schechter et al., 2004; Schwerdtfeger & Goff, 2007). However, while the extant literature on parental trauma is comprehensive, it focuses primarily on the mother’s early occurring and/or relational trauma, such as her history of child abuse or domestic violence. There is a paucity of literature focused on the parent’s adult occurring, discrete trauma, such as car accidents, natural disaster, or military trauma. In addition, there is limited literature focused on the father’s relationship with his young child. Research that specifically examines the developing relationship between military fathers and their infants or toddlers in the context of adult-occurring, deployment related trauma is sorely needed.

While the literature is beginning to address the effects of military parents’ psychological distress on their relationships with their children, many questions remain unanswered. How are
infants and toddlers specifically affected by their military parents’ psychological health? What is the quality of relational attachment between military parents and their very young children? How might early relational outcomes vary by the military parent’s gender, rank/service, family structure, deployment related challenges, family dynamics prior to deployment, and perceived family support? In recognizing and understanding the complex patterns of interactions that mediate and moderate parent-child outcomes, researchers and practitioners may begin to build models of programs and interventions that recognize these contextual factors and are truly responsive to the needs of military parents and their very young children (Masten, 2013; Paley et al., 2013). These program and intervention models, as well as the undergirding research, should be informed by theories that provide frameworks for conceptualizing and understanding the complex interplay of factors influencing military family dynamics.

**Child Maltreatment in Military Families**

Additional insights on the effects of veteran parents’ distress on parent-child dynamics is garnered from extant data on child maltreatment in military families. Recent concern has focused on an Army-specific surge in child maltreatment cases. According to a recent article in the Army Times, the number of child abuse cases in the Army increased 28% from 2008 to 2011 (Sandza, 2013). Data from the DoD reflects a more modest service-wide increase of 15% from 2009 to 2011 in the number of child abuse cases reported to the military’s Family Advocacy Program (FAP). In addition, child abuse rates in the DoD population have remained substantially lower than child abuse rates in the civilian population (DoD, 2013; Sandza, 2013). Nonetheless, the increase in reported abuse warrants a close examination of family and
environmental factors that might be contributing to the uptick in numbers, including the stressors of parenting in the context of combat deployment(s). Studies are needed to tease out mediating or moderating factors, family internal/external resources, support from the military and civilian communities, and specific parent-child relational interventions, that could mitigate child maltreatment risk factors.

In a study by Gibbs, Martin, Kupper, and Johnson (2007), the authors found a 42% higher rate of child maltreatment when the active duty parent was deployed, versus not deployed. However, as the data were drawn from families who were already in the system for at least one previously substantiated report of maltreatment, generalizability to the larger military community is limited. According to another study, in which the authors pulled data from the National Child Abuse and Neglect Data System (NCANDS), the rate of substantiated maltreatment in military families, within the state of Texas, approximately doubled on or after October 1, 2002, in comparison to before October 2002. This increase in maltreatment coincided with families’ experiences of higher deployment activity (Rentz et al., 2007). In a 2008 study investigating the rates of child maltreatment in Army families from 1990-2004, McCarroll, Fan, Newby, and Ursano examined data from the Army Central Registry (ACR) and found that, while the rate of child abuse decreased by 65% from 1990—2004 (compared to a 40% decrease in child physical abuse within the U.S. national sample), the rate of neglect increased in 1991. In addition, the rate of neglect increased by 40% from 2000 to 2004, reaching its highest level in 2004 (McCarroll et al., 2008).
According to the Department of Defense, the rate of child abuse and neglect, both reported to and substantiated by the Family Advocacy Program (the DoD agency responsible for addressing domestic violence and child maltreatment within the military), actually decreased from fiscal year 2001 to fiscal year 2009 (Department of Defense, 2013). According to a 2011 article in the Marine Corps Times, however, the number of reported child deaths in military families, relating to child abuse or neglect, rose from 14 in 2003 to 29 in 2010 (Tilghman, 2011). The article suggests that family Advocacy officials are uncertain as to whether this steep increase in fatalities can be attributed to actual increase in deaths, or to the more rigorous tracking systems that have recently been implemented (Tilghman, 2011). These discrepancies in child maltreatment data warrant additional studies that account for differences in reporting systems and track military families across time and circumstances.

In the next section, family stress theory will be deconstructed as an opportunity to explore its relevance to understanding the individual, familial, and ecological issues that play out in the lives of military parents and their very young children.

**Theoretical Underpinnings of Study**

**Family Stress Theory (FST)**

FST has its roots in the seminal work of Rueben Hill who, through his research with populations under severe stress, formulated the ABCX model (1949, 1958, as cited in McCubbin et al., 1980). Derived from his work with military families affected by war-related separation and reunion, the model was groundbreaking in its conceptualization of stress or crisis as a fluid
construct, influenced by contextual factors. In other words, crisis is not inherent to the stressful event, but rather is a product of iterative forces, residing both within and outside of the family system, which influence familial outcomes. According to the original model, “A” denotes the onset of an acute stressor, or set of stressors, that affects a family’s daily functioning and has the potential to result in a crisis (X). The impact of the stressor is mediated or moderated by two core factors—the family’s resources/social support (“B”) and the family’s perception of the stressor (“C”) (Lavee, McCubbin, & Patterson, 1985; McCubbin et al., 1980). Stressful events are filtered through the individual and collective perceptions and resources that family members bring to the stressor(s).

Over time, the ABCX model has evolved to reflect, in greater detail, the intricacies of family stress and recovery. Hamilton McCubbin, an Army social worker during the Vietnam War (Chapin, 2011) and family stress theorist, played a key role in advancing the model. A prolific researcher, McCubbin investigated familial stress and coping across a wide range of populations and contexts, including the experiences of families contending with military-specific adversity (Lavee et al., 1985; McCubbin, 1979).

**Double ABCX Model.** Building on Hill’s classical theoretical constructs, McCubbin and others expanded the temporal and conceptual orientation of the model to accommodate the passage of time, as well as to recognize the demands placed on families prior to or subsequent to the identified stressor. In this respect, the model takes into consideration normative stressors—ubiquitous and expectable transitions in the context of the family life cycle—as well as non-normative situations that are neither commonplace nor anticipated (McCubbin et al., 1980). The
layering of normative events over the identified stressor, even “positive” ones (marriage, birth, etc.), can create a ripple effect that reverberates across the family system and intensifies family outcomes (Huebner & Mancini, 2005; Lavee et al., 1985; Lavee et al., 1987).

The Double ABCX model of family stress and adaptation incorporates constructs relating to pre-crisis, post-crisis, pile-up of demands, adaptive resources, coherence, and family adaptation as a continuum (McCubbin & Patterson, 1982; McCubbin & Patterson, 1983a; McCubbin & Patterson, 1983b; Lavee et al., 1985). The adapted model is predicated on the notion that a family’s narrative is not stagnant; as time marches on, families’ responses must be recalibrated to keep pace with their evolving landscape. Existing resources that have been mobilized during the initial event must be expanded and retooled to meet family members’ shifting perceptions and additional demands. Perceptions of the stressor(s), in turn, are deeply influenced by the family’s continuing capacity to cultivate resources that can mitigate damage and maintain the integrity of the familial system. This iterative process forges a constellation of dynamic factors which, stretched out over time, charts the family’s unique course on its journey towards adaptation—the goodness of fit between demands and resources, shaped by intra-familial and family-environment transactions, which influence the family unit’s long-term health and recovery (McCubbin & Patterson, 1982; McCubbin & Patterson, 1983a; McCubbin & Patterson, 1983b; Lavee et al., 1985). As such, the original A, B, C, and X factors are joined by aA (pile-up of demands), bB (adaptive resources), cC (perception/coherence), and xX (family adaptation) factors, reflective of the family’s need to strengthen, expand, or modify its repertoire of resources to cope, and even flourish, in the face of adverse circumstances.
The bB component (adaptive resources) is comprised of the following: personal resources, such as individual characteristics, knowledge, self-esteem, and skills; family system resources, such as cohesion, adaptability, and communication; and social support, including networks of care embedded in personal, community, and institutional realms. The cC component, identified as the family’s perception/coherence of stressors, refers to family members’ overarching and enduring, yet flexible sense of capacity, to manage and integrate the stressor, as well as additional and overlapping demands, into a meaningful, organized, and acceptable narrative (Lavee et al. 1985). Coherence is considered “…an intervening factor between crisis and adaptation and is another facilitator of the family’s adaptive power” (Lavee et al., 1985, p. 813). Antonovsky (1993) defines the multidimensional construct as having three core subcomponents: comprehensibility, manageability, and meaningfulness. In other words, coherence is the dynamic interplay of resources and experiences that inform the family’s lens by which to view, cope with, make sense of, and ultimately— make meaning of—the vicissitudes of life. Coherence has continued to hold up as a relevant construct for explicating families’ experiences of stress. In a recent study investigating risk and protective factors of military families whose service member was deployed to Iraq, sense of coherence was the most robust predictor of spouse’s life contentment (Everson, Darling, & Herzog, 2013).

**Mental Health.** Consistent with the model, the research bears out the dynamic interplay of relationships between personal, familial, and social determinants of child and family functioning (Creech, Benzer, Liebsack, Proctor, & Taft, 2013; Quinn, Briggs, Miller, & Orellana, 2014). Studies suggest that individual mental health plays an influential role in family
functioning (Blow et al., 2013; Creech et al., 2013; Renshaw, Rodrigues, & Jones, 2008; Sayers et al. 2009) and that parental psychological health, specifically, is a mediator of child outcomes (Chandra et al., 2010; Lester et al., 2010; Quinn, Briggs, Miller, & Orellan, 2014). The role of parents’ mental health on their children’s emotional health, as well as the potentially deleterious effects of deployment-related stressors on both the service member’s (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2007; Kline et al., 2010; Schell & Marshall, 2008) and spouse’s mental health (Dekel, Solomon, & Bleich, 2005; Renshaw et al., 2008), underscores the need for research that examines the mediating effects of the service member- and civilian-parent’s emotional health and well-being on the emotional health and well-being of their young children.

**Marital health.** The literature suggests that marital health is influenced by individual distress (Blow et al., 2013; Cummings, Keller, & Davies, 2005; Sayers et al., 2006) and that marital health mediates the relationship between parental mental health and child outcomes (Cummings et al., 2005). Additional research suggests a relationship between interparental conflict and children’s emotional insecurity which, in turn, is related to children’s internalizing and externalizing outcomes (Davies, Harold, Goeke-Morey, & Cummings, 2002).

**Social support.** The inclusion of social support as a focal point within family stress models have emerged as part of a larger emphasis on mediating forces outside of the family system. Researchers and clinicians have increasingly been encouraged to focus, not only on intra-familial interactions, but also on the family’s ongoing engagement with external resources. These “transactions with the community” (McCubbin, 1979, p. 237) contribute to the family’s
more active management of the crisis, as well as the layers of demands that may emerge (McCubbin, 1979; McCubbin, 1980).

In addition to its role in family stress models, social support has been identified as a predictor of family outcomes in both military specific (Flake, Davis, Johnson, & Middleton, 2010; Huebner & Mancini, 2005) and non-military specific (Kelley, Whitley, Sipe, & Yorker, 2000; Quinn, Briggs, Miller, & Orellana, 2013) studies. In a large-scale study of male and female Marine recruits involved in intensive training, social support moderated the effects of training stress on recruits’ mental health (Smith, Vaughn, Vogt, King, King, & Shipherd, 2013). Given the recognition of the mitigating effects of social support across the military, child, and family literature, studies are needed to investigate the civilian parent’s perception of social support as a potential risk or protective factor for young children whose military parents are experiencing post-deployment stress.

**Resilience.** Time and research has yielded additional layers of complexity to family stress theory, integrating concepts that are consistent with an overarching, post-modernist focus on resilience. Proponents of family resiliency models (McCubbin & McCubbin, 1993; McCubbin et al., 1997) draw a distinction between adjustment and adaptation. While adjustment involves the family’s capacity to endure and maintain its integrity in the face of risk, adaptation is associated with the family’s ability to bounce back following crisis-induced disorganization and functional decline. Protective factors contribute to adjustment, while recovery factors influence adaptation. Decreased functioning is recognized as an understandable familial response, as any family may falter in the face of adverse circumstances that exceed or erode its capacity to cope. As such,
family resilience is grounded not only in the family’s initial ability to manage and mitigate the stressor, but also in its ongoing efforts to regain functional balance and achieve post-crisis regenerative growth and healing (McCubbin et al., 1993; McCubbin et al., 1997).

**Family schema.** The family’s place on the adaptation continuum is influenced by several key components: stressor events and the simultaneous and/or subsequent pile-up of demands; family type, or the family’s typical response to stress and core coping agility; family social support; family resources; family situational appraisal of the stressor/crisis; family meaning and schema; and family problem-solving and coping skills. The concept of family schema has particular salience to military families. Schema refers to the family’s internalized sense of identity, values, beliefs, expectations, and rules in relation to its circumstances. The schema serves as a prism through which the family perceives, interacts with, and draws meaning from the stressor event(s). Depending on the family’s orientation to the stressor, a particular schema can help to facilitate, or impede, the family’s short- and long-term adjustment (Chapin, 2011; McCubbin et al., 1993; McCubbin et al., 1997). As an example, a family with a positive military schema may imbue its service member’s deployment-related injury with sentiments of pride and commitment. Within the family’s schematic framework, the injury represents a sacrifice that is embedded in contextual meaning and is consistent with the family’s core identity and values. While the severity of the wound, along with a host of intra- and extra-familial factors, will continue to influence the family’s stress response, the intervening role of the family schema serves to cushion the impact of the stressors on family functioning and adaptation.
**Goodness of Fit.** Findings from the first Gulf War- and OEF/OIF-era studies have suggested a link between spouses’ background of having growing up in military households and lower perceived stress during their service members’ deployment (Padden et al., 2011; Rosen, Teitelbaum, & Westhuis, 1993). Padden and colleagues (2011) theorized that spouses with a childhood military background had cultural familiarity, knowledge, and expectations that made them better equipped to negotiate the deployment experience. From a family stress perspective, this prior immersion in the military culture may have facilitated a more coherent deployment narrative, consistent with the spouses’ family of origin values and beliefs, from which to draw positive meaning from, as well as adaptive responses to, the deployment situation. Indeed, the concept of meaning-making, an integral component of family schema, has emerged as a key mediator of resilience in military and non-military families affected by stress (Bowling & Sherman, 2006; Patterson, 1988; Saltzman, Pynoos, Lester, Layne, & Beardslee, 2013). In McCubbin’s review of three core studies relating to family separation, he observed a pattern of familial reliance on community and cultural norms and expectations. In this respect, the goodness of fit between the family and the community serves as an intervening factor in decreasing family vulnerability (McCubbin, 1979). Given the culturally-laden aspects of deployment-related stress, as well as the pervasive role that the military institution plays in the lives of service members and their families, this goodness-of-fit construct seems particularly relevant to military family studies. Depending on family members’ orientation to and comfort with the military way of life, military-specific resources may serve to buffer, or increase family members’ vulnerability to, the crisis situation (Chapin, 2011; Padden, Connors, & Agazio, 2011).
The theoretical constructs of the Double ABCX and other family stress models are rich and complex and can be further dismantled into core components that explicate the experiences of families under stress. These core concepts have evolved over time to capture researchers’ growing understanding and conceptualization of familial stress across historical, situational, paradigmatic, and cultural contexts (Huebner & Mancini, 2005; McCubbin, 1979; McCubbin et al. 1980; McCubbin, 1998; Chapin, 2011). These increasingly sophisticated constructs have rendered a more nuanced, strengths-based lens for interpreting and appreciating the stress responses of military families. While the models have been revisited and restructured to accommodate new perspectives and emergent data, the core theoretical tenets relating to the interplay of stressors, perceptions, resources, and adaptability have served as common threads that tie the components together. The relevance of family stress theory in understanding and responding to military families is underscored by its use in multiple studies relating to war-induced separation and reunion during prolonged separation from a husband missing-in-action (Hill, as cited in McCubbin et al., 1980), parenting stress during spouse’s deployment to Iraq (Everson et al., 2013), and military-related relocation (Lavee et al., 1985). The theory has been used to help frame the experiences of Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) service members and their families affected by deployment-related separation, service member injury, and service member death (Chapin, 2011). For the purposes of this study, family stress theory is being used to help identify and conceptualize the pattern of intra- and extra-familial factors that might mitigate the effects of parents’ post-deployment distress on the health and well-being of their very young children.
Attachment Theory

Proponents of attachment theory posit that very young children form close relationships with primary caregivers in an effort to achieve an ongoing sense of physical and emotional safety that fosters exploration and development. In this respect, the caregiver milieu serves as a control system, in which babies can move away from, or closer to, their attachment figures, based on their physical and emotional needs at any given moment (Bowlby, as cited in Vaughn & Waters, 1990; Bowlby, 1988; Waters, 2008). Primary caregivers serve as the “secure base” from which babies feel safe enough to explore their environment and developmentally thrive, knowing that, ultimately, they remain emotionally connected to, and protected by, the nurturing presence of the important adults who await their return (Ainsworth et al., 1978; Bowlby, 1988). Over time, early caregiving experiences become internalized, forming representational images, or internal working models, which inform the child’s interpretations of, and responses to, experiences and relationships across the lifespan. In this respect, secure attachments have been identified as a source of resilience, in which a healthy internalized representation of self and other can serve, under specific circumstances, to buffer the effects of life’s vicissitudes and promote favorable outcomes (Bowlby, 1988; Belsky & Fearon, 2002; Thompson, 2008).

Attachment theory is further undergirded by the assumption that secure attachments are predicated on the capacity of parents to provide sensitive, attuned, predictable, and contingent caregiving, in which their children’s needs are, for the most part, consistently met. Caregivers’ soothing ministrations are essential to children’s sense of felt security, as well as their developing capacity to modulate their strong, tumultuous emotions. In this sense, secure
attachment demands emotional, as well as physical, availability on the part of the primary caregiver (Ainsworth et al., 1978; Bowlby, 1988; Lieberman & Van Horn, 2008).

**Insecure attachment.** In a relationship in which the parent is unable to provide sensitive, responsive caregiving, the child’s secure attachment behaviors may prove futile, warranting the adoption of avoidant or ambivalent patterns of attachment to the parent (Ainsworth et al., 1978; Bowlby, 1988). Furthermore, the literature suggests cases in which parents who are contending with their own unresolved trauma appear frightened by, as well as frightening to, their young children. In the face of this distressing parental behavior, young children’s own behaviors may be marked by incoherent, disorganized patterns of attachment—a logical response to the illogical task of attaching to a parent who is “at once the source of and the solution to its alarm” (Main & Hesse, 1990, as cited in Lyons-Ruth & Jacobvitz, 2008, p. 675). Insecure attachments are commonly part of a complex constellation of risk factors associated with poor or compromised short and/or long-term child outcomes across developmental domains, including social emotional health (Ainsworth et al., 1978; Belsky & Fearon, 2002; Bowlby, 1988), language (Belsky & Fearon, 2002), and behavior (Green et al., 2007).

Attachment theorists largely attribute the quality of parents’ emotional availability to their emotional health (Eiden et al., 2002; Lyons-Ruth, Connell, & Grunbaum, & Botein, 1990; Buist et al., 2002), as well as to earlier childhood experiences that might influence or distort their representations of parenting (George & Solomon, 1996; Lyons-Ruth & Block, 1996). In all
these respects, attachment theory serves as a natural, logical framework for understanding and addressing potential risk factors associated with deployment-related stress, loss, or injury.

**Risk and Resilience.** Proponents of attachment theory have posited a risk/resilience conceptualization of attachment. In this respect, secure attachments are proposed, to varying degrees, to buffer the effects of contextual risk, while insecure attachments are conceived to increase vulnerability to adverse circumstances (Belsky & Fearon, 2002; Bowlby, 1988). This framework makes sense within the context of military families’ circumstances. Military parents and caregivers who are able to foster and maintain secure attachments with their children, at any juncture within the deployment cycle, may better safeguard their children’s well-being in the face of environmental stressors associated with the veteran parent’s psychological injury. If, according to attachment theory, the parent’s capacity to serve as a secure base mediates attachment quality, then efforts aimed at ameliorating the veteran parent’s psychological distress may clear the relational path, strengthening parents’ capacity to focus on the needs of their young children and mitigating symptoms which can obviate sensitive caregiving. Indeed, Gorman and colleagues (2010) conceptualized a model that theorized the direct and indirect effects of parental psychological injury on early child development. In addition to the direct effects of parental injury, the authors proposed that contextual factors, family functioning, and individual and dyadic factors mediated the relationship between parental injury and early child development.

Family support, on an individual, community, and societal level, might further mitigate the effects of military parents’ stress on their very young children’s emotional health and well-
being. Parental peer support has been found to predict attachment (Huth-Bocks, Levendosky, Boga, & von Eye, 2004). In addition, military parents’ perception of overall support, including the support of both military and non-military organizations, has predicted child psychosocial functioning in school-age children (Flake et al., 2009). From an attachment lens, more research is needed to specifically tease out the role of social and community support in ameliorating military families’ post-deployment stress, replenishing parents’ emotional health and, ultimately, promoting parents’ optional emotional availability and responsiveness to their infants and toddlers.

**The role of the non-deployed parent.** Studies have suggested that the non-afflicted parent or caregiver can play an instrumental role in moderating the effects of parental distress on child outcomes (Herba et al., 2013; Hossain, 1994). For military families, the emotional health of the non-military parent can mitigate the effects of combat deployment (Flake et al., 2009; Chandra et al., 2010), as well as the effects of the veteran’s PTSD (Al-Turkait & Ohaeri, 2008) on child outcomes. Given the buffering role that the non-military parent can play in child outcomes, studies that indicate deleterious effects of deployment-related stress on the non-military parent’s psychological and relational health (Dekel, Solomon, & Bleich, 2005; Renshaw et al., 2008) are concerning. Looking through both the family stress and attachment lens, promoting services and community support that target the non-military parent/caregiver, as well as the military parent, may create a relational safety net in which the child has at least one primary caregiver who, through supportive intervention and community care, has the capacity to
sensitively meet the child’s needs and serve as a secure base, thereby fostering child and family resilience.

**Conclusion**

Combining the core constructs of family Stress and attachment theories, this study will investigate the effects of parents’ post-deployment stress on young children’s emotional health and well-being, as indicated by CP’s perceptions of the spousal parent-child attachment, MP’s reconnection with the child, child’s ability to stay close to MP in spite of deployment, and child’s coping with deployment. While attachment theory informs the nature of the dependent variable and the relational elements of the study, family stress theory provides the lens for selecting and structuring the risk and protective factors that might mediate or moderate the effects of parental stress on early childhood outcomes. The next chapter will focus on identifying and operationalizing each of the study’s variables, as well as delineating the methodological approach that will be used in the research analysis.
Chapter 3

The purpose of this study is to examine the intra- and extra-familial factors that mitigate the effects of post-deployment parental stress on young children of military families. Secondary analysis of the first wave of data from the 2010 longitudinal Military Family Life Study will be used to examine early childhood emotional health and well-being in the context of familial post-deployment stress. This chapter will be focused on the methodological elements of the study, including the design, data set, selected variables, and data analysis plan.

Methodology

This exploratory, cross-sectional survey study addresses the following research question: How might military families’ psychological, relational, and social resources influence the effects of parents’ post-deployment distress on the emotional health and well-being of their children, ages 0-3? The hypothesis is as follows: Controlling for socio-economic status, children (ages 0-3) whose CP experiences more positive perceptions of military life, social support, emotional health and well-being, familial coping capacity, MP’s post-deployment emotional health and well-being, marital health, and less imminent deployment are more likely to experience better CP-reported emotional health and well-being.

Data Set and Sample

Data will be derived from the first wave of the 2010 longitudinal Military Family Life Project (MFLP), conducted by the Human Resources Strategic Assessment Program (HSRAP), Defense Manpower Data Center (DMDC). HSRAP at DMDC utilizes paper and pen, as well as web-based surveys, to assess the attitudes and opinions of Department of Defense (DoD)
personnel—active, reserve, and civilian—and their families. The purpose of the MFLP study is to gage active duty spouses’ attitudes and opinions across a wide range of quality of life issues. The target population is intended to represent spouses of active duty service members from the Army, Navy, Marine Corps, and Air Force, whose paygrades range from E1 to O-6 and who had been in the service at least 6 months at the beginning of the survey fielding period, which ran from May 10, 2010 through August 31, 2010. Excluded from the target population were spouses of National Guard and Reserve members, as well as warrant officers. Eligible spouses had the option of either completing and mailing in a paper survey or completing an online questionnaire, via a randomly generated, unique ticket number that provided respondents access to the web survey (DMDC, 2011a).

DMDC investigators utilized a sample frame of 670,719 eligible service members’ records drawn from the following personnel data systems: September 2009 Active Duty Master Edit File (ADMF), September 2009 Family Database, September 2009 Basic Allowance for Housing Population File, and December 2009 Defense Enrollment Eligibility Reporting System File (DEERS). Recognizing the attrition of spouse respondents due to their service members’ naturally occurring transition out of active service, the initial sample was increased to maintain a robust sample size for the MFLP 2011 follow-up wave (DMDC, 2011a).

MFLP investigators selected a stratified, single stage random sample of 101,812 members. Stratification dimensions were defined as follows: service branch, pay group, child age, deployment, and race/ethnicity. The sample was non-proportional, with use of oversampling to maximize key reporting domains and population subgroups with low response rates. Analytic weights were created to counterbalance unequal selection probabilities, as well as
differing response rates among subpopulation subgroups. Beginning in April 2010, sample members identified as eligible were mailed notification letters. Throughout the field period, sample members were mailed up to five additional postal communications. In addition, sample members with a valid email address received an email announcement and up to nine email reminders during the field period. After the sample was pared down due to sample members’ ineligibility, unlocatability, or nonresponsiveness, the final MFLP study sample was comprised of 28,552 eligible and locatable respondents (DMDC, 2011b).

For the current study, the sample was further reduced to include only those individuals whose service member spouse had returned from a combat deployment within the last six months and who had reported on a child in their household age 0 to 3, resulting in a final sample of 516 respondents. The respondent will be identified as the civilian parent (CP) and the service member will be referred to as the military parent (MP). All responses are from the perspective of the CP.

Secondary Analysis and Limitations

The MFLP survey is a comprehensive and richly layered questionnaire designed to canvas the military family landscape in an in-depth, contextualized manner. The wide range of topic areas addressed include background information, permanent change of station (PCS) moves, education and employment, the military spouse’s family, health and well-being, life in the military, service member’s deployments, effects of deployments on children, and reunion and reintegration. These areas of interest are assessed across pre-, active, and post-deployment phases of the families’ life in the military. In addition, the large scale dataset provides a robust
sample size from which to draw a subsample that meets the criteria of the current study. Nonetheless, secondary analysis is inherently limited by the design and focus of the original study from which the data set is derived. While the MFLP study explores a multitude of familial and environmental factors, the research is not specifically focused on the youngest children in the family. Early childhood research warrants the use of a particular lens and developmentally relevant constructs that are optimally measured through observational measures (van IJzendoorn, Vereijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004). The broad scope of the MFLP study limits the specificity and sensitivity of the measures used to assess early child outcomes and, consequently, reduces the validity of the current study. Nonetheless, the indicators, taken together, contribute to an initial rendering of the youngest child’s experience that can inform a more nuanced examination of early childhood considerations in future studies.

**Study Variables**

Please see appendix A for a complete list of operationalized control, independent, and dependent variables, including all items and scales.

**Background/Demographic Variables**

For the purpose of this study, several background variables have been delineated (see Table 1, chapter 4 for descriptive data). CP’s and MP’s gender; CP’s age at time of survey, CP’s race/ethnicity; age of the child whom CP has reported on; and the family’s housing status were collected via CP’s self-report. Gender and paygrade were derived from MP’s administrative record. In addition, missing data from certain self-reported key demographics,
such as education and race or ethnicity, were also imputed from MP’s administrative record (DMDC, 2011a).

**Control Variable**

**Socioeconomic status (SES).** SES is conceptually defined as a composite of factors, such as education, income, and occupation, which translates into the social class or status of an individual or group (American Psychological Association, 2014). Given the extensive literature suggesting a relationship between low SES-related contextual stress and less adaptive child and family outcomes (Lee, Wickrama, & Simons, 2013; Wadsworth, Rindlaub, Hurwich-Reiss, Rienks, Bianco, & Markman, 2013), SES will serve as a control variable.

SES is operationalized via the assessment of several key indicators: household income, financial condition, CP’s highest degree or level of school completed, and MP’s pay grade. Household income is measured by the CP’s report of total gross (before-tax) earnings in an average month (i.e., “What are your total gross [before-tax] earnings in an average month?”) Responses from original survey have been recoded into eight ordinal categories with lower values indicating lower monthly income. Financial condition is measured via a 5-point Likert scale (i.e., “Which describes the financial condition of you and your spouse?”). For the purposes of the current study, responses were reverse coded, so that lower values indicate lower perception of family’s economic comfort and security. CP’s highest education completed is measured via a 7-point item (i.e., “What is the highest degree or level of school that you have completed?”) For the purposes of the current study, responses were recoded into 4 categories, with lower values indicating lower levels of education completed. MP’s pay grade was taken
from administrative record data and coded by DMDC researchers into five categorical levels, from lowest enlisted to officer rank.

**Independent Variables**

**Military life.** The CP’s perception of military life is related to the construct of family schema, the family’s worldview, undergirded by values, beliefs, and expectations, which influences the family’s response to specific stressor events. For families whose schema engenders a coherent, meaningful interpretation and framing of adverse circumstances, their outcomes will likely be more adaptive (Chapin, 2011; Everson, Darling, & Herzog, 2013; McCubbin, McCubbin, Thompson, Han, & Allen 1997). For the purposes of this study, perception of military life will serve as a proxy for family schema and is defined as the CP’s orientation towards the military lifestyle and mission, as well as others’ appreciation of the family’s service and sacrifice in the context of war.

The perception of military life variable is operationalized through the use of two single-item, 5-point Likert scales relating to the following themes: CP’s satisfaction with military service (i.e., “Overall, how satisfied are you with the military way of life?”) and CP’s interest in staying in the military (i.e., “Do you think your spouse should stay on or leave active duty?”). In addition, two additional 2-item, 5-point Likert scales, anchored by ‘strongly agree’ and ‘strongly disagree,’ are used to assess CP’s perception that America supports the war, as well as CP’s perception that the military is making a difference. Lower scores indicate more negative perception of America supporting the war and deployed service members making a difference.
Social support. Social support is conceptually defined as the range of intra- and extra-familial networks of relationships from which the individual or family can draw on for strength, encouragement, assistance, a sense of belongingness, and other sources of nurturance and sustainment, especially during periods of normative or non-normative situations and events (Lavee et al., 1985; McCubbin et al., 1997).

Social support is operationalized through the use of the Social Support Index (SSI), a standardized instrument that assesses perceived networks of familial, social, and community support for companionship and assistance (McCubbin, Patterson, & Glynn, as cited in McCubbin, Thompson, & McCubbin, 1996). Findings support the criterion validity of the SSI in relation to family well-being ($r = .40$) (McCubbin, Thompson, & McCubbin, 1996) and coherence (Lavee et al., 1985). Furthermore, the SSI has a reported internal reliability of .82 and a test-retest reliability of .83 (McCubbin et al., 1996).

The SSI constructed scale is comprised of seventeen 5-point Likert items, anchored by ‘strongly disagree’ and ‘strongly agree.’ An additional item (i.e., “Generally speaking, I would describe my family as a strong, happy family”) was added to the MFLP survey and maintained in the current study. Additional sample items include the following: “I feel good about myself when I sacrifice and give time and energy to members of my family;” “If I had an emergency, even people I do not know in this community would be willing to help; and “I feel secure that I am as important to my friends as they are to me.” For the purposes of the current study the 18 items were subjected to a factor analysis with varimax rotation. Three significant factors emerged representing community, family, and friends’ support. The community support subscale was comprised of 6 items, with possible scores ranging from 6 to 30. The family
support subscale was comprised of 4 items, with possible scores ranging from 4 to 20. The friends’ support subscale was comprised of 4 items, with possible scores ranging from 4 to 20. The negative items were reverse coded so that lower scores indicated lower perception of support. Lower scores indicate lower perception of support across each of the subscales.

**Family coping.** Family coping is conceptually defined as members’ ongoing and evolving strategies to achieve systemic balance in the following family life dimensions: maintenance of internal conditions that promote adaptive communication and family organization; fostering of family members’ independence and self-esteem; maintenance of strong family connections, grounded in coherence and unity; development and maintenance of positive community-based transactions and supports; and capacity to safeguard and maintain the integrity of the family unit in the face of stressor events (McCubbin et al., 1980).

Family coping is operationalized through the use of the *Family Crisis Oriented Personal Evaluation Scale (F-COPES)*, a multi-dimensional standardized instrument (McCubbin, Olson, & Larsen, as cited in McCubbin et al., 1996). The *F-COPES* is used to assess families’ coping behaviors and problem-solving strategies for use in managing issues and demands that emerge both within and outside of the family unit, and that affect the family as a whole. Psychometric properties for the *F-COPES* have been examined. Internal consistency reliability with a large sample (N=2740), randomly split into two halves, indicated overall alpha reliability of .86 (N=1338) and .87 (N=1244). Findings from a smaller study (N=116) indicated a test-retest score of .81. Construct validity (N=119), using factor analysis, generated eight factors, with each of the 30 items having a factor loading greater than .38. In a study involving a larger sample (N=2740), randomly split into samples 1 and 2, factor analysis further reduced the number of
components, resulting in five subscales relating to the following constructs: acquiring social support, reframing, seeking spiritual support, mobilizing family to acquire and accept help, and passive appraisal. Strong factors were identified in sample 1 and these findings were replicated in sample 2 (McCubbin, 1996). According to DMDC researchers, the literature suggests that passive appraisal is not an effective means of coping and, in fact, represents a negative coping strategy. Consequently, DMDC researchers reversed coded items 38r and t to construct the overall score (DMDC, 2011). Each item describes family responses in relation to facing problems or difficulties. Respondents are asked to indicate, via a 5-point Likert scale anchored by ‘strongly agree’ and ‘strongly disagree,’ how well each statement describes their family (e.g., “seeking information and advice from other families who have faced similar problems,” “attending religious/spiritual services,” and “sharing our problems with neighbors”).

Marital health. For the purposes of this study, marital health is conceptually defined as the overall strength and quality of the marital unit (Lavee et al., 1987). The marital health variable has been operationalized through the use of three separate measures that capture CP’s perception of his or her marriage across varying dimensions. Marital satisfaction is assessed through a single-item, 5-point Likert scale, with lower values indicating lower marital satisfaction (i.e., “Taking things altogether, how satisfied are you with your marriage right now?”). The couple’s adjustment, indicated by the CP’s adjustment to the MP’s return home, is also assessed via a single-item, 5-point Likert scale (i.e., “Which of the following describes your readjustment to having your spouse home after he/she most recently returned home from deployment?”). For the purposes of this study, items were reverse coded from original data set, with lower values indicating a more difficult readjustment.
CP’s perception of marital challenges is assessed via an abbreviated version of the Marital Instability Index (MII) (Edwards, Johnson, & Booth, 1987). The MII was developed specifically for research purposes, but offers additional use as a clinical tool for guiding therapeutic intervention through the identified risk of marital dissolution (Edwards et al., 1987). Data from a large scale, national probability sample (N=2034) of men and women under the age of 55, indicates coefficient alpha scores of .93 for the full scale and .75 for the short-form. Content validity was informed by a comparison between expert ranking of scale items in relation to marital dissolution and respondents’ rank ordering via mean scores, yielding a Spearman correlation of .80. In other words, respondents who endorsed items ranked by the experts as serious indicators of divorce scored high on the MII (Booth, Johnson, & Edwards, 1983). Longitudinal data from the same sample supports predictive validity for the MII; respondents who scored high on the MII were nine times more likely to divorce than respondents who scored low (Booth, Johnson, White, & Edwards, as cited in Booth et al., 1987). The abbreviated version of the MII used in the current study is comprised of five items (e.g., “Even people who get along quite well with their spouse sometimes wonder whether their marriage is working out. Have you ever thought your marriage might be in trouble?”), with a 2-point scale (yes/no). Dummy coding (yes=1; no=0) has been used so that scores range from 0 to 5, with lower values indicating few indicators of marital problems.

MP’s post-deployment emotional health. For the purposes of the current study, MP’s post-deployment emotional health is conceptually defined as the MP’s psychological adjustment to returning home. Consistent with family stress models, the MP’s emotional health is conceived as a point on the continuum of adaptation (McCubbin & Patterson, 1982; McCubbin & Patterson,
1983a; McCubbin & Patterson, 1983b; Lavee et al., 1985), informed by the MP’s range of responses to post-deployment stressors.

MP’s post-deployment emotional health is assessed via a nine-item, 5-point scale administered to the CP relating to MP’s behaviors since returning home. Factor analysis was utilized, resulting in the extraction of two different dimensions of emotional health, MP’s distress (e.g., “Get angry faster”) and MP’s post-deployment emotional growth (e.g., “Appreciate family and friends more”). Factor loadings on both components were strong, with factor loadings ranging from .596 to .883. Post-deployment growth items were reverse coded from the original dataset, with lower scores indicating MP’s lower post-deployment growth. For MP’s distress, lower scores indicate lower distress.

**CP’s emotional health.** For the purpose of this study, CP’s emotional health is conceptually defined as the CP’s self-reported feelings of stress, anxiety, and depression. Stress is operationalized via the use of a single-item 5-point Likert scale, with lower scores indicating lower stress (i.e., “Overall, how would you rate the current level of stress in your personal life?”).

Depression and anxiety is operationalized through CP’s response to the *PHQ-4* (Löwe et al., 2010), a brief, 4-item measure (e.g., “feeling down, depressed, or hopeless”) of each of these affective constructs. The *PHQ-4* is comprised of two smaller scales—a 2-item depression scale (*PHQ-2*) and a 2-item anxiety scale (*GAD-2*). In a large scale, nationally representative household study conducted in Germany, internal consistency was supported by corrected item-total correlations (r = .62 or greater) and Cronbachs alpha (α=.82). Construct validity for the
PHQ-4 total scale was assessed via intercorrelations with other self-report scales ($r = -.49$, -.39, and -.35). Additionally, there were significant association between PHQ-4 scores and demographic characteristics considered risk factors for depression and anxiety (Löwe et al., 2010). Scores range from 0 to 12, with lower scores indicating lower depression and anxiety.

**Anticipation of next deployment.** The anticipation of next deployment is defined as the CP’s understanding of how soon the MP will be deployed again; the nature of the deployment (e.g., combat zone; anticipated time away from family, etc.) is not specified. The variable is operationalized via a single-item 9-point scale (i.e., “When do you expect your spouse’s next deployment?”). For the purposes of the current study, the scale was recoded into two categories of anticipated deployment, with 1=within 6 months and 2=7 months or longer, or not expected to occur at all.

**Dependent Variable**

**CP’s perception of child’s emotional health and well-being.** The child’s emotional health and well-being is conceptually defined as a compilation of relevant early childhood constructs relating to parent-child connectedness and relational health (Ainsworth et al., 1978; Bowlby, 1988; Lieberman & Van Horn, 2008), as well as child’s response to environmental and familial stressors within a post-deployment context.

The dependent variable is operationalized through CP’s response to items taken from the Attachment Behavior Index, as well as three single-items relating to connectedness, reunion, and coping. The CP’s role in reporting child outcomes warrants special consideration, as the literature suggests a relationship between maternal distress and mothers’ increased likelihood of
having a more distorted, more negative perceptions of their infants’ behaviors, temperament, and/or attachment (Casanueva et al., 2010; Gharaibeh & Hamlan, 2011; Verhage, Oosterman, & Schuengel, 2013). Nonetheless, whether CP’s responses can be attributed to the child’s actual behaviors or CP’s skewed perception of the child’s behaviors, parent’s report of problematic child outcomes indicates a potential risk for perturbations in the parent-child dyad that warrants further consideration.

The Attachment Behavior Index is a 6-item scale, which was derived from the Attachment Q Sort (Version 3; Waters, 1987) for use in the MFLP study (DMDC, 2011c). The Attachment Q Sort (AQS) is a standardized measure designed to provide a comprehensive assessment of the secure-base behavior of a child in relation to his or her primary caregiver(s) (Waters, 1995). The suggested implementation of the AQS (not used in the MFLP survey or current study) requires an observer’s use of a large number of cards (90), each denoting a behavioral characteristic of children between the ages of 12-48 months of age. After several hours of child-observation in a home setting, the observer (either a parent/caregiver or a researcher/professional) is asked to sort the cards from most to least characteristic of the child being observed. After a series of card orderings and placements, scores are compared to an expert-described sort of the prototypically secure child (van IJzendoorn, Verijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004). Criterion-related, concurrent validity was evaluated in a 1990 study by Vaughn and Waters, in which the authors compared the AQS with the Strange Situation Assessment (Ainsworth, Blehar, Waters, & Wall, as cited in Vaughn & Waters, 1990) and found that infants who were classified as “secure” in the Strange Situation scored higher on both security and sociability, as measured by the AQS via home observations (Vaughn & Waters, 1990). Findings from a more recent
meta-analysis continue to support the observer ASQ’s convergent validity with the Strange Situation security ($r=.31$), as well as observer ASQ’s discriminant validity, with only a modest relationship to temperamental reactivity ($r=.16$). However, findings from the meta-analysis do not support validity for the self (parent or caregiver)-reported AQS (van IJzendoorn et al., 2004)—a finding of particular relevance to the current study. Given the extraction of only a small number of questions from the original AQS (e.g., “My child easily becomes irritated or angry with me.”), the use of survey items (versus observation and sorting), and the use of CP-report versus observer-report, the validity of the Attachment Behavior Index (constructed AQS scale) in the current study appears markedly compromised. In addition, it is critical to note that the behavioral characteristics noted are specific to children ages 12-48 months. Consequently, the validity of the measure for infants, ages 0 to 12 months, is further impaired. Taken together with other indicators of relational connectedness and coping, however, the Attachment Behavior Index scores are still helpful in informing an exploratory snapshot of the child’s emotional health and well-being in the context of post-deployment stressors. It should also be noted that, for the purposes of this study, construct validity of the dependent variable was tested by examining the correlations between the Attachment Behavior Index and the other dependent variable indicators for the 0 to 12 month-old subgroup with the 12 to 36 month-old subgroup; the coefficients were similar for the 0 to 12 month-old and 12 to 36 month-old subgroups, supporting construct validity for the dependent variable. As constructed for use in the MFLP survey, Attachment Behavior Index scores range from 1 to 5, with higher scores indicating more insecure attachment to CP.
Additional indicators of child’s emotional health and well-being are operationalized through the use of a 2-item, 5-point Likert scale, anchored by ‘very well,’ and ‘very poorly,’ measuring the effects of deployment on the child. For greater construct specificity, each of these items is scored separately, with one item assessing how well the child has coped with MP’s deployment and the other item assessing child’s ability to stay connected. For each item, lower values indicate poorer outcomes.

Quality of post-deployment MP-child reconnection is assessed via a 1-item, 5-point Likert scale (i.e., “Which of the following describes your spouse’s reconnection with your child[ren] after he/she most recently returned home from deployment?”). Reverse coding from the original data set was used to optimize consistency of direction in each of the dependent variable indicators.

**Data Analysis Plan**

All scales will be tested for internal consistency. Univariate descriptive analysis and bivariate correlation analysis will be used to examine the distribution of all variables and the potential presence of multicollinearity. After the diagnostic analysis is completed, the hypothesis will be tested using step-wise multiple regression analysis where each of the dependent variables will be regressed on the independent variables.

The secondary analysis of de-identified data from the first wave of the Military Family Life Project dataset was certified as exempt under the listed category of 45 CFR 46.10 by the Institutional Review Board of the Catholic University of America.
Conclusion

Each of the variables extracted from the MFLP data represents an individual, familial, or environmental factor that influences the caregiver milieu in which the youngest members of military families grow and develop. Secondary analysis of the identified variables will be utilized to assess a model that examines the interplay of risk and protective factors that mediate or moderate deployment-induced effects on infants’ and toddlers’ emotional health and well-being. Descriptive data and findings from the secondary analysis are presented and examined in the next chapter.
Chapter 4: Findings

The purpose of this study is to examine how military families’ psychological, relational, and social resources influence the effects of parents’ post-deployment distress on the emotional health and well-being of their children, ages 0-3. Findings from descriptive and multivariate secondary analysis are presented in this chapter.

Secondary analysis of a nonprobability, stratified sample of civilian spouses of active duty service members from the first wave of the 2010 MFLP longitudinal study (N=28,552) (DMDC, 2011a) was utilized. Respondents with a child(ren) in their household under the age of 18 were asked to report on the child closest to the respondent’s own birth day and month. In the current study, the MFLP sample was narrowed down to respondents who reported on a child between the ages of 0 to 3 and whose service member spouse had returned home from a combat deployment within the last six months (N=516).

Study Sample Demographics and Characteristics

An overview of the sample participant demographics and characteristics is provided in Table 1. Of the total sample of CP respondents (n=516), 98.4% were female and 1.6% were male. While the number of male respondents seems low, given that over 13% of active duty service members are married females (The Office of the Deputy Under Secretary of Defense, 2012), it is important to note that the study sample is comprised only of non-active duty spouses. Therefore, the discrepancy between population and sample data might be partly attributed to the number of female active duty service members married to other active duty service members, whose spouses would not have been eligible to participate in the study.
The majority of CP respondents were white (79.7%). The remaining 20.3% of respondents were Hispanic (7.2%), Black (5.0%), Asian (3.9%), or other (4.3%). Respondents ranged in age from 18 to 49 at the time of the MFLP survey, with a mean age of 28.49 years (s.d. = 5.04). Of the children in the household ages, 0 to 3, whom the CP respondent reported on during the survey, 15.9% were 0 to 6 months old, 20.3% were 6 to 12 months old, 32.6% were 1 to 2 years old, and 31.2% were 2 to 3 years (\(\bar{x} = 1.95, s.d.=.82\)). Of the total CP respondents, 26.2% were married two years or less, 64.9% were married 3 to 9 years, and 8.9% were 10 years
or longer ($\bar{x} = 4.77, s.d. = 3.15$). In regards to housing, 31.7% of the total CP respondents lived in military housing either on- or off-installation, while 68.2% lived in civilian housing.

**Descriptive Data on Control Variable**

Socioeconomic characteristics are summarized in Table 2. Participants’ total monthly (gross, before taxes) household income ranged from $350 to $10,000 per month, with a mean monthly income of $5390.75 ($s.d. = $2479.00$). Of the total number of CP respondents, 62.4% ($n=322$) characterized their families’ financial condition as very comfortable and secure or able to make ends meet. Of the total CP respondents, 11.2% had some years of school or a high school diploma; 39.1% had some college, but no degree; 32.4% had completed a Bachelor’s degree; and 17.2% had earned a Masters, doctoral, or other professional degree. Regarding paygrade, 32.4% of CP respondents’ active duty spouses were lower enlisted (E1 – E3), 17.6% were Corporals (E4), 2.9% were middle enlisted (E5 – E6), 37.4% were higher enlisted (E7-E9), and 9.7% were officers (O1 – O6).

**Descriptive Data on Independent Variables**

A summary of descriptive data on independent variables is provided in Table 3.

**Perception of Military Life**

Of the total number of CP respondents, 58.1% reported feeling very satisfied or satisfied with military life. In addition, over two-thirds, or 67.1%, of CP respondents indicated being very interested or interested in staying in the military. It is interesting to note that while 80.4% of CP respondents reported strongly agreeing or agreeing with the statement that deployed
service members are making a difference in the world, only 21.1% strongly agreed or agreed that
the public supports the war.

<table>
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<th>SES Characteristics</th>
<th>N</th>
<th>%</th>
<th>$\bar{x}$</th>
<th>s.d.</th>
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</table>

*aReflects CP’s perception of family’s status
bReflects CP’s status

CP’s Perception of Support

CP’s overall perception of social support appears strong. With possible scores on each of
the family support and friends’ support subscales ranging from 4 to 20, mean scores for total
respondents were 17.34 (s.d. = 2.30) and 15.23 (s.d. = 3.00), respectively. In addition, with
possible scores on the community support subscale ranging from 6 to 30, the mean score for total
respondents was 21.04 (s.d. = 4.88). Reliability for the family (α = .75), friends’ (α = .79), and
community (α = .87) subscales was acceptable.

CP’s Emotional Health
The majority of CP respondents reported feeling at least as stressed as usual at the time of the survey. Of the total CP respondents, only 9.5% reported experiencing much less or less stress than usual. As indicated in Chapter 3, CP’s feelings of negative emotions, such as depression and anxiety, were measured through the PHQ-4 ($\alpha = .84$). With possible scores ranging from 0 to 12, CP respondents’ overall feelings of depression and anxiety appear relatively low ($\bar{x} = 2.18; s.d. = 2.57$).

Family Coping

As indicated in Chapter 3, CP’s perception of family coping was assessed through the F-Copes ($\alpha = .83$). With possible scores ranging from 1 to 5, the mean score for total respondents was 3.34 ($s.d. = .50$), with 5 indicating better coping.

MP’s Post-deployment Emotional Health

As indicated in Chapter 3, CP’s perception of MP’s post-deployment health was assessed through post-deployment distress ($\alpha = .83$) and post-deployment growth ($\alpha = .80$) subscales, constructed from a series of survey items. The mean score for CP respondents’ perception of MP’s distress was 9.67 ($s.d. = 4.64$), with possible scores ranging from 6 to 30 and higher scores indicating greater distress. The mean score for CP’s respondents perception of growth was 10.70 ($s.d. = 3.03$), with possible scores ranging from 3 to 15 and higher scores indicating lower post-deployment emotional growth.

Marital Health

Descriptive data suggests relatively high levels of overall marital health. Of the total number of CP respondents, 85.2% reported feeling “very satisfied” or “satisfied” with their marriage and 57% reported “very easy” or “easy” post-deployment readjustment with the MP. In addition, CP’s perception of marital problems was assessed through the MII ($\alpha = .83$). With possible scores ranging from 0 to 5, the mean score for CP respondents was 1.49 ($s.d. = 1.65$).

Next Anticipated Deployment
Of the total CP respondents, 39.7% anticipated having MP deploy again within the next 6 months, while 60.3% anticipated having MP deploy no sooner than 7 months, or not at all.

**Descriptive Data on Dependent Variables**

A summary of descriptive data on dependent variables is provided in Table 4.

**Child’s Emotional Health**

As indicated in Chapter 3, child’s emotional health was comprised of constructs relating to the CP’s perception of the child’s attachment; coping with deployment; staying connected to the MP, given deployment separations; and the quality of the MP-child reconnection. Attachment was measured through the *Attachment Behavior Index*, adapted from the *AQS*. Reliability of the *Attachment Behavior Index* used in the current study was acceptable (α = 79). With possible scores ranging from 1 to 5, with 5 indicating more insecure attachment, the mean score for CP respondents’ perceptions of their child’s attachment was 2.38 (s.d. = .73). Of the total number of CP respondents, 55.8% reported their children coping very well or well with the MP’s deployment, while 40.8% reported their children staying very connected or connected to the MP. The majority of CP respondents perceived their children’s reunion with the MP favorably, with 74.4 % reporting the reunion as very easy or easy.

**Intercorrelations**

**Background and Control Variables**

A correlation matrix of background variables by SES is provided in Table 5. The strongest correlation is between CP’s age and MP’s paygrade (r = .61), an expectable, but not confounding association. Using a Pearson’s r of correlation of middle .7 or higher as the recommended cut-off for including two variables together in a regression (Meyers, Gamst, & Guarino, 2006), there is no multicollinearity indicated.
### Table 3
Descriptive Data on Independent Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>N</th>
<th>%</th>
<th>(\bar{x})</th>
<th>s.d.</th>
<th>(\alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perception of military life&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• military satisfaction (% very satisfied or satisfied)</td>
<td>300</td>
<td>58.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Staying in military (% very interested or interested in staying in military)</td>
<td>346</td>
<td>67.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Perception that public supports war (% strongly agree or agree)</td>
<td>109</td>
<td>21.1</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Deployed service members making a difference in the world (% strongly agree or agree)</td>
<td>415</td>
<td>80.4</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>Perception of support&lt;sup&gt;a&lt;/sup&gt;</td>
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<td></td>
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<td>• Family support</td>
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<td>N/A</td>
<td>17.34</td>
<td>2.30</td>
<td>.75</td>
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<td>• Community support</td>
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<td>N/A</td>
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<td>• Friends’ support</td>
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<td>N/A</td>
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<td>3.00</td>
<td>.79</td>
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<tr>
<td>CP’s emotional health&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• ( % experiencing much less than usual or less than usual stress)</td>
<td>49</td>
<td>9.5</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Depression/Anxiety&lt;sup&gt;(PHQ-4)&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
<td>2.18</td>
<td>2.57</td>
<td>.84</td>
</tr>
<tr>
<td>• Family coping&lt;sup&gt;a&lt;/sup&gt;&lt;sup&gt;(F-Copes)&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
<td>3.34</td>
<td>.50</td>
<td>.83</td>
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<td>MP post-deployment emotional health&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Distress</td>
<td>N/A</td>
<td>N/A</td>
<td>9.67</td>
<td>4.64</td>
<td>.83</td>
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<tr>
<td>• Growth</td>
<td>N/A</td>
<td>N/A</td>
<td>10.70</td>
<td>3.03</td>
<td>.801</td>
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<tr>
<td>Marital health&lt;sup&gt;a&lt;/sup&gt;</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Marital Satisfaction (% very satisfied or satisfied)</td>
<td>440</td>
<td>85.2</td>
<td>N/A</td>
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<td>N/A</td>
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<tr>
<td>• Marital problems&lt;sup&gt;(MII)&lt;/sup&gt;</td>
<td>N/A</td>
<td>N/A</td>
<td>1.49</td>
<td>1.65</td>
<td>.83</td>
</tr>
<tr>
<td>• Couple Readjustment (% very easy or easy readjustment)</td>
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<td>57.0</td>
<td>3.58</td>
<td>1.08</td>
<td>N/A</td>
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<tr>
<td>Next anticipated deployment</td>
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<tr>
<td>• Within 6 months</td>
<td>205</td>
<td>39.7</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>• 7 months or longer, or not at all</td>
<td>311</td>
<td>60.3</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</table>

<sup>a</sup>Based on CP’s perception
Table 4
Descriptive Data on Dependent Variables

<table>
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<tr>
<th>Dependent Variable</th>
<th>$N$</th>
<th>$%$</th>
<th>$\bar{x}$</th>
<th>$s.d.$</th>
<th>$\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child’s emotional health$^a$</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Attachment behavior ($AQ$S)</td>
<td>2.38</td>
<td>.73</td>
<td>.79</td>
<td></td>
<td></td>
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<tr>
<td>• Coping with deployment (% coped very well or well)</td>
<td>288</td>
<td>55.8</td>
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<td></td>
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<tr>
<td>• Staying connected with MP (% child able to stay very connected or connected to MP)</td>
<td>210</td>
<td>40.8</td>
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<tr>
<td>• Reunion with MP (% very easy or easy reconnection)</td>
<td>384</td>
<td>74.4</td>
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</tbody>
</table>

$^a$Based on CP’s perception

Risk and Protective Factors

A correlation matrix of risk and protective factors is provided in Appendix A. The strongest correlation is between marital satisfaction and marital problems ($r = -.62$), followed by friend and community support ($r = -.56$), as well as staying in military and military satisfaction ($r = .56$). Based on the criteria recommended by Meyers and colleagues (2006) for including correlated variables together in a regression analysis, multicollinearity within the model(s) is not indicated.

Table 5
Correlation Matrix of Background Variables by SES
Pearson Correlation Coefficient ($r$)

<table>
<thead>
<tr>
<th>Monthly income</th>
<th>CP gender</th>
<th>CP Race/Ethnicity</th>
<th>CP age</th>
<th>Child age</th>
<th>Length of marriage</th>
<th>Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education completed</td>
<td>.06</td>
<td>-.14$^b$</td>
<td>.49</td>
<td>-.09</td>
<td>.26$^b$</td>
<td>.19$^b$</td>
</tr>
<tr>
<td>Paygrade</td>
<td>-.04</td>
<td>-.17$^b$</td>
<td>.61$^b$</td>
<td>-.04</td>
<td>.43$^b$</td>
<td>.27$^b$</td>
</tr>
<tr>
<td>Financial Condition</td>
<td>.04</td>
<td>-.03</td>
<td>.25$^b$</td>
<td>-.11$^a$</td>
<td>.19$^b$</td>
<td>.22$^b$</td>
</tr>
</tbody>
</table>

$^a p \leq .05$

$^b p \leq .01$
Findings Related to the Hypothesis

A description of independent and dependent correlations is provided in Table 6. All significant Pearson Correlation Coefficients were at the \( p \leq 0.05 \) or \( \leq 0.01 \) level. While Cohen (as cited in Meyers et al., 1996) offered a basic rule of thumb guidance for interpreting correlations as large (.50 or greater), moderate (.30 to .49), and small (.29 or less), he and other authors have encouraged researchers to judge the strength of the correlation(s) in the context of the study in which it has been derived (Meyers et al., 1996). Given the fairly robust sample size of the current study (n = 516) and, consequently, the increased likelihood of statistical significance (Meyers et al., 1996), very modest correlations must be interpreted with caution. Nonetheless, given the complex issues under examination, even weak correlations may be important in understanding the interplay of factors that promote child and family risk or resilience in the face of adverse circumstances.

Attachment

Overall, the majority of correlations with attachment were relatively small. The correlation between couple readjustment and attachment was the most robust \( (r = -.24) \). CP respondents who reported better couple readjustment reported lower insecure attachment. Additional correlations with attachment include family support \( (r = -.23) \), CP stress \( (r = .21) \), and marital satisfaction \( (r = -.22) \). CP respondents who reported lower family support reported higher insecure attachment. CP respondents who reported higher stress reported higher insecure attachment. CP respondents who reported lower marital satisfaction reported higher insecure attachment. Additional significant correlations with attachment are found in Table 6.
Child’s Coping During Deployment

Military satisfaction was moderately associated with child’s coping with deployment \((r = .33)\); CP respondents who reported higher satisfaction with the military way of life reported better child coping during deployment. In addition, community support was correlated with child’s coping \((r = .24)\). CP respondents who reported better community support reported better child coping. CP stress and couple readjustment were each associated with child’s coping. CP respondents who reported higher stress reported worse child coping \((r = -.23)\), while CP respondents who reported better couple readjustment reported better child coping \((r = .23)\). Additional significant correlations with child’s coping are included in Table 6.

Child Staying Connected with MP Given Deployment Separations

Military satisfaction was moderately correlated with child’s staying connected with MP \((r = .30)\). CP respondents who reported greater satisfaction with the military way of life reported greater ability for child to stay connected with MP. In addition, there was a moderate association between couple readjustment and child’s staying connected with MP \((r = .26)\). CP respondents who reported better readjustment reported greater ability for child to stay connected with MP. Additionally, community support \((r = .23)\), MP distress \((r = -.24)\), and CP stress \((r = -.25)\) were correlated with child’s staying connected with MP. CP respondents who reported better community support reported greater ability for child to stay connected with MP. CP respondents who reported less MP distress reported greater ability for child to stay connected with MP. Finally, CP respondents who reported less CP stress reported greater ability for child to stay
connected with MP. Additional significant correlations with child’s ability to stay connected with MP are delineated in Table 6.

**MP’s Reconnection with Child**

The most robust correlation in the findings was between couple readjustment and child-MP reconnection (r = .46); CP respondents who reported better couple readjustment, reported easier child-MP reconnection. In addition, there was a moderate to high correlation between MP post-deployment distress and child-MP reconnection (r = -.37); CP respondents who reported higher MP post-deployment distress, reported more difficult child-MP reconnection. There was also a moderate correlation between family support and child-MP reconnection (r = .33); CP respondents who reported higher family support reported easier child-MP reconnection. As a whole, MP-child readjustment drew the most robust correlations with the greatest number of independent variables. Remaining correlations with child-MP reconnection are presented in Table 6.

**Multiple Regression Analyses**

Step-wise multiple regression analysis (MRA) was used, where each of the dependent variables was regressed on the independent variables. In the first analysis of each of the regression procedures, the control variables were entered into the equation, resulting in Model 1. In the next step of the procedure, each of the independent variables was entered, resulting in Model 2. Significance (F) and accounted-for variance (R²) for each of the models was examined. In addition, each of the variables’ significance in the second, saturated model was evaluated. The dependent variable was again regressed, but only on control and independent
variables with a significance of $p \leq .10$, resulting in a third, parsimonious model of predictors.

Each of the dependent variable regression analyses is presented in Tables 7 – 10.

<table>
<thead>
<tr>
<th></th>
<th>Child’s attachment behavior (AQS)</th>
<th>Child’s coping</th>
<th>Child’s staying connected with MP</th>
<th>Reunion with MP</th>
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</thead>
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<tr>
<td>1. Military sat</td>
<td>-.17^b</td>
<td>.33^b</td>
<td>.30^b</td>
<td>.24^b</td>
</tr>
<tr>
<td>2. Stay in mil</td>
<td>-.11^a</td>
<td>.17^b</td>
<td>.15^b</td>
<td>.15^b</td>
</tr>
<tr>
<td>3. Perception public supports war</td>
<td>-.14^a</td>
<td>.11^b</td>
<td>.15^b</td>
<td>.09^a</td>
</tr>
<tr>
<td>4. Perception make difference</td>
<td>-.10^a</td>
<td>.11^a</td>
<td>.13^b</td>
<td>.22^b</td>
</tr>
<tr>
<td>5. Family support</td>
<td>-.23^b</td>
<td>.16^b</td>
<td>.19^b</td>
<td>.33^b</td>
</tr>
<tr>
<td>6. Community support</td>
<td>-.15^b</td>
<td>.24^b</td>
<td>.23^b</td>
<td>.20^b</td>
</tr>
<tr>
<td>7. Friend support</td>
<td>-.14^b</td>
<td>.14^b</td>
<td>.14^b</td>
<td>.15^b</td>
</tr>
<tr>
<td>8. CP stress</td>
<td>.21^b</td>
<td>-.23^b</td>
<td>-.25^b</td>
<td>-.24^b</td>
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<td>9. CP depression/Anxiety</td>
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<td>-.22^a</td>
<td>-.20^b</td>
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<td>.10^a</td>
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<td>-.24^b</td>
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<td>12. MP post-deployment growth</td>
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<td>-.21^b</td>
<td>-.22^b</td>
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<td>14. Couple readjustment</td>
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<td>.23^b</td>
<td>.26^b</td>
<td>.46^b</td>
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<td>15. Marital satisfaction</td>
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<td>.19^b</td>
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<td>.13^b</td>
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^a$p\leq .05$

^b$p\leq .01$
### Table 7

<table>
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<th>Model 1</th>
<th>Model 2</th>
<th>Parsimonious Model</th>
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<td>3,512</td>
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<sup>a</sup>p≤.10  
<sup>b</sup>p≤.05  
<sup>c</sup>p≤.01

### Attachment

In the first step of the child attachment MRA, the control variable, financial condition, emerged as a significant predictor (-.15) at <i>p</i> ≤ .01. CP respondents who reported worse financial condition reported higher insecure attachment. Although none of the other control
variables were significant, the model, as a whole, was significant at $p \leq .05$ ($F = 2.40; df = 4,511$). In the second, saturated model of the MRA, financial condition lost its significance and was not included in the final model. Significant variables in the second model at $p \leq .10$ were CP’s perception of the public supporting the war (Beta = -.08) and CP stress (Beta = .09). In addition, couple readjustment was significant at $p \leq .05$ (Beta = -.11). Overall, the second model was significant at $p \leq .01$ ($F = 3.50; df = 20,495$) and accounted for 12% of the variance. In the final model, perception of public supporting the war was significant at $p \leq .05$ (Beta = -.10). CP respondents who least agreed that the public supports the war reported higher insecure attachment. Both CP stress and couple readjustment were significant at $p \leq .01$, with Betas of .15 and -.19, respectively. CP respondents who reported more stress reported higher insecure attachment. In addition, CP respondents who reported worse couple readjustment reported higher insecure attachment. The final model was significant at $p \leq .01$ ($F = 17.08; df = 3, 512$), but only accounted for 9% of the variance. A comprehensive summary of the Child Attachment MRA is provided in Table 7.

**Child’s Coping During Deployment**

In the first analysis of the child coping MRA, the control variable, financial condition, emerged as a significant predictor (Beta = .12) at $p \leq .05$. CP respondents who reported better financial condition reported better child coping. None of the other control variables were significant and the model, as a whole, was only significant at $p \leq .10$ ($F = 2.20; df = 4,511$) and accounted for 2% of the variance. In the second, saturated model of the MRA, financial condition lost its significance and was not included in the final model. CP stress was significant in the second model at $p \leq .10$ (Beta = -.08). Community support was significant at $p \leq .01$ (Beta
=.14) and couple readjustment (Beta = .12) was significant at \( p \leq .05 \). Military satisfaction was significant at \( p \leq .01 \) (Beta = -.20). Overall, the second model was significant at \( p \leq .01 \) (\( F = 4.90; df = 20,495 \)) and accounted for 17% of the variance. In the final model, CP stress was significant at \( p \leq .05 \) (Beta = -.10). CP respondents who reported lower stress reported better child coping. Significant variables at \( p \leq .01 \) were military satisfaction (Beta = .22), community support (Beta = .11), and couple readjustment (Beta = .12). CP respondents who reported greater military satisfaction reported better child coping. In addition, CP respondents who reported better community support reported better child coping. CP respondents who reported better couple readjustment also reported better child coping. The final model was significant at \( p \leq .01 \) (\( F = 22.53; df = 4,511 \)) and accounted for 15% of the variance. A comprehensive summary of the Child Coping MRA is provided in Table 8.

**Child Staying Connected**

In the first analysis of the child staying connected MRA, the control variable, financial condition, emerged as a significant predictor (Beta = .17) at \( p \leq .01 \). CP respondents who reported better financial condition reported better staying connected. None of the other control variables were significant and the model, as a whole, was significant at \( p \leq .01 \) (\( F = 3.64; df = 4,511 \)), accounting for only 3% of the variance. In the second, saturated model of the MRA, financial condition lost its significance and was not included in the final model. There was a weak connection between public supporting the war and child staying connected at \( p \leq .10 \) (Beta = .07). Variables significant at \( p \leq .05 \) were military satisfaction (Beta = .14), community support (Beta = .11), CP stress (Beta = -.12), and next deployment (Beta = .09). Couple
Table 8
Multiple Regression Analysis with Child Coping and Control and Independent Variables

<table>
<thead>
<tr>
<th>Control Variable (SES)</th>
<th>Model 1 Beta</th>
<th>Model 2 Beta</th>
<th>Parsimonious Model Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly income</td>
<td>.01</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>Education completed</td>
<td>.01</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>Financial condition</td>
<td>12^b</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>Paygrade</td>
<td>-.00</td>
<td>-.01</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Model 1 Beta</th>
<th>Model 2 Beta</th>
<th>Parsimonious Model Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military satisfaction</td>
<td>.20^c</td>
<td>.22^c</td>
<td></td>
</tr>
<tr>
<td>Stay in military</td>
<td>.01</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Perception public supports war</td>
<td>.02</td>
<td>.04</td>
<td>.02</td>
</tr>
<tr>
<td>Perception making difference</td>
<td>.14^b</td>
<td>.11^c</td>
<td>.11^c</td>
</tr>
<tr>
<td>Family support</td>
<td>-.04</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>Community support</td>
<td>.14^b</td>
<td>.11^c</td>
<td></td>
</tr>
<tr>
<td>Friends’ support</td>
<td>-.04</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>CP stress</td>
<td>-.08^a</td>
<td>-.10^b</td>
<td></td>
</tr>
<tr>
<td>CP depression/anxiety</td>
<td>-.06</td>
<td>-.07</td>
<td></td>
</tr>
<tr>
<td>Family coping</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>MP distress</td>
<td>-.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>MP post-deployment growth</td>
<td>-.01</td>
<td>.04</td>
<td>.04</td>
</tr>
<tr>
<td>Marital problems</td>
<td>-.08</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Couple readjustment</td>
<td>.12^b</td>
<td>.12^c</td>
<td></td>
</tr>
<tr>
<td>Marital satisfaction</td>
<td>-.07</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>Next deployment</td>
<td>.04</td>
<td>.12</td>
<td>.12^c</td>
</tr>
</tbody>
</table>

R^2                     | .02          | .17          | .15                      |

F                      | 2.20^a       | 4.90^c       | 22.53^c                  |

| df                     | 4,511        | 20,495       | 4,511                    |

^a p≤.10
^b p≤.05
^c p≤.01

readjustment was significant at .01 (Beta = .13). Overall, the second model was significant at p ≤ .01 (F = 5.26; df = 20,495) and accounted for 18% of the variance. In the final model, public supporting the war (Beta = .08), community support (Beta = .10), and next deployment (Beta = .10) were significant at p ≤ .05. CP respondents who reported stronger belief that the public
supported the war reported child staying better connected to MP. CP respondents who reported
greater community support reported child staying better connected to MP. CP respondents who
did not expect MP to deploy for another 6 months or longer, or not at all, reported child staying
better connected to MP. In addition, military satisfaction (Beta = .16), CP stress (Beta = -.13),
and couple readjustment (Beta = .15) were significant predictors at \( p \leq .01 \). CP respondents who
reported better marital satisfaction reported child staying better connected to MP. CP
respondents who reported lower stress reported child staying better connected to MP. Finally,
MP respondents who reported better couple readjustment reported child staying better connected
to MP. The final model was significant at \( p \leq .01 \) (\( F = 16.76; df = 6,509 \)) and accounted for 17% of the variance. A comprehensive summary of the Child Staying Connected MRA is provided in Table 9.
### Table 9

<table>
<thead>
<tr>
<th>Control Variable (SES)</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Parsimonious Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Monthly income</td>
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<td>-.04</td>
<td></td>
</tr>
<tr>
<td>• Education completed</td>
<td>-.05</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>• Financial condition</td>
<td>.17&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>• Paygrade</td>
<td>.05</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Military satisfaction</td>
<td>.14&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.16&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• Stay in military</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Perception public supports war</td>
<td>.07&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.08&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• Perception making difference</td>
<td>.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Family support</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Community support</td>
<td>.11&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.10&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• Friends’ support</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CP stress</td>
<td>-.12&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-.13&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• CP depression/anxiety</td>
<td>-.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Family coping</td>
<td>-.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• MP distress</td>
<td>-.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• MP post-deployment growth</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Marital problems</td>
<td>-.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Couple readjustment</td>
<td>.13&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.15&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>• Marital satisfaction</td>
<td>-.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Next deployment</td>
<td>.09&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.10&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td><strong>R&lt;sup&gt;2</strong></td>
<td>.03</td>
<td>.18</td>
<td>.17</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>3.64&lt;sup&gt;c&lt;/sup&gt;</td>
<td>5.26&lt;sup&gt;c&lt;/sup&gt;</td>
<td>16.76&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>4,511</td>
<td>20,495</td>
<td>6,509</td>
</tr>
</tbody>
</table>

<sup>a</sup>p≤.10  <sup>b</sup>p≤.05  <sup>c</sup>p≤.01

### MP’s Reconnection with Child

In the first analysis of MP’s reconnection with child, the control variable, financial condition, emerged as a significant predictor (Beta = .21) at p ≤ .01. CP respondents who reported better financial condition reported better MP-child reconnection. None of the other
control variables were significant and the model, as a whole, was significant at \( p \leq .01 \) \((F = 5.54; df = 4,511)\) and accounted for 4% of the variance. In the second, saturated model of the MRA, financial condition lost its significance and was not included in the final model. Marital satisfaction was a predictor at \( p \leq .10 \) (Beta = -.10). Additional predictors, significant at \( p \leq .01 \), were as follows: perception that deployed service members are making a difference (Beta = .13), family support (Beta = .14), CP stress (Beta = -.11), MP distress (Beta = -.19), and couple readjustment (.34). Overall, the second model was significant at \( p \leq .01 \) \((F = 10.90; df = 20,495)\) and accounted for 31% of the variance. In the final model, CP stress (Beta = -.09) and marital satisfaction (Beta = -.10) were significant at \( p \leq .05 \). CP respondents who reported lower stress reported better MP-child reconnection. Surprisingly, CP respondents who reported lower marital satisfaction reported better MP-child reconnection. Perception that service members make a difference (Beta = .14), family support (Beta = .14), MP distress (Beta = -.17), and couple readjustment (Beta = .34) were significant predictors of MP-child reconnection at \( p \leq .01 \). CP respondents who reported higher perception of service members making a difference reported better MP-child reconnection. CP respondents who supported better family support reported better MP-child reconnection. CP respondents who reported lower symptoms of MP distress reported better MP-child reconnection. Finally, MP respondents who reported better couple readjustment reported better MP-child reconnection. The final model was significant at \( p \leq .01 \) \((F = 34.90; df = 6,509)\) and accounted for 29% of the variance. A comprehensive summary of the MRA for MP-child reconnection is provided in Table 10.
### Table 10

<table>
<thead>
<tr>
<th>Control Variable (SES)</th>
<th>Model 1 Beta</th>
<th>Model 2 Beta</th>
<th>Parsimonious Model Beta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly income</td>
<td>.07</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Education completed</td>
<td>-.06</td>
<td>-.04</td>
<td></td>
</tr>
<tr>
<td>Financial condition</td>
<td>.21&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Paygrade</td>
<td>-.08</td>
<td>-.04</td>
<td></td>
</tr>
</tbody>
</table>

**Independent Variables**

- Military satisfaction: -.02
- Stay in military: .07
- Perception public supports war: -.02
- Perception making difference: .13<sup>c</sup>
- Family support: .14<sup>c</sup>
- Community support: .04
- Friends’ support: -.06
- CP stress: -.11<sup>c</sup>
- CP depression/anxiety: .06
- Family coping: .01
- MP distress: -.19<sup>c</sup>
- MP post-deployment growth: -.01
- Marital problems: -.01
- Couple readjustment: .34<sup>c</sup>
- Marital satisfaction: -.10<sup>b</sup>
- Next deployment: -.04

<table>
<thead>
<tr>
<th>R²</th>
<th>.04</th>
<th>.31</th>
<th>.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>5.54&lt;sup&gt;c&lt;/sup&gt;</td>
<td>10.90&lt;sup&gt;c&lt;/sup&gt;</td>
<td>34.90&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>df</td>
<td>4,511</td>
<td>20,495</td>
<td>6,509</td>
</tr>
</tbody>
</table>

<sup>a</sup>p≤.10  
<sup>b</sup>p≤.05  
<sup>c</sup>p≤.01

### Summary of Findings

Bivariate analysis yielded a multitude of correlations across the study variables. The vast number of correlations reflects the confluence of factors that help to shape and influence family and child outcomes. With only a few exceptions, each of the independent variables was
associated with each of the dependent variables, partially supporting the study hypothesis. While
post-deployment growth was not associated with all of the dependent variables, it was associated
with CP-child attachment. Similarly, while next anticipated deployment was not associated with
most of the dependent variables, it was associated with child staying connected to MP. In this
respect, every independent variable was related, either directly or indirectly, to at least one facet
of the child’s emotional health and well-being.

Regression analysis was used to help explicate the complex interplay of factors that
influence children’s deployment-related emotional health and well-being by capturing key
predictors, as well as combinations of predictors, that influenced each of the dependent variables.
A final regression, involving the input of only those variables that maintained significance in the
face of competing variables, resulted in a “lean and mean” (Meyers et al., 2006, p. 175) model of
risk and protective factors that most robustly predicted the dependent variables. For a
comprehensive summary of final model predictors in relation to each of the predictor variables,
see Table 11.
Table 11
Final Model Predictors Across Dependent Variables

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Child Coping</th>
<th>Staying Connected</th>
<th>MP-Child Reconnection</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Perception public supports war</td>
<td>X&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• CP stress</td>
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<td>X&lt;sup&gt;a&lt;/sup&gt;</td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Couple readjustment</td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Community support</td>
<td></td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Military satisfaction</td>
<td>X&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>• Next deployment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Perception service members making a difference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Family support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• MP distress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Marital satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X = significant predictor of dependent variable

<sup>a</sup>Beta ≤ .10
<sup>b</sup>Beta ≤ .20
<sup>c</sup>Beta ≤ .30
<sup>d</sup>Beta = .34

Conclusion

Consistent with the core tenets of family stress theory, the data suggests a complex and dynamic intersection of variables relating to parental stress, family coherence, marital dynamics, and social support. The intricate pattern of predictive variables that emerged in the study elucidated the confluence of both intra- and extra-familial factors that influenced young children’s emotional health and well-being in the context of their parents’ post-deployment
transition. Each study variable, to varying degrees, exerted influence on the family unit that, ultimately, contributed to children’s outcomes.

The next chapter will provide a summary of the study, as well as a more comprehensive interpretation of the findings. In addition, study limitations, implications of the study to the field, and recommendations for next steps in extending the application of the findings will be addressed.
Chapter 5: Summary and Conclusions

For the past 13 years, the U.S. military has experienced an unprecedented number of service members returning home to their families and children amidst physical and psychological injuries sustained during repeated and extended deployments (Dedert et al., 2009; Grieger et al.; Hoge, Terhakopian, Castro, Messer, & Engel, 2007; Jakupcak et al., 2007; Kline et al., 2010; Schell & Marshall, 2008, 2006; Shanker, 2008). Considering that almost 44% of Department of Defense (DoD) military personnel are parents, many service members are reconnecting with their children in the face of post-deployment stress or trauma. A substantial number of the children of active duty parents are very young, with over 350,000 children of Active Duty members between the ages of 0–3 (The Office of the Deputy Under Secretary of Defense, 2012). Parenting very young children against a backdrop of prolonged separation, uncertainty, and the service member’s impaired emotional health can pose unique challenges and risk factors that warrant consideration (Cozza & Lieberman, 2007; Gewirtz, Polusney, DeGarmo, Khaylis, & Erbes, 2010; Sayers et al., 2010).

While an increasing number of studies have emerged to examine the implications of deployment-related distress on child and family outcomes (Flake, Davis, Johnson, & Middleton., 2009; Gewirtz et al., 2010; Lester et al., 2010; Sayers et al., 2009), few studies have focused on the needs and interests of very young children within the context of the deployment cycle (Chartrand, Frank, White, & Shope, 2008; Walsh, Dayton, Erwin, Muzik, Busuito, & Rosenblum, 2014). Given the unique developmental vulnerabilities of very young children, as well as their complete dependence on the parents and caregivers in their lives (Lieberman & Van Horn, 2013; Maughan, Cicchetti, Toth, & Rogosch, 2007; Schechter et al., 2004; Masten, 2013;
Maholmes, 2012; Paris, DeVoe, Ross, & Acker, 2010; Thompson, 2008), research that specifically examines deployment-related risk and protective factors in relation to infants and toddlers is warranted.

Methodology

The current study represents an initial response to the critical gap in literature relating to young children affected by their families’ deployment-related circumstances. The author utilized secondary analysis of data derived from the first wave of the 2010 longitudinal Military Family Life Project (MFLP), conducted by the Human Resources Strategic Assessment Program (HSRAP), Defense Manpower Data Center (DMDC), in an effort to examine the interplay of risk and protective factors influencing the emotional health of young children affected by post-deployment circumstances. The author reduced the stratified, single stage random sample of 101,812 spouses from the original study (DMDC, 2011a) to include only those respondents whose service member spouse had returned home from a combat deployment within the last six months and who had reported on a child in their household age 0 to 3—resulting in a final sample of 516 respondents. The author utilized bivariate and multiple regression analysis to address the following hypothesis: Controlling for socio-economic status, children (ages 0-3) whose CP experiences more positive perceptions of military life, more positive perceptions of social support, more positive perceptions of emotional health and well-being, more positive perceptions of familial coping capacity, more positive perceptions of MP’s post-deployment emotional health and well-being, more positive perceptions of marital health, and less imminent deployment are more likely to experience better CP-reported emotional health and well-being.
Findings

Bivariate analysis generated several correlations across variables. Almost every independent variable was significantly associated with every dependent variable, with the exception of MP’s post-deployment emotional growth (associated only with CP-child attachment) and imminent deployment (associated only with child staying connected to MP). Multiple regression analysis yielded additional findings that partially, but not completely, supported the study hypothesis.

Final Predictors

Several psychosocial variables emerged as predictors of young children’s emotional health and well-being in the context of deployment and reintegration, partially supporting the study’s hypothesis. After controlling for SES, final predictors included the following: perception that the public supports the war, CP stress, couple readjustment, community support, military satisfaction, imminent deployment, perception that deployed service members are making a difference, family support, MP distress, and marital satisfaction. Of these predictors, CP stress, couple readjustment, community support, and military satisfaction each predicted multiple indicators of child’s emotional health.

Strongest Predictors

CP stress and couple readjustment emerged as the only variables to have predicted child’s social emotional health and well-being across each of the dependent variables, with couple readjustment emerging as the strongest predictor of attachment in the final model. Military
satisfaction was the strongest predictor of both child coping and child staying connected with MP. Finally, marital readjustment was the strongest predictor of MP reconnecting with child.

**Control Variable (SES)**

Of all of the indicators of SES, only CP’s perception of financial condition emerged as a significant variable in the first model and, in fact, did not maintain significance in subsequent models. Given the extant literature indicating the association between low SES-related contextual stress and less adaptive child and family outcomes (Lee, Wickrama, & Simons, 2013; Wadsworth et al., 2013), this finding is somewhat surprising. Perhaps financial safeguards, such as employment, healthcare, and other benefits, which are inherent to military service, help to minimize SES risk factors. While rank, household income, level of education, and financial condition engender differences in SES among service members and their families, military-specific benefits might have contributed to a relative level of security that helped to mitigate SES-related differences in outcomes theorized to have presented in the model.

**Independent Variables**

Controlling for SES, several independent variables emerged as predictors in the final model. These variables included the following: perception that the public supports the war, CP stress, couple readjustment, community support, military satisfaction, imminent deployment, perception that deployed service members are making a difference, family support, MP distress, and marital satisfaction. However, while each of these variables contributed to at least one
indicator of child’s emotional health and well-being, only CP stress and couple readjustment served as predictors for each of the dependent variables.

**Perception of military life.** The emergence of military satisfaction as a strong predictor of multiple dependent variables partially supported the hypothesis that young children whose CP respondent experienced more positive perceptions of military life would experience better CP-reported emotional health. This finding, along with the significance of other military life indicators (i.e. public’s support of the war and perception that deployed service members are making a difference) in the final model, was also consistent with the literature cited in Chapter 2 regarding the contribution of sense of coherence and schema to families’ adaptation in the context of family stress (Antonovsky, 1993; Everson, Darling, & Herzog, 2013; Chapin, 2011; McCubbin et al., 1993). In other words, the constellation of predictive factors in the current study underscores the critical role that families’ capacity to make meaning and sense of their circumstances plays in influencing child outcomes.

While staying in the military was positively correlated with each of the dependent variables, it did not emerge as a significant predictor in any of the regression analyses. This finding might be partly attributed to the relative weakness of the variable, relative to other variables, as an indicator of positive perception of military life. While staying in the military seems logically connected to having a positive perception of the military way of life, other considerations, such as relative financial security, also figure into military service. Additional research is needed to help tease out the factors most relevant to family members having a positive and protective military family schema.
**CP’s emotional health.** The role of CP stress as a predictor of child outcomes across each of the dependent variables partially supported the hypothesis that infants and toddlers of CP respondents who perceived better emotional health were more likely to experience better CP-reported emotional health. In addition, the finding is consistent with the literature suggesting that parental distress has deleterious effects on child outcomes (Cicchetti, Rogosch, & Toth, 2000; Eiden, Edwards, & Leonard, 2002; Lyons-Ruth & Block, 1996; (Maughan, Cicchetti, Toth, & Rogosch, 2007; Schechter et al., 2004; Schwerdtfeger & Goff, 2007). However, it is interesting to note that CP depression and anxiety, while correlated with each of the dependent variables, did not emerge as a predictor in the regression analysis. This unexpected finding might be attributed, in part, to the relatively low percentage of CP respondents with higher PHQ-4 scores. Within this stressed, but hearty sample of respondents, the distribution might have, in effect, obscured the anticipated relationship between parental mental health issues and early childhood outcomes. Additional research, aimed at delving more deeply into the complex interplay of stress and other dimensions of parental psychological health, is warranted.

**MP’s emotional health.** MP distress emerged as a predictor of the MP-child post-deployment reconnection, partly supporting the hypothesis that infants and toddlers of CP respondents who experienced more positive perceptions of MP’s post-deployment emotional health were more likely to experience better CP-reported emotional health. While MP’s distress was also correlated with each of the dependent variables, regression analysis indicated that MP’s distress did not hold as a predictor of CP-child attachment, child’s coping with MP’s deployment, or child staying connected with MP. For example, contrary to expectations that
MP’s distress would foster challenging family dynamics or interactions which, in turn, would erode CP-child attachment, the findings did not support such a relationship. Perhaps these outcomes were more easily mitigated by protective factors embedded in the model. Nonetheless, the finding that MP’s distress predicted MP-child reconnection emerges as a powerful finding with important implications for the MP-child relationship. Additional research is warranted to more closely examine MP’s post-deployment distress and resilience on the short- and long-term functioning of the family unit, across familial relationships. MP’s post-deployment growth, while correlated with each of the dependent variables, did not emerge as a predictor for any of them.

**Perception of social support.** As anticipated from the family stress literature and additional research (Flake, Davis, Johnson, & Middleton, 2010; Huebner & Mancini, 2005; McCubbin, 1979; McCubbin et al., 1980), both family and community support emerged as predictors of child’s outcomes, partially supporting the hypothesis that young children whose CP experienced more positive perception of social support would experience better CP-reported emotional health. While bivariate analysis suggests an association between friends’ support and each of the dependent variables, the significance did not hold up in the regression model. The data suggests that, from the perspective of the CP respondent, family and community support held the most weight in influencing children’s emotional health and well-being in the context of post-deployment stress and transition.

**Perception of familial coping capacity.** Surprisingly, familial coping capacity did not predict any of the child outcomes, contradicting the hypothesis that young children whose CP
respondents experienced more positive perceptions of familial coping capacity would experience better CP-reported emotional health. Bivariate analysis yielded relatively weak correlations between family coping capacity and each of the child outcomes, but this significance was not maintained in the regression models. Given the focus on the mitigating effects of individual and familial coping across the literature (Chapin, 2011; McCubbin et al., 1993; McCubbin et al., 1997; Padden et al., 2011), it is puzzling that the CP’s perception of family coping did not emerge as a significant predictor. Perhaps more robust predictors in the regression models, such as CP stress and couple readjustment, served to mediate the relationship between familial coping and child outcomes. In this respect, family coping might have lost its accounted-for variance when taken together with other variables in the model. Researchers are encouraged to utilize additional analyses, such as Structural Equation Modeling (SEM), to get a more in-depth understanding of the direct and indirect role that family coping plays in the lives of military families and their young children.

**Perception of marital health.** Another unexpected finding, well worth noting, is the relationship between marital satisfaction and MP-child reconnection. Regression analysis in the current study suggests that greater marital satisfaction is correlated with poorer MP-child reconnection. While bivariate analysis suggested that better marital satisfaction was related to better MP-child reconnection, regression analysis reversed the direction of the relationship—suggesting that poorer marital satisfaction predicted better MP-child reconnection. Given the literature suggesting marital conflict as a risk factor for poorer child outcomes (Cummings, Keller, & Davies, 2005), the direction of the correlation is perplexing. Furthermore, better
couple readjustment, a different but related construct, is associated with better child outcomes across each of the dependent variables. Additionally puzzling, the bivariate correlation between marital satisfaction and MP-child reconnection yielded the expected direction, in that greater marital satisfaction was associated with greater MP-child connection. The “flip” in direction from bivariate to multiple regression analysis suggests the possibility of an anomalous finding. However, the unexpected finding might also be attributed to the complicated, nuanced dynamics that play out over the course of a family’s post-deployment reintegration. It might be theorized, for example, that for families with lower satisfaction in their marriage, the MP focuses his or her energy on fostering a better connection with their child to help compensate for the lack of intimacy or connection in their marriage. Nonetheless, caution should be used in applying the findings and closer examination of the relationship between the variables, especially in the context of reintegration over time, is warranted.

**Imminent deployment.** It is worth noting that CP’s expectation of how soon the next deployment would occur was predictive of the child’s ability to stay connected with the MP. CP respondents who reported MP deploying sooner reported the child having more difficulty staying connected with MP. While this particular variable did not serve as a predictor for any of the other dependent variables, its modest, but significant contribution merits further consideration. Is the CP’s perception of the child’s ability to stay connected with the MP clouded by the implications of another family separation? Or is the CP’s response, in fact, an accurate assessment of the MP’s disengagement from his or her young child—a means, perhaps, of
protectionone’s heart from the inevitable pain of saying goodbye? Additional research is needed to examine the interplay of these constructs more closely.

**Conclusion**

**Limitations**

There were a number of limitations to the study. Inherent to the constraints of secondary data, the author’s operationalization of variables was limited to the use of items and measures utilized in the original survey. As indicated earlier, the use of the *Attachment Behavior Index* (derived from the *AQS* for use in the MFLP study) as a survey measure is problematic, given the intended implementation of the original *AQS* as an observational sort (van IJzendoorn, Verijken, Bakermans-Kranenburg, & Riksen-Walraven, 2004; Waters, 1995). In addition, as the developmental age range of the behavioral characteristics noted in the *AQS* are specific to children ages 12-48 months, the validity of the measure for infants, ages 0 to 12 months, was further compromised. The findings were additionally limited by the retrospective nature of two of the dependent variable indicators, child’s ability to cope with MP’s most recent deployment and child’s ability to stay connected with MP. While not optimal, the use of retrospective indicators was necessary, given the limited number of survey items relevant to infants and toddlers.

The use of the CP respondent as the only source of information posed an additional limitation to the study; family members’ experiences, feelings, and behaviors were filtered through the lens of the CP. The report of both parents would have provided a richer, more
balanced account of the family’s experience. Furthermore, the subsequent comparison of CP and MP responses would have mitigated respondents’ biases, thereby strengthening the overall validity of the study.

Finally, while respondents were selected by DMDC investigators through stratified, random sampling to increase the representativeness of the original study, those who chose to participate might have differed in their perceptions and experiences than those who chose not to participate. Spouses experiencing greater distress or less support, for example, might have had less time and energy to devote to completing the survey, thereby precluding their participation in the study. Any such characteristics unique to those who did, or did not, participate in the study would have skewed the representativeness of the sample to the larger population, thereby decreasing the external validity of the study.

**Contributions and Recommendations**

The identified limitations underscore the exploratory nature of the study. Findings should be shared and interpreted in the context of these limitations. Nonetheless, the study yields key findings, many of which are consistent with outcomes from other military family research. As indicated, CP’s perception of greater stress and greater MP distress predicted worse child outcomes. In addition, increased community support predicted better child outcomes. These findings are consistent with prior studies involving older children, in which perceived spousal stress, MP distress, and community support mitigated the effects of deployment-related circumstances on children’s outcomes (Chandra et al., 2010; Flake et al., 2009; Lester et al.,
The current study builds off of these studies by examining risk and protective factors from the perspective of the youngest child. Consequently, policy experts, direct service providers, and other professionals working on behalf of infants and toddlers of military families will no longer need to rely completely on data extrapolated from studies involving older children. Rather, these early childhood advocates will now be equipped with data that is both relevant and specific to the population they serve.

**Policy.** Advocates now have an additional policy tool for drawing attention to the effects of parents’ deployment-related stressors on young children, which is critical to preserving and strengthening programs and services that support both military and veteran families. As service members continue to return home, transitioning back into their military and civilian communities, policy makers are tasked with building and maintaining an infrastructure of support on both sides of the installation gates. Consistent with findings from the current study that social support predicts child outcomes, both military and civilian communities need to be “at the ready” to embrace and respond to the families and children who have carried the weight of over a decade of war and conflict. Civilian communities, as well as Veterans Affairs (VA) institutes, are called upon to help bolster programs and services for the infants and toddlers of veterans, as well as active duty members, and their families. Findings from the current study underscore both the need and value of policies that galvanize such efforts. For example, while the VA has not historically focused on the needs of the family, recent efforts have been made to offer family counseling services, as long as such services are deemed warranted for the care and treatment of the individual veteran (Sherman, Perlick, & Straits-Tröster, 2012). Nonetheless,
parenting and early childhood-focused services remain largely unavailable. Policy is needed to expand VA services that focus specifically on decreasing parental distress, providing vet-to-vet parent support, and strengthening parent-child relationships in families contending with post-service stress and injury.

**Practice.** From a direct service perspective, findings from the current study support the notion that young children’s emotional health and well-being is directly tied to parents’ emotional health and well-being. In this respect, professionals’ efforts to ameliorate parents’ stress or psychological injury have direct bearing on the children they serve. Interdisciplinary professionals, such as home visitors, early care and education providers, and mental health providers are encouraged to consider the needs of both the parent and the child in fostering resilience across the family unit. Furthermore, given the findings that social support and couples’ readjustment serve as predictors for child outcomes, interdisciplinary professionals are urged to strengthen family, community, and other resources on behalf of families and their young children. These mechanisms of social support can be leveraged to foster optimal couple readjustment that, in turn, contributes to the emotional health and well-being of the youngest family members.

Interdisciplinary professionals are also encouraged to attend to the dynamics between service member parents and their young children before, as well as after, a scheduled deployment. Given the finding that suggests imminent deployment as a weak, but significant, predictor of children’s ability to stay connected with their military parents, efforts aimed at exploring parents’ feelings and concerns in anticipation of deployment should be considered.
Additional research is warranted to more closely examine the potential effects of pre-deployment anticipatory grief on parents’ relationships with their children. Both interdisciplinary providers and policy leaders should be mindful of findings relating to CP respondents’ perception of military life as a predictor of child outcomes. As perception of military life can serve as a risk or protective factor, depending on parents’ perspectives, providers are encouraged to assess parents’ feelings about military life and service, especially as it relates to meaning making in the context of military stress or trauma. Interventions aimed at building on positive perceptions, as well as acknowledging and working through more negative perceptions, are indicated to help promote family resilience. Furthermore, given the proposed downsizing of the military and the associated reduction in forces, a number of service members will be separated honorably, but involuntarily, from service (Zoroya, 2014). For service members who have served and sacrificed, involuntary separation may be perceived as a violation of a trusted social contract that, ultimately, influences their perceptions of military life. Professionals serving military or veteran families are encouraged to understand the context of the service member’s transition out of service. This understanding, part of a larger assessment of the family’s perception of military life, could serve as an entry point for mitigating problematic perspectives that, in turn, influence child outcomes.

Research. As indicated throughout the presentation of findings, additional, more sophisticated research is warranted to build off of the study’s exploratory findings. As an example, longitudinal studies are critical to fostering a more in-depth understanding of the sequencing and interplay of variables that influence family and child outcomes over time. As the data used in the current study is derived from the first wave of data collected by DMDC
researchers, longitudinal examination of these early childhood variables is feasible. Longitudinal studies that are specifically organized around the unique considerations of infants and toddlers of military or veteran families would be optimal. Through the utilization of observational or standardized measures validated for use with infants and toddlers, researchers could capture a far more in-depth and comprehensive understanding of the short and long-term effects of parents’ deployment experiences on their infants and toddlers.

Finally, qualitative studies are critical to gaining a deeper, more nuanced understanding of the lived experiences of families and their young children. Consistent with family stress theory, every narrative is unique, informed by the interplay of risk and protective factors that play out in the lives of young children and their families affected by separation, injury, or loss. Qualitative studies would be instrumental in capturing and interpreting the intricate pattern of dynamics and interactions that both influence, and are influenced by, families’ internal and external resources. Furthermore, mixed-methods studies would help to texturize emergent quantitative data, breathing life, substance, and meaning into the findings. By capturing the exquisite strengths, as well as the vulnerabilities of military families, such studies would help guide providers in building on families’ internal and external resources.

**Summary**

Military parents and their young children have, and continue to make, tremendous sacrifices in support of our nation. Society, in turn, has both a social and ethical obligation to maintain a comprehensive infrastructure of support available to these families—during their
period of active duty service and beyond. As study findings suggest, infants and toddlers of military families, while vulnerable to their parents’ post-deployment stress, are also safeguarded by both intra- and extra-familial sources of support. Professionals and policy makers are called upon to serve military and veteran families by attending to their youngest, most vulnerable family members, thereby contributing to a legacy of resilience that can be passed down from one generation to another.
### Appendix A

**Correlation Matrix of Risk and Protective Factors**

**Pearson Correlation Coefficient (r)**

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<td>6. Community Support</td>
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<td>7. Friend Support</td>
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<td>.16 b</td>
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<td>-.12 b</td>
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<td>15. Marital Satisfaction</td>
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<td>.06</td>
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*ap<.05  
bp≤.01
Appendix B

Survey items Extracted from MFLP Survey and Used in Current Study

Control Variable

1. Family’s SES
   a. household income (What are your total gross [before-tax] earnings in an average month? Include all income for you and/or your spouse)
   b. financial condition (Which describes the financial condition of you and your spouse? Very comfortable and secure; able to make ends meet without much difficulty; occasionally have some difficulty making ends meet; tough to make ends meet but keeping our heads above water; in over our heads)
   c. CP’s highest education completed (What is the highest degree or level of school that you have completed? Mark the one answer that describes the highest grade or degree that you have completed. 12 years or less of school [no diploma]; high school graduate—high school diploma or equivalent (e.g., GED); some college credit, but less than 1 year; 1 or more years of college, no degree; Associate’s degree (e.g., AA, AS); Bachelor’s degree (e.g., BA, AB, BS); Master’s, doctoral, or professional school degree [e.g. MA MS, Med, MEng, MBA, MSW, PhD, MD, JD, DVM, EdD)
   d. MP’s pay grade, taken from administrative record data (1. E1-E3; 2. E4; 3. E5-E6; 4. E7-E9; O1-O3; O4-O6)

Independent Variables

1. CP’s perception of life in the military
   a. Overall, how satisfied are you with the military way of life? (very satisfied; satisfied; neither satisfied nor dissatisfied; dissatisfied; very dissatisfied)
   b. Do you think your spouse should stay on or leave active duty? (I strongly favor staying; I somewhat favor staying; I have no opinion one way or the other; I somewhat favor leaving; I strongly favor leaving)
   c. Indicate how much you agree or disagree with the following statements. Mark one for each item  a. The American public supports the war (Strongly disagree; Disagree; Neither agree nor disagree; Agree; Strongly agree); b. Deployed
Service members are making a difference in the world (Strongly disagree; Disagree; Neither agree nor disagree; Agree; Strongly agree).

2. CP’s perception of support system
   a. Community Support:

   Indicate how much you agree or disagree with each of the following statements about your community and family. *Mark one answer for each item.*
   b. If I had an emergency, even people I do not know in this community would be willing to help.
   e. People here know they can get help from the community if they are in trouble.
   g. People can depend on each other in this community.
   l. Living in this community gives me a secure feeling.
   n. There is a feeling in this community that people should not get too friendly with each other.
   o. This is not a very good community to bring children up in. (Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree)

   b. Family Support:

   Indicate how much you agree or disagree with each of the following statements about your community and family. *Mark one answer for each item.*
   a. Generally speaking, I would describe my family a strong, happy family.
   c. I feel good about myself when I sacrifice and give time and energy to members of my family.
   d. The things that I do for members of my family and they do for me make me feel part of this very important group.
   m. The members of my family make an effort to show they love and have affection for me.

   c. Friends’ Support:

   Indicate how much you agree or disagree with each of the following statements about your community and family. *Mark one answer for each item.*
   p. I feel secure that I am as important to my friends as they are to me.
   q. I have some very close friends outside the family who I know really care for me and love me.
   f. I have friends who let me know they value who I am and what I can do.
   i. My friends in this community are a part of my everyday activities.

3. CP’s perception of emotional health and well-being
a. Overall, how would you rate the current level of stress in your personal life? (much less than usual, less than usual, about the same as usual, more than usual, much more than usual)

b. Over the last two weeks, how often have you been bothered by any of the following problems? Mark one answer for each item. a. Little interest of pleasure in doing things. b. Feeling down, depressed, or hopeless. c. Feeling nervous, anxious, or on edge. d. Not being able to stop or control worrying. (Not at all; Several days; More than half the days; Nearly every day)

4. CP’s perception of familial coping capacity

a. Indicate how well each statement describes your family. When we face problems or difficulties in our family, we respond by…Mark one answer for each item. a. Sharing our difficulties with relatives. b. Seeking encouragement and support from friends. c. Knowing we have power to solve major problems. d. Seeking information and advice from other families who have faced similar problems. e. Seeking advice from relatives. f. Seeking assistance from community programs designed to help families in our situation. g. Accepting gifts and favors from neighbors (e.g., food, taking in the mail, etc). h. Seeking information and advice from our family doctor. i. Asking neighbors for advice and assistance. j. Attending religious/spiritual services. k. Accepting stressful events as a fact of life. l. Exercising to stay fit and reduce tension. m. Accepting that difficulties occur unexpectedly. (Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree).

5. CP’s perception of MP’s post-deployment emotional health and well-being

a. MP’s distress:

After your spouse most recently returned home from a deployment, to what extent did your spouse seem to… Mark one answer for each item. a. Be more emotionally distant (e.g., less talkative, less affectionate, less interested in social life)? c. Get angry faster? e. Drink more alcohol? g. Take more risks with his/her safety? h. Have trouble sleeping? i. Be different in another way? (Not at all; Small extent; Moderate extent; Large extent; Very large extent)

b. MP’s post-deployment growth:

b. Appreciate life more? d. Appreciate family and friends more? f. Have more confidence? (Not at all; Small extent; Moderate extent; Large extent; Very large extent)
6. **CP’s perception of marital health**
   a. Please respond to the following questions regarding your relationship with your spouse. *Mark “Yes” or “No” for each item.* a. Even people who get along quite well with their spouse sometimes wonder whether their marriage is working out. Have you ever thought your marriage might be in trouble? b. Have you or your spouse ever seriously suggested the idea of divorce within the past three years? c. Have you discussed divorce or separation with a close friend? d. Has the thought of getting a divorce or separation crossed your mind in the past three years? e. Did you talk about consulting an attorney about a divorce or separation?
   b. Which of the following describes your readjustment to having your spouse home after he/she most recently returned home from deployment? (Very easy; Easy; Neither easy nor difficult; Difficult; Very difficult)
   c. Taking things altogether, how satisfied are you with your marriage right now? (Very Dissatisfied; Dissatisfied; Neither Satisfied nor Dissatisfied; Satisfied; Very Satisfied)

8. **Anticipation of next deployment**
   a. When do you expect your spouse’s next deployment? *Mark one.* (Does not apply, I do not expect my spouse to be deployed; within 3 months; in 4-6 months; in 7-9 months; in 10-12 months; in 13-18 months; in 19-24 months; in more than 24 months)

**Dependent Variable**

1. **CP’s perception of child’s emotional health and well-being**
   a. Indicate how much you agree or disagree with the following statements about this child during the last four weeks. *Mark one answer for each item.* a. My child has been more willing to try new things. b. My child has been acting more “baby-like” than he/she is capable of. c. My child easily becomes irritated or angry with me. d. My child has been more clingy than usual. e. My child has been afraid of doing things he/she is usually ok with. f. My child is demanding and impatient with me. He/she fusses and persists unless I do what he/she wants right away. (Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree)
   b. How well has this child…*Mark one answer for each item.* a. Coped with your spouse’s deployment? b. Been able to stay connected to your spouse given
deployment separations? (Very well; Well; Neither well nor poorly; Poorly; Very poorly)

Which of the following describes your spouse’s reconnection with your child(ren) after he/she most recently returned home from deployment? (Does not apply, we did not have children at the time; Very easy; Easy; Neither easy nor difficult; Difficult; Very difficult)
References


Ramirez, J. (2009, June). Children of Conflict: Since 9/11, more than a million kids have had a parent deployed. Their childhoods often go with them. Newsweek, 153(24), 54—57.

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