

Examining the role of place-based interventions in supporting military families:

A qualitative study of family-centered therapeutic landscapes

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**Abstract**

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United States military families, including active duty, Reserve and National Guard, and veteran families, continue to face challenges and risks to psycho-social health and well-being. Deployments are ongoing and represent a significant source of stress during which families attempt to maintain relationships across great distances and within the dangerous context of wartime service. Injured service members (both those who continue to serve and those who are separated from the military) and their families, contend with multiple issues related to managing symptoms, finding adequate treatment, and carving out lives under new circumstances. Research with military families continues to be essential to understanding how to best support the military members, spouses/partners, and children who sacrifice so much with their service.

This qualitative dissertation uses a grounded theory approach to explore military families' experiences of stress and coping during deployment, especially those of female spouses. In addition, it examines family-level efforts to reconnect and reintegrate post-

deployment and post-injury through participation in a family retreat program. In particular, this study focuses on the *emplaced experiences* inherent to maintaining the home during deployment and attending a place-based retreat. In doing so, this study implements a family systems approach to understanding these emplaced experiences, acknowledging the complex relational connections within families and the ways in which stressful events in particular, have ripple effects through the family unit.

This dissertation is comprised of three papers empirically based on qualitative interviews with parents who attended the National Military Family Association's Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs in 2013. The first paper looks at the deployment experiences of 43 female spouses with children, with particular attention to the often overlooked duties spouses take on as the primary parent on the home front. This paper conceptualizes military spouses as "stay-behind parents" and presents findings related to the stress and coping processes characteristic of this role. The second paper turns to parents' experiences at the Operation Purple retreats and seeks to understand how these family programs function as "therapeutic landscapes," a health geography framework used to understand links between places and healing. Interviews with 50 parents demonstrate interconnected program components related to the physical environment, social environment, and symbolic environment that facilitated participants' therapeutic experiences. The third paper examines respondents' experiences of the nature settings where the Operation Purple retreats occurred, seeking to illuminate the lived (military family) experience of spending time in natural environments. Findings are arranged in three phenomenological domains that both confirm and extend existing nature-health research: Being away, Being in, and Being fascinated.

This study seeks to deepen our understanding of military family life and the ways in which military family systems are impacted by wartime service, deployment, and parental injury. It also aims to direct attention to existing, on-the-ground supports for military families, and place-based programs in particular. By theorizing mechanisms at work in these programs, practices can be further refined and developed to meet the needs of military families.

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## DEDICATION

To the many military service members, spouses, and children I have met over the years, and those in particular who agreed to be part of my study, I acknowledge the trust you put in me. I hope I have done justice to your stories, trials and tribulations, and experiences of working to support your families. Your sacrifices are not forgotten.

## INTRODUCTION

### **Background and Significance**

Across all branches of the Department of Defense, there are over 2.8 million family members, including spouses, children, and dependent adults. The majority of service members are married and close to half are parents (Office of the Deputy Assistant Secretary of Defense, 2014). While service members solely fulfill their military job duties, the effects of military life are not limited to the service member alone, but have substantial spillover effects for family members as well (MacDermid Wadsworth & Southwell, 2011).<sup>1</sup> The needs of military families represent an urgent public health issue with the potential to impact multiple generations. As such, social welfare research with service members and their families, and the programs which support them, is timely and needed.

Since 2001, the United States has engaged in large-scale conflicts in the region commonly known as the Middle East, with concentrated mobilizations to Iraq and Afghanistan. Formally referred to as the Global War on Terrorism (GWOT), these conflicts included military operations known as Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation New Dawn (OND). At the time of this writing, this thirteen-year engagement, the

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<sup>1</sup> Note on use of terms: This study adopts terminology used in other military family research: service member refers to the family member who is active duty, Reserve, National Guard, or separated from the military; spouse refers to the married or romantic partner of the service member- in this study the majority of spouses were female, none were active military. Similarly, the term military parent refers to the service member parent and non-military parent refers to the spouse. All families, regardless of military status (active vs. retired) are referred to as military families. All families in this study had experienced one or more deployments of the service member parent. Additionally, this study focuses on the not uncommon military family configuration of two-parent heterosexual households, but acknowledges the need for research on underrepresented military families such as dual-service families, and families of female, gay, lesbian, and transgender service members.

longest war in US history, has resulted in 6,830 American service member casualties and 52,340 injuries (Department of Defense, 2016), as over 2.7 million troops have been sent to battle zones. The duration and nature of GWOT conflicts increased the cumulative risk exposure for service members and their families and piled demands on military family systems, with great potential to overwhelm family resources and negatively impact functioning, especially for vulnerable and at-risk families. Understanding the effects of wartime on the family unit is vital to understanding the larger impact of contemporary war and conflict.

### **Wartime Service and Contemporary Military Family Life**

Research on the impact of deployments on military personnel and their families has a long history, dating back to some of the first studies of families who had experienced the Vietnam War. While this body of research has contributed generally to our understanding of military family culture, post-September 11th military operations have placed unprecedented demands on military families resulting in distinct challenges and an array of risks to individual and family psychosocial wellbeing.

Deployments during GWOT were markedly different from previous military engagements, especially with regard to deployment schedules, the increased mobilization of reserve and National Guard forces, combat injury survival rates, and communication technology (Paley, Lester, & Mogil, 2013). Prior military deployment cycles included “dwell time,” long periods at home between deployments that allowed service members to recuperate from their overseas duties and families to reintegrate before another deployment (Defense Science Board, 2007). However, since 9/11, the time between deployments has shortened, the length of deployments has increased, as has the frequency with which deployments are extended. As a

result, service members now experience multiple redeployments with brief periods of time at home, leaving them and their families only brief respites to connect.

Wars in Iraq and Afghanistan have taken a toll on all available reserves, impacting a large number of individuals and families. The number of troops required to sustain engagements precipitated increased mobilization of reserve and National Guard forces at similar rates to active duty service members, albeit with different training and orientation to military life (Defense Science Board, 2007). Reserve and Guard components differ from active duty service members who are considered “full-time” military members, may live on military installations (bases), and are integrated, along with their families, into local military communities. In contrast, Reserve and Guard forces normally work and live in civilian communities, often far from the military installations with which they are affiliated. Their military obligations include training one weekend a month. They may be “activated” whenever the need arises to support stateside needs (e.g., disasters, maintaining civil order) or overseas military operations. During GWOT conflicts, Reserve and Guard service members and their families have faced challenges coping with service member operational stress and injuries post-deployment, and negotiating reintegration with fewer community supports (Valenstein et al., 2015).

While advancements in body armor technology, medical interventions, and access to immediate and effective medical services on the battlefield have spared many service members from death and limited the severity of injuries sustained (Gawande, 2004), rates of Post-Traumatic Stress Disorder (PTSD) and Traumatic Brain Injury (TBI) remain particularly high (Tanielian & Jaycox, 2008). These “invisible injuries” have had significant consequences for service members and their families, including coping with inter- and intrapersonal injury

symptoms and managing the care and treatment of the injured parent (Hisle-Gorman et al., 2015; Holmes, Rauch, & Cozza, 2013; Sayer et al., 2010).

Unlike previous conflicts, technology available during recent wars has allowed service members and their families to communicate directly and in real-time, with greater frequency, ease, and reliability. However, this ability to connect through phone calls, emails, and video-calls has presented service members and families with a double-edged sword. With greater access to one another and more frequent contact has come greater visibility of the challenges each party may have been facing, on the front lines and the home front (Paley et al., 2013). Increased communication elevated expectations of how family members would maintain connection and involvement with one another's lives during deployment. Managing technology-assisted interactions and maintaining connections across great distances has been an additional challenge for military families (Cafferky & Shi, 2015; Merolla, 2010).

**Importance of a (military) family systems approach.** Families represent emotionally connected and highly interdependent systems that are greater than the sum of their individual member parts. Thus, family systems theory (Bowen, 1966) is especially useful when examining the impacts of stressful events, such as parental deployment, on family psychosocial health and functioning (Boss, 2002; Maguire, 2012; Riggs & Riggs, 2011; Sullivan 2015). All members of a family unit are affected by both individual and shared experiences; stressful events are not experienced in isolation and have ripple effects that touch each family member (White & Klein, 2002). The family system works to regain homeostasis, or a sense of balance, needed to effectively manage challenges and adapt to changes within and outside of the family (Boss, 2002). Family histories, dynamics, and resources determine how members and the entire unit will cope with stressors compared to other families facing the same stressful circumstances.

Families confronting stressors under strain and with fewer resources may find themselves unable to effectively manage challenges and crises, leaving them vulnerable to additional stressful events and diminishing inner and outer supports. This “pile-up” of stressors and reduction of coping can lead to a cycle of cumulative stress, with serious potential repercussions for socioeconomic and health outcomes (McCubbin & Patterson, 1982).

Deployment rearranges roles, alters routines, and shifts the majority of day-to-day family responsibilities to the non-deployed parent. Impacts of this separation carry on long after the service member returns home as families negotiate the return of the military parent, cope with potential combat stress or other more serious injuries, and reconnect after months apart (Institute of Medicine, 2013). Even a single deployment experience can have detrimental impacts on parent-child and marital relationships, individual health and coping, and family adjustment (Pincus, House, Christenson, & Adler, 2005). During all points in the deployment cycle, families also contend with normative and non-normative events and family processes that intersect to varying degrees with parental deployment (e.g., significant events missed by service member). While single deployments, especially those lasting six months or less, may be more easily managed by families, the norm for most OIF/ OEF/ OND<sup>2</sup> families is multiple separations (Institute of Medicine, 2013). Families who are unable to achieve homeostasis post-deployment and enter subsequent deployments with unresolved issues, are at greater risk for poor outcomes.

**Military family stress.** All military families experience normative and non-normative family life stressors, which, when compounded with the distinct challenges of military family life, can have deleterious effects on psychological health and social functioning (Green, Nurius, & Lester, 2013). Higher rates of psychological injuries, substance use, suicide attempts and

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<sup>2</sup> Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), Operation New Dawn (OND).

deaths, and major depression have been found among military service members with frequent and prolonged deployments (Baker et al., 2009; Bryan et al., 2015; Lew et al., 2006; Okie, 2005; Seal et al., 2009). Deployment has been linked to interpersonal and familial problems, such as increased marital conflict and domestic violence (McCarroll, Fan, Newby, & Ursano, 2008) as well as risk of parental maltreatment/neglect of children (Gibbs, Martin, Kupper, & Johnson, 2007; Rentz et al., 2007).

Military spouses with a deployed partner report significantly more stress than spouses of non-deployed service members (Burton, Farley, & Rhea, 2009). In particular, research has linked deployment with increased rates of spouse anxiety, depression, post-traumatic stress symptoms, and suicidal thoughts (for a review see de Burgh, White, Fear, & Iverson, 2011). Spouses whose partners have psychiatric diagnoses of their own, including PTSD, face even greater levels of stress (Renshaw, Rodrigues, & Jones, 2008) and may experience an exacerbation of symptoms if they have their own trauma histories (Green, Nurius, Milburn, & Lester, 2013).

Military children can also be negatively affected by a parent's deployment and may demonstrate a range of externalizing and internalizing reactions (for a review see Alfano, Lau, Balderas, Bunnell, & Beidel, 2016). Children's reactions can manifest as mental health and behavior problems with repercussions for present and future social-emotional development (Chandra et al., 2010). The impact of deployment on children's mental health includes increased anxiety (Lester et al., 2010) and poor psychosocial health and increased stress (Flake, Davis, Johnson, & Middleton, 2009). Preschool children, in particular, may be at risk for developmental delays (Nguyen, Ee, Berry-Caban, & Hoedebecke, 2014) and behavior problems (e.g., separation anxiety, developmental regressions) (Chartrand, Frank, White, & Shope, 2008). Among older school children and adolescents, having a deployed parent has been linked to increased alcohol

and drug use (Acion, Ramirez, Jorge, & Arndt, 2013) and poor mental health outcomes (Cederbaum et al., 2014; Milburn & Lightfoot, 2013).

The demands of military family life, post 9/11, have taken a toll on family relationships and individual functioning. While individual stressors, including a deployment, may be managed without seriously jeopardizing health and wellbeing, contemporary military families have endured multiple risks compounded with a taxing of resources and support, that has left significant impacts on individual and family-level outcomes (Lester & Flake, 2013). As such, the context within which many families are negotiating deployments, one marked by increased stress and decreased resilience, endangers military family member psychosocial functioning and imperils the entire family system.

### **Supporting Military Family Well-Being**

Considering the impacts of wartime military service across the family system, intervention and prevention programs and services that address family-level challenges are essential to supporting military family health (Lester et al., 2016; Pemberton, Kramer, Borrego, & Owen, 2013). Since 2009, the National Military Family Association has been offering family-centered retreats through its Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs. These programs offer weekend-long, recreation-based family programming in non-clinical contexts (e.g., YMCA camps, outdoor science schools) to help address the multi-layered stressors with which military families contend, including deployment and parental injury. The OP programs serve families affiliated with active duty, reserve and Guard, and veteran service members, across all branches, an important feature that allows a wide swath of military family populations to benefit from programming.

Like other types of outdoor family camps, OP family programs are hosted by camp and education centers located in nature/wilderness settings (e.g., national parks, state parks) with the intent to use the natural environment to help foster therapeutic aspects of program goals. The current study is particularly focused on this aspect of the OP program, and seeks to respond to gaps in research concerning the use of place, and natural environments in particular, in camp-centered programming with military families.

### **Nature-Based Family Camps: Therapeutic Landscapes for Military Families?**

Nature has long been considered salubrious across cultures, with recorded uses of nature to heal dating back to the Middle Ages (Gerlach-Spriggs, Kaufman, & Warner, 1998). This historic and contemporary view of nature as health promoting is evident in a range of practices and places which employ natural elements and offer natural spaces (e.g., trees, gardens, water features) to enhance wellness and contribute restorative qualities (Gesler, 2003). For example, healing gardens in hospitals provide a place for contemplation, reflection, and relaxation for patients, visitors, and staff (Cooper-Marcus & Barnes, 1999). Community-based gardens offer neighbors and residents a place to congregate, grow food, create beauty, and have contact with nature, especially in urban locales (Milligan, Gatrell, & Bingley, 2004). More in-depth nature experiences, such as wilderness and adventure-based therapeutic recreation, enroll nature as a program component and offer a more significant reprieve from daily life and urban centers by taking participants into the out-of-doors (D'Amato & Krasny, 2011; Gass, Gills, & Russell, 2012). Research demonstrates that spending time in and having contact with nature positively impacts physiological and psychological systems, thereby reducing stress and easing mental fatigue (Hartig, Mitchel, de Vreis, & Frumkin, 2014; Kaplan & Kaplan, 1989; Ulrich, 1983). Thus simply being in nature may convey important health-related benefits.

Outdoor recreation is a common way that individuals, and families with children in particular, may access natural environments. A range of activities exist through which families can connect with nature, and connect with one another while in natural environments. Organized family camps (versus individual family camping outings) provide one venue for nature-based, family-centered recreation. Camps that offer interventional programming target family populations coping with specific issues or challenges and integrate more direct therapeutic components along with outdoor recreation activities (Agate & Covey, 2007). Due to camp locations which tend to be away from cities and near or within preserved nature areas (e.g., national parks, state parks), and an emphasis on wilderness-based and environmental education, family camps represent a form of place-based programming, where the physical environment is integral to participants' experiences and outcomes. However, despite the centrality of nature at many if not most family camps, studies have not adequately addressed the context within which camp processes occur, in essence relegating nature as simply background or setting and not an active element of programming. Additionally, while camp research suggests that family camps support family functioning, less is understood about how the social interactions among family members that occur in natural camp environments further enhance relational experiences (Izenstark & Ebata, 2016).

It is to these gaps in the literature that this dissertation seeks to respond. Several areas of research are relevant to the topics described here, and the integration of these areas along with findings presented from this study aim to present new views on the role of nature in supporting military families. Drawing from cultural ecology, structuralism, and humanism, the "therapeutic landscape" concept offers a useful overarching guide to understanding the relationship between places and well-being (Gesler, 1992). Family camps, as therapeutic landscapes, may offer

participants environmental, social, and symbolic supports that work in concert to facilitate therapeutic experiences, thus deepening our understanding of how family camps support family functioning.

In support of these efforts, this dissertation is guided by the following aims:

- a) Examine deployment stress and coping experiences and processes within military families as actualized by the stay behind parent who centrally manages the home, cares for children, and maintains family relationships during spousal deployment.
- b) Better understand the stressors, both normative and those distinct to military family life, which influence health and psychosocial functioning of military families and the links between these stressors and health and well-being.
- c) Examine the links between place (specifically the use of natural environments), therapeutic intervention, and family health in a family-centered program for military families affected by parental deployment and/or combat-related parental injury.
- d) Extend the “therapeutic landscape” concept to encompass family programs which utilize natural settings as an intervention component.
- e) Respond to gaps in the literature regarding the integration of place into family-centered interventions, and specifically a more general understanding of what landscapes promote military family health.

### **Overview of Papers**

This qualitative dissertation includes three separate but theoretically and topically connected empirical papers. Data for each paper are drawn from in-depth interviews conducted in 2013 with participants from the National Military Family Association’s OP programs.

The first paper uses a family stress and coping framework to examine military wives' experiences of spousal deployment, locating these women within their roles and responsibilities as partners and mothers, and acknowledging the interactional nature of deployment across the family (Sullivan, 2015). Research questions for Paper 1:

- How do military wives experience the reconfiguration of household and parenting duties during a spouse's deployment?
- What are the relational contexts within which spouses manage home front responsibilities during deployment?
- How does a spouse's deployment impact military wives' stress and coping processes?

The second paper examines theoretical foundations and intervention processes of the OP family programs, as place-based programs, with particular attention to the *emplaced experience* of the family camp participation. This paper uses the framework of "therapeutic landscapes" (Gesler, 1992; 2003) to articulate the interaction of the physical, social, and symbolic environments in place-based experiences that supports therapeutic goals and participant experiences. Research questions for Paper 2:

- What are the potential supports nature-based family camps offer military service members and their families?
- In particular, what is the role of place in these types of initiatives as an under-examined program element?
- How might the Therapeutic Landscape concept and its associated dimensions (physical, social, and symbolic environments) help to illuminate some of the mechanisms by which place-based programs, like Operation Purple, are restorative?

The third paper examines OP participants' experiences of the natural environments of the retreat settings. All OP programs are located in national parks or similar natural settings (e.g., state parks; private outdoor education sites). The use of these settings is intentional and represents the program's goal to bring families coping with stressful circumstances to environments perceived to be restorative and rejuvenating (Green, Mogil, Buchanan, Lester, 2016; National Military Family Association, 2009). Research questions for Paper 3:

- What is the role of nature in a place-based retreat program for military families?
- What are participants' experiences of the outdoor environments where retreats occurred?
- How did those natural environments distinctly contribute to their own and their family members' retreat experiences?

## **Study Context**

### **Description of Operation Purple Family Programs**

In 2009, the National Military Family Association expanded its OP program to include parents and children together. Previously, OP had served military children in residential summer camp programs around the country, but after hearing a call from parents for programs for the entire family, developed programming for the entire family. In order to best support military families coping with multiple stressors associated with deployment and parental injury, OP collaborated with the Families OverComing Under Stress (FOCUS) Project which was headquartered at the University of California Los Angeles (UCLA). The first pilot OP Family Retreats took place in Washington and California. The program further expanded to serve injured service members and their families with the OP Healing Adventures program. Since 2009, supported by funding from the National Military Family Association and various donors, over 700 military families have been served by OP family programs.

Programs typically last four to five days and take place in locations proximal to areas with concentrated military populations. The retreats are free to families who attend. Family programs are located around the country in order to serve as many families as possible.<sup>3</sup> OP Family Retreats typically serve families who have experienced a deployment within the last 15 months. OP Healing Adventures typically serve families with a wounded service member parent. Average attendance ranges between 16-20 families for each OP Family Retreat and 10-13 families for each OP Healing Adventures program. Families sign up online and complete an application. Healing Adventures applicants go through an additional screening process with a mental health provider to ensure there is a good fit between the program and the families' needs, as well as to assess for any circumstances families may have that would require special accommodations (e.g., physical limitations requiring first floor room, presence of a service dog).

The schedule for OP family programs incorporates the host site's outdoor education and camp activity programming as well as the specific military family resilience curriculum. Host site lead staff are trained in the OP curriculum and then train their educators and support staff who work with families during the retreats. In addition to the host site staff, OP coordinators attend the retreats along with mental health providers. FOCUS Project Trainers lead military family resilience activities during the retreat and Department of Defense, Military Family Life Consultants (MFLCs) provide resources and support as needed.

Participants engage in a number of different outdoor activities designed to foster communication and cooperation between family members. These activities include high and low ropes courses, hiking, canoeing, team-building games, service project endeavors, river rafting,

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<sup>3</sup> Retreats have taken place in the following states: Alabama, California, Colorado, Georgia, Hawaii, Maryland, New York, North Carolina, Pennsylvania, Tennessee, Texas, Virginia, Washington, and Wyoming.

and nature exploration. Programs capitalize on the distinct features of the natural environments where they are located and provide outdoor education along with recreational activities (e.g., teaching about glaciers while canoeing in a glacier-fed lake, teaching about forest growth while hiking in temperate rainforest). Participants also attend FOCUS lead sessions for parents and the whole family that focus on specific military family stressors including parenting before, during, and after deployment, coping with a parent's combat injury, and family communication around stressful shared experiences.

### **Study Sample Description**

Interviews were conducted with parents from 50 families who had attended the National Military Family Association's OP family programs in 2013. Thirty-three respondents had attended OP Family Retreats and 17 had attended OP Healing Adventures. These retreats took place in six states: Maryland, North Carolina, Tennessee, Texas, Washington, and Wyoming.<sup>4</sup> Eighty-three families attended OP family programs in 2013 and all were eligible to participate in the study; 60% (N=50) enrolled and completed interviews.

Respondents were primarily the female spouses of male service members (N=43). However, interviews were conducted with 1 male spouse, 4 male service members, and 3 female service members. All but 2 of the 50 respondents were currently married and all had children under the age of 18.

Demographic information for respondents and relevant family information is provided in each individual paper. A broader description of the military families included in this study is provided in this introduction.

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<sup>4</sup> To protect the confidentiality of respondents, specific locations of retreats and host sites will not be provided.

The majority of families were comprised of a male service member (average age=36.7; active or separated from the military- retired, medically retired, honorably discharged) and a female civilian spouse (average age 35). In four families, the military parent was female (average age= 39.8); two of these female service members were married to male non-military spouses, two were separated from male military spouses.

All families had experienced at least one GWOT deployment, with an average of 2.9 (SD=1.64) deployments.<sup>5</sup> A third of families had experienced four or more deployments. Deployments ranged in length from under six months to over eighteen months. On average, respondents endured more than two years of cumulative time apart due to deployment; a third of families experienced three or more years of cumulative absence; and one family who had been through seven deployments, counted over sixty months apart.

A total of 145 children were represented in this study, ranging in age from 5 months old to 26 years old, with an average of 2.9 children per family. The majority of children were age 12 or younger (70.3%). Half of families reported some degree of financial difficulty.

Race/ethnicity of spouses was as follows: 70.8% White, 18.8% Hispanic, 4.2% African American, 4.2%% Asian American, 2.1% other. Spouse education level ranged from some high school to graduate school; 37.5% had completed some college and 35.4% had a college degree or higher. Fifty-eight percent of spouses were employed, primarily in part time employment. Nine spouses (18.8%) had a history of military service, ranging from 1-6 years.

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<sup>5</sup> One respondent and her children had experienced no deployments with the respondent's current husband with whom she attended the retreat. Separately she and her children had gone through four deployments with the respondent's first husband/children's father. The respondent's current husband had been deployed once before they were together.

The breakdown of race/ethnicity of service members was as follows: 70% White, 14% African American, 12% Hispanic, 2% Asian American, 2% Native American.<sup>6</sup> Military parent education ranged from high school to graduate school, the majority had completed some college (53.1%). Number of years of military service ranged from 3 to 29, (M=13.5, SD=5.81).

There were a total of 23 active duty service members representing the following branches: Army (N=10), Marines (N=5), Navy (N=7), Air Force (N=1). Rank/paygrade for active duty service members ranged from E-5 to O-5, with mid-level enlisted (E-5 to E-7) making up the majority (78.3%). Active members of the National Guard (N=3) and Reserves (N=7) were also represented in this study. One third of service members were separated from the military: medical retirement (N=10) and retirement or honorable discharge (N=7).

Almost three-quarters of all service members reported one or more service-related injuries. Of those injured service members, 65% reported Post-traumatic Stress Disorder (PTSD), 28% traumatic brain injury (TBI), and 72% some kind of physical injury. Types of physical injury included limb amputation, shrapnel wounds, burns, spinal injuries, vision and hearing loss, asthma, and sleep apnea.

### **Conclusion**

This study is among the first of its kind to examine military family participants' lived experiences of attending a nature-based family camp program. In doing, so this project incorporates research from various fields that while disconnected in the literature, dynamically

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<sup>6</sup> The race/ethnicity service member demographics represented in this study reflect national military service trends with 31.2% of service members identifying as racial/ethnic minorities in the Department of Defense, and 25.6% in the Reserve and National Guard components (Office of the Deputy, 2014). However, gaps in military family research remain, particularly pertaining to understanding the experiences of racially and ethnically underrepresented service members and their families.

interact in practice at the OP retreats. Understanding persons in their environments is a central tenet of social welfare research. Military family life is highly contextualized by the environments in which it takes place, both at home and overseas, and in the places in between where, at least during deployment, military families work to maintain connections and relationship bonds. Examining the places military families go to reconnect and strengthen ties can help direct needed attention to the ways in which programs and services can maximize supports. The three papers that follow this introduction aim to speak to these inquiries and contribute to the broader understanding of military family challenges, needs, and services.

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PAPER 1: CONCEPTUALIZING THE STAY-BEHIND PARENT:  
A QUALITATIVE STUDY OF MILITARY SPOUSE DEPLOYMENT EXPERIENCES

### Introduction

The term “stay-at-home parent” typically denotes the family member who is the primary caregiver and homemaker. Among heterosexual couples, until very recently, this role was assumed to be held by women. While it has become more common in the United States for both husband and wife to work outside the home, and share responsibilities for housework and childcare, gendered family household patterns persist (Killewald & Gough, 2010; Zimmerman, 2000). When the role of stay-at-home parent falls on men, it is qualified as “stay-at-home dad” to signify an alteration of traditional family norms (Brescoll & Uhlmann, 2005). However, certain life events can reassign household responsibilities: injury, illness, unemployment, or a parent’s absence. For military spouses, wartime deployment represents such a shift. During these periods when the service member spouse is away, an unspoken family contract assumes that the non-deployed parent will stay behind, taking on extra household roles, in addition to new responsibilities specific to the stress of wartime deployment.<sup>1</sup>

The expansion of military engagements has created unprecedented challenges for military service members and their families (Paley, Lester, & Mogil, 2013). While earlier conflicts were characterized by shorter, single deployments, today’s military families contend with frequent,

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<sup>1</sup> Note on use of terms: This paper adopts terminology used in other military family research: service member refers to the family member who is active duty (e.g., employed full time in the military), Reserve or National Guard (civilian who is actively part of the military reserve component), or separated from the military (e.g., retired, medically retired, honorably discharged); spouse refers to the married partner of the service member- in this study the majority of spouses were female, none were active military. Similarly, the term military parent refers to the service member parent and non-military parent refers to the spouse. All families, regardless of military status (active vs. retired) are referred to as military families. All families in this study had experienced one or more deployments of the service member parent.

prolonged deployments providing less time to reunite before the next deployment (Institute of Medicine, 2013). Thus, military families negotiate significant periods of family separation, whereby non-deployed spouses assume considerable responsibilities on the home front.<sup>2</sup>

Although deployments differ across military branches in length, frequency, and risk exposure, they generally challenge families with a major separation that disrupts routines, strains relationships, and impacts well-being (Department of Defense, 2010; Lester et al., 2016; Rodriguez & Margolin, 2015). Although it is well known that service members face distinct risks while deployed to combat, evidence increasingly links deployment with adverse outcomes among family members at home (Alfano, Lau, Balderas, Bunnell, & Beidel, 2015; Gerwitz, Erbes, Polunsky, Forgatch, & DeGarmo, 2011). Among non-deployed female spouses, deployment has been linked with numerous negative social and psychological health outcomes, such as depression, anxiety, and acute stress reactions (de Burgh, White, Fear, & Iverson, 2011; Mansfield et al., 2010).

Research has pointed to several aspects of deployment that make it arduous for those left behind, including worry for the deployed spouse's safety, communication challenges, media exposure, and a lack of support (Asbury & Martin, 2012; Kees, Nereberg, Bachrach, & Sommer, 2015; Larsen, Clauss-Ehlers, & Cosden, 2015; Maguire & Parcell, 2015). However, to date, there is a dearth of attention paid to the ways in which the stay behind spouses experience this reconfiguration of duties, how it transforms their everyday life realities, and the ways it challenges their coping responses (Wilson & Murray, 2016).

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<sup>2</sup> Although the spouses referred to in this paper were all female, the larger study included male spouses as well. Families comprised of male spouses and female military service members represent an understudied population deserving of greater attention.

This study introduces the concept of the “stay-behind parent.” Drawn from the literature and in-depth, semi-structured interviews with 43 female military spouses with children, this concept locates these parents within the context of deployment-specific family separation. During this time, the sole responsibility of managing the household, caring for children, and psychologically and logistically tending the needs of the family falls on them as the ones who *stay behind*. While I focus on female parents, I employ a family stress and coping lens (Boss, 2002; Riggs & Riggs, 2011; Sullivan, 2015) to situate their experiences within the dynamics of the family and illuminate their roles in maintaining family functioning during deployment.

In what follows, I present a brief review of research relevant to the main foci of the study, including family separation, household labor, and military family deployment stress. This literature review is followed by a description of the qualitative methods employed in this study. The results section substantiates the main findings of the study, namely the concept of stay-behind parent and related aspects of this role as well as respondents’ coping responses to deployment. Findings underscore how deployment is a situation to be managed and endured for months, and sometimes years. This study illustrates important complexities and nuances in the everyday realities and burdens of military spouses. The discussion section summarizes findings in concert with relevant literature, and concludes with recommendations for military family support endeavors.

### **Literature Review**

Due to the nature of military family life, wherein the majority of service members are male and the demands of service include frequent moves, distance from kin, and long work hours

by service members—household patterns assume a gendered division of labor.<sup>3</sup> Non-military spouses, typically women, perform the majority of the housekeeping and childrearing duties, with varying degrees of emotional and logistical support from their husbands. Managing the home front during spousal deployment brings added responsibilities of attending to the emotional and psychological effects of family separation and combat on their spouses and children. Analytically capturing this complex reality involves some modification in what is known about the practical and psychological aspects of household labor, as well as the impacts of deployment.

### **Division of Household Labor and Family Configuration**

Families in general face multiple challenges concerning the configuration of roles and responsibilities, including fundamental decisions regarding divisions of labor, in and out of the home. Although beliefs and practices regarding the roles of men and women in the home and workplace have changed significantly in recent decades, the consensus on who should perform the unpaid work of homemaker and childrearing has developed much more slowly (Cherlin, 2016).

To be sure, among heterosexual couples, more women are working outside the household, and more men are doing household work (Goldscheider, Bernhardt, & Lappegård, 2015). A growing body of research on household labor has sought to understand and document these complexities in light of complicated and shifting social processes (Esping-Anderson & Billari, 2015). Although there has been some debate on how much the gender balance has shifted

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<sup>3</sup> This literature review focuses on heterosexual couples with children. Much can be gained from research with same-sex couples regarding divisions of labor; however, considering the traditional configuration of two-parent military families in which the majority includes a male service member and female spouse, studies on heterosexual couple household labor practices are most relevant to this particular study (all respondents were females married to male service members).

and why, how it has changed, and what it means, there remains an imbalance, tilting heavily towards women fulfilling much of the work at home (Bianchi, Robinson, & Milkie, 2006). Divisions of household labor have been linked to psychological well-being, with negative outcomes, such as depression, more common among women who assume, or perceive to take on, greater responsibilities at home (Claffey & Mickelson, 2009; Glass & Fujimoto, 1994; Khawaja & Habib, 2007; Saxbe, Repetti, & Graesch, 2011).

In much the same way that civilian women are burdened with an unequal share of household and parenting *carework*, female military spouses also have been shouldered with the bulk of household and childcare duties. In recent decades, more U.S. women have entered the workforce, including wives of armed forces personnel. However, in most military families, traditional roles persist. Military wives are more likely to be unemployed and caring for young children than their civilian counterparts (Lim, Golinelli, & Cho, 2007). Currently, males comprise 84% of the total U.S. military force (Office of the Deputy Under Secretary of Defense, 2014). Furthermore in homes where men are deployed service members, whether or not the stay-behind parent is working (40% of active duty female spouses are employed, Office of the Deputy, 2014), she has little choice but to assume all household duties.

### **Parental Absence and Family Separation**

Periods of parental separation can upheave family dynamics and roles, while bringing new sources of stress. Military families join other family populations who negotiate a parent's absence (Merolla, 2010b). Studies on families separated by incarceration (Arditti, Lambert-Shute, & Joest, 2003; Arditti, 2005), political conflicts (Rousseau, Rufagari, Bagilishya, & Measham, 2004), and migrant work (Dreby, 2010) have explored the related strains of family separation, especially when compounded by contexts of danger and uncertainty. The lengthy

absence of one parent shapes the experience of the parent left behind to care for children and tend the home. Military deployments and other family separations have been termed periods of “ambiguous absence,” when family members are psychologically near, yet physically remote (Allen, 2000; Faber, Willerton, Clymer, MacDermid, & Weiss, 2008).

Within the context of family separation, parents left behind are on their own to manage the day-to-day realities of family life. Included in these responsibilities, are the ways in which one parent’s absence creates “relational maintenance” tasks for the stay-behind parent (Merolla, 2010a). These tasks help maintain psychological and relational presence, and include long-distance communication, practical and logistic caretaking (e.g., mailing money or supplies, visits), and intrapersonal processes of remembering, worrying, and thinking about the absent parent/spouse (Maguire, Heinemann-LaFave, & Sahlstein, 2013; Merolla, 2010b). Thus, these partnered yet temporarily single parents are charged with bridging relational distance, forced to stretch their “social relations across time and space” (Giddens, 1984, as quoted by Merolla, 2010b, p. 172) to encompass all family members, near and far.

### **Stress and Coping in the Military Family System**

Family stress and coping theory contextualizes individuals within their family unit (e.g., their roles, relationships), and the entire family within broader systems and processes that can impact how families manage stressful events (e.g., community, culture, socio-economic factors) (Boss, 2002). Stressful experiences can negatively impact physical and psychological well-being (Lazarus & Folkman, 1984). How individuals evaluate stressful events (e.g., challenging vs. manageable) and the adequacy of the personal and social resources available to them, direct responses to the event (Folkman & Moskowitz, 2004).

Coping is aimed at reducing and managing problematic emotional reactions, accessing resources and support, and alleviating other sources of stress. It may be best understood as a continuum, with maladaptive outcomes on one end, and more adaptive outcomes on the other (Lavee, McCubbin, & Patterson, 1985; Maguire & Parcell, 2015). Appraisals, cognitive and affective perceptions of potentially stressful events or circumstances, play an important role in how individuals cope and respond to their experiences (Lazarus & Folkman, 1984). Differences in appraisal responses helps to explain differences in outcomes, whereby some individuals or families can manage situations, while others fall into crisis (Boss, 2002).

Military deployments present military families with significant and stressful experiences of family separation. Deployment has been linked to myriad psychological adjustment issues in military spouses, (for a review see de Burgh, White, Fear, & Iverson, 2011). According to research, military spouses report feelings of loneliness, isolation, and worry for the service member's safety (Warner, Appenzeller, Warner, & Grieger, 2009); these feelings gain strength as deployments lengthen (SteelFisher, Zaslavsky, & Blendon, 2008). The emotional wear and tear of deployments increases stress and somatic symptoms in spouses with deployed partners (Burton, Farley, & Rhea, 2009). As a result, these spouses seek more mental health services and receive more psychiatric diagnoses (Mansfield et al., 2010). While deployment at any point brings stress, deployment during critical life periods such as pregnancy further increases spousal stress, and impairs coping (Haas & Pazdernik, 2007). Going through deployment while parenting—especially young children—increases negative outcomes in spouses (Gibbs, Martin, Kupper, & Johnson, 2007; Johnson et al., 2007; Weins & Boss, 2006).

Military spouses' perceptions of deployment stress have been shown to predict how they cope during the separation (Padden, Connors, & Agazio, 2011), and may outweigh the actual

number of stressful events in predicting presence and severity of mental health outcomes (Warner et al., 2009). Optimism, defined as positive thinking and outlook, can bolster coping (Padden et al., 2011), while more negative cognitive processes (e.g., rumination, denial, avoidance) decrease physical and emotional well-being (Burrell, Adams, Durand, & Castro, 2006; Kees, Nerenberg, Bachrach, & Sommer, 2015). In addition, military spouses' access to, and positive perceptions of support during deployment has been found to buffer associated stressors (Pittman, Kerpelman, & McFayden, 2004; Keith & Nguyen, 2012).

Although literature that examines military spouses and deployment is increasing, there are still gaps surrounding the intricacies of the stay-behind parent's experiences of stress and coping (Cafferky & Shi, 2015; Davis, Ward, & Storm, 2011). Deployments typically span many months, and entail long-term adaptation (Dimiceli, Steinhardt, & Smith, 2010). Because of this, the psychological stress of such periods can extend for years. For the non-deployed parent, these periods shift the bulk of home front responsibilities squarely on her shoulders. But, in her husband's absence, she must also fill his temporarily vacated role at home while maintaining connections with her distant partner. There are many aspects of spouses' deployment experiences that bring their own forms of strain and distress, as well as coping and adaptation. The present study aims to fill gaps in the literature by delving into the everyday experiences of military spouses during deployment, their responses and appraisals of their realities, and how they manage the home front by entering deployment mode as a means to endure extensive periods of family separation.

## Methods

### Participant Selection and Recruitment Procedures

This study draws from in-depth, qualitative interviews with 43 female military spouses who attended the National Military Family Association's Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs in 2013.<sup>4</sup> Operation Purple programs bring military families to national parks or similar natural areas<sup>5</sup> for multi-day retreats<sup>6</sup> in order to strengthen their connections following a recent deployment (OPFR), and/or while coping with a parental injury (OPHA) (Green, Mogil, Buchanan, & Lester, 2016).

Respondents were spouses of active duty and veteran service members (e.g., medically retired, honorably discharged). Purposive sampling was used to select respondents who met the following criteria: 1) parent primarily responsible for applying to the Operation Purple program;<sup>7</sup> 2) female spouse of military service member; 3) experienced at least one deployment; and 4) parenting a child under the age of 18. All female spouses in the study met these criteria.<sup>8</sup>

After securing approval from the University of Washington Human Subjects Division to conduct the study, respondents were recruited in two ways. I worked with Operation Purple to recruit respondents who had already attended retreats prior to data collection (May through July, 2013). These respondents were informed by Operation Purple that a study was underway, and

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<sup>4</sup> Respondents were part of a larger study examining therapeutic recreation and military family well-being.

<sup>5</sup> For example, state parks or environmental education centers.

<sup>6</sup> Most retreats lasted four days, Friday through Monday; Wyoming retreats lasted five days.

<sup>7</sup> The parent primarily responsible for applying to the Operation Purple family program was used as selection criteria in order to choose participants who would be most aware of current family challenges and goals for attending the retreat. The majority of these individuals were the non-military female spouses.

<sup>8</sup> While the broader study included interviews with male and female service members and a male spouse, they were not included in the analysis for this paper.

that their contact information (phone and email) would be shared, unless they indicated that they were not interested in participating. Respondents who attended retreats in August through November of 2013 were recruited directly at the retreats. Participants received a brief overview of the study, and were asked to provide their contact information. Participation in the study was confidential, and Operation Purple had no knowledge of families' participation.

Upon receiving contact information, I emailed participants with additional information about the study, including objectives, types of questions I would be asking, interview length, and incentives. Participants who wanted to participate, contacted the researcher, and were directed to a password-protected website where they could enroll. After participants enrolled, I provided an Information Statement and scheduled the interview.

### **Interviewing Procedures**

Each respondent was interviewed once. All interviews were conducted by phone and Verbal consent was secured for participation and for digitally recording the interview. Most respondents chose to be interviewed from home. Interviews lasted one to two hours, and averaged 83 minutes. A participant identification number was given to all respondents, and demographic data (e.g., proper names of family members, places of work) were de-identified. After interviews were complete, each respondent received a \$50 gift card.

The interview guide consisted of open-ended questions with follow-up prompts used to probe deeper (Charmaz, 2006). For this paper, I relied in particular on questions pertaining to deployment experiences: How many deployments have you and your family experienced? How long did each of those deployments last? (Probes: Give me a sense of the timing of those deployments, were they recent, spread out, back-to-back?; How would you describe the nature of those deployments in terms of danger, location, ease of communication, and any other details?;

How would you describe the amount of time your spouse has had to be away from the family in terms of total time/ percentages/ etc.?) What are some of your current military family life challenges? What are some of the ways that you manage or cope with those challenges?

### **Demographics**

Demographic information for respondents, as well as pertinent information about their family contexts is provided below (also see Tables 1.1 and 1.2). All of the respondents were female, and their average age was 35. All respondents were married to male military service members, and parenting at least one child under the age of 18 (average number of children was 2.9). About one-quarter of respondents identified as a racial or ethnic minority.<sup>9</sup> Educational backgrounds ranged from some high school to graduate degrees. Seven female spouse respondents were former military (one to six years of service); none had been deployed to combat. Nearly half of the respondents were employed outside of the home, primarily part-time. The majority of respondents were affiliated with mid-level rank service members (E5-E7). A little more than half described their family financial situations as entailing some degree of economic hardship.

The majority of respondents (N=35, 81.4%) had experienced two or more spousal deployments; 15 respondents (35%) experienced four or more deployments. Spouses' deployments ranged in length from under six months to more than one year. Respondents experienced an average of more than two years of cumulative time apart from their husbands (sum total of months deployed); 13 respondents (30%) experienced three or more years of

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<sup>9</sup> Military wives, in general represent a more racially and ethnically diverse group than civilian wives (Lim, Golinelli, & Cho, 2007). The sample for this study approximately reflects the broader racial/ethnic makeup of military families where about 30% of service members and spouses identify as a racial/ethnic minority (Office of the Deputy, 2014).

cumulative absence, and one family went through seven deployments, with over 60 months apart.

### **Data Analysis Procedures**

All interviews were transcribed verbatim (Poland, 2002). In line with a grounded theory approach (Corbin & Strauss, 2008; Glaser & Strauss, 1967), which “focuses on the nuances of people’s experiences to develop and explore concepts and theories” (Manzo, 2005, p. 71), I employed an open coding strategy and multiple phases of code development (Charmaz, 2006). Analyses were conducted using the qualitative analytic software ATLAS.ti, version 7.

Transcripts were first read in full and coded line-by-line (Charmaz, 2006). During the first phase of coding, themes and patterns were identified in relation to the research questions (Braun & Clark, 2006). This phase of coding was guided by the goal to develop a “comprehensive summary of events in the everyday terms of those events” (Sandelowski, 2000, p. 334). To this end, the contents of first-phase codes consisted primarily of respondents’ comments. A priori meta-labels based on themes found in the literature (e.g., deployment stress, coping responses) were also used to help identify and articulate major patterns, and were linked to specific interview questions.

The second phase of coding involved a more conceptual level of analysis (Charmaz, 2006). Initial codes developed in phase 1 were further developed to reveal sub-categories and relationships between concepts (Corbin & Strauss, 2008). Thematic networking was used to organize and understand links between codes (Attride-Stirling, 2001).

To support a peer review process verifying code development and interpretation of data, regular consultation with dissertation committee members was arranged by the researcher, and with stakeholders familiar with the needs of military families. Throughout the analytic process,

relevant literature on military families and family stress and coping was consulted to confirm themes and patterns, and identify new theoretical developments.

### Results

During our conversation, Evey,<sup>10</sup> an Army spouse and mother of two, explained to me, that military wives “are known as ‘Household Six’ because they’re in charge of the household.” In the military, call signs vary, but the numeric designations assigned to positions remain the same. The number “six” is attached to the person in charge of a unit or company, usually the highest-ranking officer (e.g., the commander). The duties of *Household Six*, the highest in command at home, lie within the realm of the primary parent and household manager. In the gendered world of military family life, this person is overwhelmingly the female spouse. This tongue-in-cheek designation is so ubiquitous that one can easily find an assortment of Household Six paraphernalia online (e.g., bumper stickers, mugs, t-shirts).

During deployment, this distinction of family position is quite explicit. In fact, roles magnify and intensify such that military spouses’ capacities are often stretched to the limit. Deployment turns Household Six into the *stay-behind* parent. It upends household and parenting responsibilities, reconfiguring the role of military wife and mother. Deployment centralizes the role of stay-behind parents within the realm of the home. All caretaking duties fall to them to manage, including solo parenting of children and attending to all routines, activities, and chores related to meeting a family’s daily needs. As one respondent said: “It’s a lot. It’s a lot for two parents. It’s certainly a lot for one parent.”

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<sup>10</sup> All respondent names and potentially identifying information have been changed to protect confidentiality.

During deployment, military spouses manage their duties and cope with the many demands deployment brings. Carolyn, mother of two and wife of an active duty Marine who has been deployed twice, described herself and other spouses during deployment as “survivors,” saying, “We were all left in our homes with our kids to continue our duties and keep the home intact, and we did that, we survived that.” Carolyn’s statement reflects a determination and sense of pride in fulfilling those duties; however, it also reflects the encompassing stress of deployments. Respondents used a variety of strategies to survive deployment. Coping centered on the ways in which respondents prepared for and managed their increased responsibilities with varying levels of support. Although external and practical processes directed how respondents coped, internal appraisals of their situations, abilities, and general circumstances also impacted how they managed.

The presentation of findings below is divided into two sections (See Table 1.3 for a list of themes). In the first, I explore dimensions of the stay-behind parent experience, and in the second, I examine respondents’ coping processes during deployment.

### **Conceptualizing the Stay-Behind Parent**

Deployment distinguishes stay-behind parents from stay-at home parents in how it binds them to the home and links them to the battlefield. In my interviews, three important dimensions of the stay-behind parent experience emerged: 1) de facto single parenting; 2) filling dual parenting roles; and 3) maintaining connections: tending the expanded family home.

**De facto single parenting.** Many respondents referred to themselves as single parents. During periods of spousal/parental absence, they assumed sole responsibility for shopping, cooking, cleaning, managing finances, completing paperwork, overseeing home repairs, accessing health benefits, communicating with military family support officers, maintaining

relationships with extended family, and parenting multiple children.<sup>11</sup> Heather, mother of two, who was married to her Navy spouse for ten years, said, “I would say a good solid three years I felt like I was a single mom.” Heather shuttled her children to school, made sure they did their homework, enforced the chore chart, and placed her own education and career on hold. Taking on the identity of a single mom despite being married with a committed, yet deployed co-parent, captured Heather’s acknowledgement of her circumstances in which she was responsible for everything. Identifying as a single parent reflected a coming to terms with the added responsibilities during deployment, and legitimized some respondents’ experiences.

De facto single parenting was difficult for most respondents. However, some viewed their additional duties as temporary or part of the job, and thus, experienced single-parenting as less burdensome. For other respondents, the single parent identity concretized their reality as the sole caregiver, and bolstered them psychologically to cope with the demands of deployment. As one respondent said about preparing for life during a yearlong separation, “I know what to expect...I’m gonna do it all by myself.”

A few respondents expressed resentment regarding the unanticipated reality of their married lives. Although time apart was an expected aspect of military family life, for this group of spouses, extensive separation created a paradox in the lived experience of being partnered yet single parents. Anna said, “I just label myself as a single parent...I’m still married and we’re together, but [my husband is] not around.”

Although a few respondents were single parents before marrying their current military spouses and had practical and organizational systems in place that did not necessarily require their husband’s support or assistance, prior experience as a single parent did not automatically

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<sup>11</sup> Respondents in this study had an average of 2.9 children. The national average number of children in U.S. military families is 2.0. (Office of the Deputy, 2014).

ease deployment stress. For some, the expectation of support that came with marriage, and the return to single parenting within the context of deployment made negotiating life even more stressful than when they were (unmarried) single parents.

**Filling dual parenting roles.** De facto single parenting describes the role and the duties of the stay-behind parent during periods of deployment, yet it was not the only dimension present. In relation to the stay-behind parent's duties on the home front, the military parent's deployment leaves a void in household responsibilities to be filled by those staying behind. Although respondents were alone as parents during deployment, because children's needs and expectations could not be placed on hold, respondents often were left to fulfill their husband's roles. During deployment, they did what they could to step into their husband's shoes, practically and emotionally, and with varying levels of success. At times, they mastered tasks and proved to be adequate stand-ins. But at other times, they exacerbated the hurt feelings that came with the military parent's absence.

Some respondents embraced the novelty of expanding their roles during a deployment with less strain and consequence. One respondent recounted learning to throw and catch a football in order to help her adolescent son sharpen his skills when he practiced at home. Another described how her family would tease her by calling her both mom and dad throughout the deployment. Other respondents described taking actions to help maintain their husband's presence in the family, even as they assumed some of his responsibilities. For example, Molly recorded events at home so she could remember to tell her husband about them. She said, "I wanted him to feel like, hey, you're still the man of the house. You're still their dad. You're still my husband." Although Molly's husband was physically absent from the daily home activities, she made the effort to keep him engaged.

But for other respondents, the stress of separation overwhelmed their abilities to make up for the absent and missed deployed parent. While these missed moments impacted parent and child relationships, the stress of absence added to the stay-behind parent's emotional and logistical duties. Several respondents described moments when they were unable to adequately fill roles of both mom and dad. Heather said there were times during deployment when she wanted to sleep all day, because without the expectation of her husband coming home, she felt physically and psychologically drained. Julia said that her husband's ongoing absence almost ruined them as a family. Indeed, the responsibility and pressure to assume their husband's duties was stressful for many respondents, and they looked forward to regaining equilibrium in their households.

**Maintaining connections: Tending the expanded family home.** An additional set of tasks, distinct from their duties of tending to their children and the household, was present in respondents' narratives. Deployment strains family relationships, in part, by the ways forces families into long-distance relationships—all within a context of concern for the military parent's safety. Life on the battlefield is dangerous, with extreme risks for injury and even death. Life on the home front can seem tedious, mundane, and repetitive by comparison. Bridging these two very different worlds in order to maintain family connections is an additional task of the stay-behind parent.

The lived experience of maintaining these bridges was illustrated by Courtney, mother of five and longtime Army spouse, when she said that during deployment, she felt like she was “taking care of two households.” She explained that her home front responsibilities expanded to include the temporary home of her husband overseas. Through communication with her husband,

sending care packages with reminders of home, and her own internal processes of concern, she tended to this second household.

Respondents did not have two lawns to mow or two pantries to fill, but the felt sense of taking care of two households, described by Courtney, implied that stay-behind parents were compelled to direct their energies and worries to multiple places. They mailed packages with sentimental items (e.g., photos, letters), snacks, and basic necessities (e.g., lip balm, sunscreen, baby wipes). Respondents also described a constant undercurrent of concern for their spouses' safety, comfort, and well-being. Although most respondents agreed that anything could happen at any time, some knew their husbands were unlikely to be in harm's way (e.g., deployed on a ship or outside of high-combat areas). Other respondents, especially those married to service members whose job duties placed them in the line of fire experienced a constant level of stress and concern throughout the deployment that only dissipated upon reintegration.

In respondents' descriptions of the various ways they maintained contact with their husbands, intentional communication served as a coping strategy that allowed them to invest in their relationships despite the physical absence. Some respondents described more old-fashioned modalities that worked for them. With her spouse deployed on a ship that prohibited electronic communication, Heather stayed in touch by mailing handwritten "love notes" each day of his deployment. Neva took a job at her children's school where she could monitor them, while keeping in touch with her husband more easily, as she could bring the phone to her daughters' classrooms when he called from Iraq.

During deployment, respondents invested substantial time and energy inhabiting cyberspace, where they used technology to experience a sense of co-presence, maintain connections, and engage with each other's lives. One respondent said of a yearlong deployment: "We lived

through Skype.” Video technology helped respondents experience a sense of proximity that was reassuring and allowed some continuity in day-to-day relationships. Although there was no substitute for daily, in-person immersion in family life, Desiree said that Skype allowed her husband to watch their young children play and interact, “growing up together,” a level of engagement that “made a huge difference” in how they maintained their connections. Stephanie described how Skype not only helped her family maintain connection during deployment, but also helped to ease reintegration. Because her children and husband Skyped almost every day of the deployment, when he came home, everyone adjusted more easily to his presence.

Although technology was helpful, efforts by respondents to communicate and maintain connections during deployment became stressful for some. For example, many struggled with the quality and reliability of technology, high overseas Internet costs, and problems with time differences, making it difficult to reach each other for more than a quick check-in, or to connect with children who had fallen asleep. Many respondents described being tethered to their phones, even sleeping with them so they would not miss a call. These spouses were on constant alert for incoming communication, and lived partly in the present moment, and partly ready to drop everything to connect with their husbands.

The use of technology to bridge distance also had the unintended consequences of widening it. Webcams created windows between the worlds of the home front and the battlefield. But what was observed on either side sometimes increased the sense of distance, as the nearness of Skype reminded participants just how far away they were. For example, in her attempts to make her husband feel connected to home life and their two boys, Brenda regularly sent him photos, videos, and updates. However, instead of pulling him into the fabric of the family and lessening the sense of emotional distance, this sharing had the opposite effect. He responded with

what she described as jealousy, blame, and guilt, faulting her for his absence and criticizing her level of involvement with their sons.

In addition, windows into the worlds of deployed spouses had another unintended consequence: it exposed family members to potential sources of distress and trauma. Several respondents discovered how much danger their husbands faced while communicating with them, especially on video calls, when they could see and hear explosions. For them, communication carried an added burden of worrying that a phone call or video chat would be the last; thus, communication was emotionally laden. Stay-behind spouses coped with the difficult tasks of updating a spouse on family news, receiving input on a parenting or household decision, sharing small talk, or arguing about a relationship issue, while simultaneously processing the danger deployed spouses faced.

The relative regularity of communication also created a fragile sense of normalcy that was easily broken by the unpredictability of both combat and of Internet connectivity. Respondents described abrupt silences or disconnections in the middle of conversations, and communication lapses that could last for several days, often causing fear that the worst had occurred. Often, these unexpected breaks resulted from deployment conditions, increases in combat, or safety protocols that shut down all but operationally necessary lines of communication. But sometimes, these lapses in communication were the result of non-communication on the part of spouses. This type of response had other effects. For the few stay-behind spouses who recounted such examples, knowing their husbands could reach out but chose not to, was painful and frustrating. It also had lasting repercussions for their marriages, increasing emotional distance and fostering resentment. In response to what Kristina perceived

as volitional disregard during her husband's first deployment when he only called "every couple months," Kristina said she "stayed angry for two years."

### **Coping Processes During Deployment**

While respondents assumed the role of the stay-behind parent, not all of them did so with ease or conviction. When I asked Ally if she had a system for handling deployments, she responded, "No, it's hard every time it happens, especially going into it. I feel like there's no rule book for this." Although no guide exists to ease the stay-behind parent's experience with deployment, each respondent found ways to cope. Three areas of coping emerged in respondents' narratives: 1) getting into "deployment mode;" 2) drawing on sources of support; and 3) appraisals and responses to deployment.

#### **Getting into "deployment mode:" Managing the demands and duties of deployment.**

In order to endure months of separation from their husbands and their increased responsibilities, many respondents shifted into what one respondent termed "deployment mode," practically and psychologically preparing to accept the transfer of household and childcare responsibilities in the absence of spousal support. Deployment mode is a mindset that helps to normalize potentially turbulent periods of spousal/parental absence. Getting into deployment mode entails drawing upon coping strategies stay-behind parents use to help them adapt to, or cope with stressful circumstances when they assume greater emotional and logistical homemaking and caretaking duties.

How respondents managed their home front duties—their individual deployment modes—spanned a continuum from over-management to disorganization. These extremes were described by a few respondents; most were somewhere near the center of this continuum, psychologically bolstered by getting into deployment mode, and generally managing their

responsibilities. However, enduring deployment was not a linear experience, and many respondents described experiencing periods of emotional equanimity, as well as times of upset.

Those who drew little distinction between deployment and non-deployment periods expressed less stress in how they perceived their duties. Ally noted, “even though you have a part of your family that’s deployed, life still goes on.” Assuming the attitude that life went on, deployment or not, helped these respondents manage long periods of being left behind, and smoothed disruptions in home and family life. Others identified as being highly self-reliant and independent, with little need for a spouse’s support, and therefore, less fazed when he was absent. “When [my husband’s] gone,” said Kristina, “actually, honestly, nothing changes, except for the fact that he’s not [physically] here.” Similarly, Monique said, “it’s not really any different. It’s just one less mouth to feed.” Nevertheless, whether or not the continuity of roles made life easier for stay-behind spouses, deployment provided a dose of reality that meant that the work of family life was never-ending.

Experiencing a previous deployment helped some respondents anticipate potential challenges, and provided them with opportunities to create systems for managing family life during separation. For them, deployment mode entailed taking proactive approaches prior to deployment to prepare themselves and family members for time apart. Before Josie’s husband deployed, she informed her four children, “Things are going to be different for nine months,” but when deployment ended, life would go “back to normal.” Josie was preparing her family for the changes, rearranging, and potential chaos that accompany life during deployment. Naming life during deployment as “different” also gave her family permission to endure it any way they could, with the expectation that life would stabilize once their service member returned.

Previous experience with deployment and other significant periods of separation also provided some respondents with a sense of knowing what might accompany deployment, thus leading to a greater sense of ease and control. This increased sense of agency was illustrated in how some women drew from past experiences in anticipating the occurrence of stressful events such as an illness, major repair, or accident. In fact, one respondent referred to the multitude of unanticipated situations as the “Murphy’s Law for the military spouse.” The ability to anticipate such events lent a framework of manageability to what sometimes seemed like the impossible.

Theresa, a longtime military spouse and child of military parents, had ample experience managing the logistical and emotional aspects of deployment and significant periods of time when her husband was away. She described deployment mode as an approach that involved extensive planning, strategizing with her five children, and monitoring to ensure that everyone adhered to their designated roles. Although Theresa’s approach tended towards hyper-management, even micro-management at times, she also demonstrated flexibility that supported how she coped: “Go to plan B? Alright, let’s go to plan B...Give me five minutes and a Diet Coke, and I’ll get back to you, and we’ll go to plan B.” This orientation influenced how Theresa interpreted the stressors she confronted during deployment. Theresa admitted that her proactive and routinized strategies did not necessarily negate feelings of sadness, or eliminate struggle, fear, and “reservation about being able to [manage].” But she also viewed deployment as a challenge to overcome, saying, “I’m not easily defeated by anything.”

Nevertheless, most respondents did not have Theresa’s extensive experience with military family life on which to draw, or her level of insight about managing deployment. In contrast, several respondents experienced deployment mode as a paring down of life to where

they were just getting by. Michelle said that during deployment, she was “just getting through the day-to-day,” which she admitted, “was not always good.”

Often, just getting through the day meant letting go of responsibilities or minimizing obligations, such as relying on household and parenting short-cuts (e.g., drive-thru dinners, relaxing rules on screen time) and limiting demands on seemingly maxed-out schedules (e.g., volunteering for fewer responsibilities, limiting children’s activities). Heather noted that during deployment, there were so many demands on her time and energy that her house was a “wreck” because she simply couldn’t keep up. Similarly, Bethany spoke about not taking care of chores and tasks that her husband would normally complete, such as mowing the lawn, even though she knew she was fully capable of doing them, saying, “it’s just so overwhelming that you just let those things go.” For these respondents, deployment responsibilities and spousal absence left them energetically and psychologically bereft. Feeling overwhelmed, sad, and lonely translated into cognitive reactions impacting how they managed day-to-day.

**Drawing on sources of support.** Respondents drew on varying forms of social support during deployment. Some sought counseling services, parenting classes, and military spouse workshops. Others confided in friends and family who provided emotional and tangible support. Although some were fortunate to have family members living nearby, others were far from family and friends, and had few relationships nearby that they could leverage for support. Several respondents also described challenges to accessing support from more formal sources of support nearby (e.g., employers, children’s schools, insurance companies, medical professionals, and the military, more generally).

Almost all respondents relied on families of origin for support during deployment. Most described increased contact with family members during deployment through phone calls and

visits. Respondents frequently traveled back to parents' homes during deployment to spend holidays, or receive support during a long separation, especially when children were young. One respondent whose parents lived in the same town called them the "adopted husband." During deployment, they assisted her with tasks ranging from picking children up from school, to mowing the lawn, to repairing the dishwasher. However, many respondents, particularly active duty families, did not have family members living nearby. Although for most respondents, family support was constrained by distance, limitations were not only geographic in nature. Although family members played a supportive role for many respondents, relatives often did not understand the nuances of military culture, and were not in a position to provide sound advice or an empathetic ear.

For families living within the highly stratified and hierarchical military culture, where they were positioned vis-à-vis power and resources often shaped their experiences. Husbands' rank and active duty status impacted stay-behind parents' access to support in multiple ways. For example, active duty status allowed families to live on military bases, providing direct access to formal (e.g., classes, professional services) and community supports (e.g., shopping exchange, military friends and neighbors). A little more than half of the respondents were spouses of active duty members, and described the ways in which contact with the larger military community bolstered coping and helped to ease deployment stress. Molly described making friendships with other spouses in the military community:

You make very deep relationships very quick unlike any other situation that I've ever been in. I have very deep connections with people that I rarely see now. I can call and go, "Hey, you know what? I need you," and they'd drop anything. Because we've made that connection that I can't get anywhere else.

Living on base opened access to military-sponsored events and support (e.g., family days, children's camps, spouse workshops). Shared experiences of deployment and military life

facilitated connections between respondents and those around them. One respondent talked about support that seemed to automatically accompany life on a military base: moving into a new home was often greeted by neighbors bearing necessities like toilet paper, cookies, and an extra hand to unload boxes or entertain children.

Nevertheless, living on base was not without challenges. While many found comfort in being surrounded by people familiar with the demands of military family life, there was also increased exposure and awareness of the deployment risks of injury and death. Living on base meant no escape from the realities of wartime service. Moreover, the nature of the small communities led to some difficulty in keeping family problems private.

On the other hand, respondents whose spouses were affiliated with the Reserve or National Guard often lived in primarily civilian neighborhoods. Thus, they described feeling more isolated in the challenges they faced during deployment. Many felt as though the communities where they lived, including their children's schools and places of employment, were rarely aware of their unique needs as military families. For example, one respondent struggled to get her son's teacher to understand that his failing grades were not due to a lack of comprehension, but were the consequence of his father's deployment-related absence. Another respondent resigned from her job after her employers refused to allow her enough flexibility in her schedule to take care of her daughter while her husband was deployed. Another respondent talked about a general lack of camaraderie and closeness among families whose service members were deployed in the same unit, which left her feeling distant and disconnected from the other spouses, even though their husbands were serving together. One respondent observed a sharp difference in media coverage of the Reserve and National Guard compared to those who were active duty. She noted that while active duty deployments received local news coverage, when

her Army Reserve spouse deployed, there was no fanfare, no news broadcast, no recognition, leaving her family's experience invisible.

**Appraisals and responses to deployment.** Coping is not only impacted by the availability and accessibility of social support, but also guided by appraisals of the situation and perceptions of internal and external resources that may aid in managing distress. The consensus among respondents was that the nature of deployment entailed many unknowns, elements outside of their control, and the disruption of plans. The various contours of deployment challenged respondents to maintain positive attitudes while in deployment mode. Nevertheless, respondents' appraisals of deployment and their particular circumstances informed the ways in which they responded. In other words, how they perceived their circumstances directed the manner in which they experienced months of separation from their spouses, directed emotional responses, and mobilized coping responses.

Some respondents approached deployment mode with the proverbial glass as half full, others saw no silver linings to their realities of being alone to manage their children and households. Although both mindsets entailed a level of acceptance of their circumstances, when viewed within a spectrum of coping strategies, those who were able to adopt more positive outlooks were better able to cope and manage stress.

Attempts to shut out the negative aspects of deployment assisted some respondents in making it through tough times. Josie said her family had to "focus on the good," especially with another deployment approaching. The "good," for her, meant that her husband came home from his previous deployments alive and uninjured. Similarly, Kimberly said, "You're dealt a certain number of cards. Unfortunately it may be a horrible stack but you've got to learn to work with it." Although the hand Kimberly was dealt would not have been her first choice, and included

four deployments, her daughter's chronic medical condition, and her own health issues that prohibited her from having a second child, she had found ways to not only enjoy, but love her life. Focusing on the positive was key for her, and something she was working to instill in her daughter, especially considering their family circumstances.

Ally similarly talked about the power of focusing on the positive in order to live without regrets, knowing that as long as she did her best to cope and manage, no matter how things turned out, she would be okay with the results. Julia noted that keeping a positive attitude and being realistic about the experiences of deployment as part of the choice they made to be a military family enabled them to handle each deployment stronger and more united:

This is [what] that we signed up for... You have to take the good out of it and you don't get over the bad. You stay on the positive... A deployment can really make or break the family, a couple, and for us, it really does make us stronger.

While some respondents adapted positive coping strategies, not all of them could maintain optimism in the face of the numerous challenges deployment presented. Some respondents described approaches that entailed taking life one day at a time, and dealing with the emotional fallout that deployment stress created by simply "sucking it up." These approaches helped respondents cope as well, however the tone of such appraisals did not offer the level of psychological buffering that more optimistic views conferred. Furthermore, as one respondent noted, negative feelings and perceptions had a way of taking over all the other areas of one's life.

Maria, mother of two who weathered eight deployments with her Coast Guard husband of 20 years, as well as many shorter periods of family separation, reflected on how she coped: "you just live day-to-day... There is no other option. You just put one foot in front of the other and deal with the problem at hand." Bethany said that her family motto was: "hope for the best and prepare for the worst."

Negative appraisals compounded the stresses of increased responsibilities and made deployment more seem even more burdensome. For many respondents, the notion that their husbands were going through a similarly difficult time, helped them to maintain positive outlooks about their sacrifices. But when they felt as though hardship was not flowing both ways, attitudes changed to anger and resentment. Jamie acknowledged that her resentment was not her “true heart,” but resulted from stress and the sacrifices she was making for her husband’s career. While his work was recognized by the military via salary raises and promotions, she felt as though her role as wife and mother left behind to manage their home lives and raise their children was unacknowledged. In the darker moments during deployment, Jamie felt bitter and yearned for recognition.

Similarly, when Anna learned that her husband was stationed in a former palace complete with a pool, while she took care of their three children and her sister’s three children in off-base housing with no pool in sight, she lost much of the empathy she had for him: “[My] only pool was the tears...I was so sick and frustrated. I was just like this absolutely sucks... Let him do his job and bring him home. Don’t let him get used to [being] poolside.”

Some respondents expressed more generalized resentment about the toll of military life on their marriages and families. Recounting the emotional distance Anna felt from her husband and the repercussions of his absence on their marriage and children’s lives, she said, “If the Army’s gonna take a year of their life, it really essentially takes all of our lives... The Army is that person’s mistress, and it holds your family hostage.” Deployment drove these women into an emotional limbo. At the mercy of deployment schedules and with little freedom to opt out of responsibilities at home, they resented how their family took second place to the military.

## Discussion

This study examined military spouse deployment experiences using a family stress and coping framework to highlight areas of nuance within spouses' experiences of managing significant periods of family separation. While household arrangements during non-deployment periods were skewed among most respondents, with women assuming greater shares of household and childcare duties, periods of deployment upended normal patterns, forcing spouses to assume the role of single parents, to substitute for absent fathers, and manage two homes through relational maintenance with the deployed spouse. The majority of respondents endured multiple deployments lasting several months at a time. Coping with deployment took many forms, and depended on the availability and proximity of support, and how respondents appraised their circumstances. Most respondents learned to get into "deployment mode," logistically and psychologically preparing and strategizing for the months of spousal absence ahead. For some respondents, this mode also broadly represented life on the home front during deployment, and a suspension of normal operations during the separation. By illuminating such dimensions of the deployment experiences of military spouses, this study advances research in key areas of military parent functioning in order to inform prevention and intervention efforts with military families contending with deployment.

The conceptualization of military spouses as stay-behind parents provides a contrast to stay-at-home parents and those in other family configurations, and sharpens attention to the distinct ways in which these parents are bound to their homes and families during deployment. Interviews with the stay-behind parents in this study highlighted the centrality of household management and parenting responsibilities in spouses' deployment experiences. Indeed, research on military families has shown that sole management of the household, including caring for children, is a central source of stress for the parent left behind during deployment, and

contributes to negative psycho-social outcomes in military spouses (Tanielian, Karney, Chandra, Meadows, & Deployment Life Study Team, 2014). To date, however, this picture is incomplete. Respondents' narratives provided additional depth and nuance to these more general findings (Wilson & Murray, 2016).

Military spouses, as stay-behind parents, share commonalities with mothers and wives in other family populations who face complex and often dangerous periods of family separation. With regard to divisions of household labor, military spouses join civilian spouses in taking on greater percentages of housework and childrearing, even in households where male spouses contribute (Goldscheider et al., 2015). While scholars of household labor note that women, regardless of employment, perform most of the household work, stay-behind parents face added challenges. The deployment cycle places them at risk for elevated stress responses, and challenged to keep up with an accumulation of demands on their time and energy (Davis et al., 2011). These periods, while temporary, reconfigure their roles and duties; however, unlike stay-at-home parents or single parents, the needs of their absent spouses continue to generate additional demands.

As the findings show, during deployment, military spouses become *de facto* single parents resembling un-partnered civilian mothers. Thus, they are responsible for all duties surrounding caring for the home and children. As with other single parents, solo parenting and solo homemaking take psychological and emotional tolls. Deployment has extra burdens on military spouses that contribute to feeling overwhelmed, emotionally exhausted, and socially isolated. However, married military spouses, temporarily separated from their husbands due to deployment, may gain a sense of empowerment through their single-parent identity, as effectively managing a deployment provides military spouses with a sense of pride (Pittman et

al., 2004). Nevertheless, for most respondents, the emotional and physical toll of single parenting during deployment was exhausting.

However, military spouse experiences as stay-behind parents diverge from those of civilian single parents, in several distinct ways. Although deployment turns military spouses into *de facto* single parents solely responsible for all day-to-day aspects of home, they remain partnered and relationally bound to their absent spouses. Thus, military spouses not only single parent during deployment, but also fill their absent husband's role in service to the needs of children and the family (Lapp et al., 2010). In addition, while spouses work to keep the deployed parent present by enacting his role and responsibilities, they also work to keep him engaged with the family through relational maintenance strategies (Merolla, 2010a). Findings presented here extend the understanding of how military spouses experience the maintenance of relational connections with their deployed spouses; as one respondent said, it meant "taking care of two households." Stay-behind parents do much to bridge the home front with the battlefield, centrally through communication. However, the tangible, psychological, and symbolic tending of two households layers another responsibility on the stay-behind parent.

Communication between stay-behind and deployed parents has received attention within military family specific and broader family studies (e.g., Houston, Pfefferbaum, Sherman, Melson, & Brand, 2013; Maguire et al., 2013; Merolla, 2010a, Merolla, 2010b). This study extends this research by contextualizing communication and relational maintenance as an added deployment responsibility, falling primarily on the stay-behind parent. For respondents in this study, communication with deployed spouses was inseparable from more intrapersonal processes of concern, and generally thinking about their distant husbands. In this sense, relational maintenance expanded military spouses' obligations and forced them to stretch their emotional

and psychic energies to encompass family members at home and overseas. Contemporary military family communication during deployment has been shaped by video calling technology such as Skype. This study demonstrates some of the emotional complexity that video calls can foster in that they allow a greater sense of nearness and intimacy but also bring family members closer into one another's very different worlds. For those at home, greater proximity to the realities of war facing their service member may increase worry and concern.

The literature on stress and coping has made great strides in identifying the various contours of stress facing families today and analytically capturing the nuances of coping (Boss, 2002). Stress and coping in military families specifically, is prevalent in this literature (e.g., Hill, 1949; Boss, 2002; Campbell & Demi, 2000; Maguire, 2012). However, contemporary differences in deployment schedules, warfare technology, communication, and family configurations have necessitated a renewed focus on the well-being of service members and their families. As this and other studies suggest, wartime deployments not only impact service members, they also have profound implications for family members left behind.

The experiences of this study's respondents help to extend the understanding of military spouse deployment stress and the tasks of coping. Analysis of this group of stay-behind parents suggests that coping strategies are interwoven with the stressful circumstances related to deployment. Contrasts in coping strategies were evident in respondents' narratives in which some employed problem-focused coping, (e.g., anticipating challenges and strategizing solutions), while others demonstrated more avoidant-based coping (e.g., overcommitting to extra-familial responsibilities to avoid confronting negative feelings) (Dimiceli et al., 2010).

For example, in response to the upheaval of normal life during deployment, respondents entered deployment mode. For some, this approach was more adaptive and, paired with optimism

and positive appraisals, contributed to a sense of being able to successfully manage their responsibilities. Positive perceptions have been established as contributing to effective coping and adaptation among civilian and military populations (Blank, Adams, Kittleson, Connors, & Padden, 2012; Larsen et al., 2015).

Negative coping responses were also described by respondents. These findings align with other military spouse research that examines a spectrum of coping strategies, revealing how the demands of deployment can undermine spouses' attempts to maintain positive outlooks (Dimiceli et al., 2010). Some respondents in this study coped with deployment by shrinking demands on their limited time and energy, focusing only on their family's basic needs. Many of these respondents experienced deployment as an emotional and psychological drain, and yet, they coped by taking care of necessities and letting everything else go. For a few respondents, perceptions of facing greater hardship on the home front than their spouses on the battlefield added strain in the form of negative emotions, such as resentment and anger that made coping with deployment more burdensome.

As expected, social support was an important aspect of spousal coping, yet differences remained in what was available to respondents, and how they experienced the support structures around them. Perceptions of, and access to support play significant roles in military spousal coping with deployment (Davis et al., 2011; Faber et al., 2008; Green, Nurius, & Lester, 2013; Larsen et al., 2015). Findings presented here highlight contrasts in spouses' support experiences. For example, some found their families of origin instrumental in helping them get through deployment, while others found little tangible and emotional support in family, and instead turned to other members of the military community. The power of shared experience regarding social support is particularly relevant to military spouses experiencing deployment (Wang,

Nyutu, Trans, & Spears, 2015). Access to friends, systems, and formal support structures that shared familiarity with military family life allowed respondents to feel seen and better understood. In contrast, those with little to no contact with military-informed support networks reported more difficulty.

Deployment was difficult for most respondents. The task of managing everyday challenges, while keeping a positive attitude was an ongoing challenge for many. While some were better able to cope with their situations by employing adaptive frameworks, perceptions of unbalanced divisions of labor strained any goodwill others had. Although their husbands were often under life-threatening circumstances while in combat, deployment-mode created a battlefield at home for several women; *carework* increased exponentially with the service member's absence, and they felt they managed more than their share. All respondents certainly survived their deployment experiences, however challenges they faced and struggled to overcome, primarily took place hidden from view, within the privacy of their homes and family relationships. Nonetheless, these experiences illuminated several areas of spouse stress and tests of coping abilities. Championing the resilience of military spouses is in order, however their roles on the home front, as mothers and wives, must not be assumed and therefore left unexamined.

### **Limitations**

While this study contributes to an understanding of contemporary military family arrangements and military spouse responses to deployment stress, limitations exist. Relying on retrospective self-reports of stressful events involves the potential for reporting distortion (Monroe, 1982). However, findings presented in this study do align with current research on military spouse deployment experiences.

This study examines the experiences of female spouses of male service members who have experienced multiple deployments. However, more research is needed to understand the “stay-behind” experiences of parents in other less common military family arrangements, such as dual-service families, and families of female, gay, lesbian, and transgender service members.

Because only subjective descriptions of stress and well-being were used, the clinical significance of the distress these respondents experienced due to a spouse’s deployment cannot be determined. However, understanding the experiences of military spouses who may not meet the criteria for mental health disorders, but for whom deployment has still exacted an emotional and relational toll, is essential to effectively respond to the needs of military families.

Lastly, sampling through the Operation Purple family programs generated a self-selecting group of respondents who were actively seeking help for family challenges related to deployment and parental injury. This group may not be reflective of the broader population of military families.

### **Implications and Conclusion**

This study underscores a simple point: families serve too. Policymakers and practitioners working with military personnel today must take this into account. Services that may be readily available to returning service members should also be extended to children and spouses. This requires the employment of highly trained providers familiar with the needs of military families in agencies and departments that have not typically served families (Pemberton, Kramer, Borrego, & Owen, 2013). Strategies identified in this study such as preparing and strategizing for life during deployment, adopting positive thinking, and accessing social support can inform individual and family coping during deployment via family support services.

Although the military already offers many resources to support the needs of military families (e.g., classes, support groups, commissaries), many more than what is available to civilians, these resources can be further channeled to support military spouses in ways that they are instinctively supporting themselves and directed to specific areas of stress and strain (e.g., filling role of mom and dad, maintaining connections with deployed parent across great distance). Some examples include providing easily accessible family activities that may help those struggling to do more than take care of the basics to get out of the house and experience a reprieve from their responsibilities, opportunities for families to communicate with deployed service members for free with high quality services, providing low-cost cell phone plans enabling families to maintain contact with service members worldwide, and offering mentorship programs to help increase coping strategies. With specific attention to the needs of the stay-behind parent, access to high quality/ low-cost childcare and mental health providers is essential to mitigate the impact of deployment stress on spouse and child well-being.

The women interviewed for this study are part of a growing population of military family members indirectly impacted by contemporary conflict and the related surges in deployments for active duty and reserve component service members. Given the scale of global conflict and U.S. involvement, this is a problem that will impact an even larger number of women in future years. Increasingly, as conflicts continue, what happens to deployed service members is largely absent from public view, and the critical work performed by stay-behind parents is even less visible. Nevertheless, as respondents' narratives reveal, deployment represents a major challenge to those left behind. Recognizing these distinct contours of contemporary military family life is one important step towards equitable solutions. More must be done to acknowledge the everyday

work of over one million military spouses obscured from view, within their homes, and carried out with endurance, dedication, and love.

Table 1.1. *Military spouse respondent demographics*

	<b>Mean</b>	<b>(SD)</b>
Age (range 27-47)	35.1	4.95
# of deployments (range 1-8)	2.9	1.67
# cumulative months apart	25.9	14.63
# of children (range 1-5)	2.9	1.08
	<b>N</b>	<b>(%)</b>
<b>Gender</b>		
Female	43	100.0
<b>Race/Ethnicity</b>		
White	31	72.1
Hispanic	8	18.6
African American	2	4.7
Asian American	2	4.7
<b>Education</b>		
Some high school	2	4.7
High school graduate	3	7.0
Some college	15	34.9
AA or technical degree	7	16.3
College graduate	9	20.9
Post-college	7	16.3
<b>Employment</b>		
Not employed	18	41.9
Registered caregiver	2	4.2
Self-employed	2	4.2
Part-time	15	34.9
Full-time	6	14.0
<b>Family financial situation</b>		
Struggling	6	15.4
Have necessities, no \$ for extras	15	38.5
Okay, some \$ for extras	10	25.6
Comfortable, have \$ for extras	8	20.5
<b>Family housing arrangements</b>		
Own home	18	43.9
Rent home	11	26.8
Living on military base	9	22.0
Other (e.g., living with friends)	3	7.3

Table 1.2. *Service-related demographics of military parent*

	N	%
<b>Gender</b>		
Male	43	100.0
<b>Service Member Status</b>		
Active duty	22	51.2
Reserves	6	14.0
National Guard	3	7.0
Retired/ Honorably Discharged	4	9.3
Medically retired	8	18.6
<b>Military Branch</b>		
Army	18	41.9
Marine Corps	4	9.3
Navy	7	16.3
Air Force	2	4.7
Coast Guard	1	2.3
Reserves/National Guard	11	25.6
<b>Rank/ Pay grade*</b>		
E-1 – E-4	6	14.0
E-5 – E-6	25	58.1
E-7 – E-9	6	14.0
Warrant Officer	1	2.3
Officer	4	9.5

\*one respondent did not provide rank for her service member spouse

Table 1.3. *Significant themes related to military spouse deployment experiences*

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Conceptualizing the Stay-Behind Parent

De facto single parenting

Filling dual parenting roles

Maintaining connections: Tending the expanded family home

Coping Processes During Deployment

Getting into “deployment mode:” Managing the demands and duties of deployment

Drawing on sources of support

Appraisals and responses to deployment

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## PAPER 2: PLACE-BASED FAMILY RETREAT PROGRAMS: THERAPEUTIC LANDSCAPES FOR MILITARY FAMILIES

### **Introduction**

In ways previously unknown, today's military forces have experienced unprecedented deployment schedules (American Psychological Association, 2007; Kang & Hyams, 2005), exceptional combat stressors (Friedman, 2006), and a high prevalence of injuries including posttraumatic stress disorder and traumatic brain injury (Tanielian & Jaycox, 2008). While the wear and tear of combat for service members is well documented, the impacts of military life on family members, including repercussions of deployment, continue to be identified, along with the risk and protective factors that erode or buffer the effects of such strains (Lester et al., 2016; Palmer, 2008; Sullivan, 2015; Tanielian et al., 2014).

The reintegration phase of the deployment cycle (i.e., when the service member returns home) presents challenges for service members, spouses/partners, and children (Cogan, 2016). Families who have waited months and even over a year to reunite may have thought only of the joys of homecoming and not the changes and stressors that reunions can bring (Saltzman et al., 2009). In reality, many families experience challenges with reintegration (National Military Family Association, 2010) and face risks for increased stress and conflict, and decreased family cohesion and functioning (McNulty, 2010). Combat injuries present families with added stressors (Hisle-Gorman et al., 2015; Holmes, Rauch, & Cozza, 2013). Although attitudes are shifting, admitting to and seeking help for emotional and mental health issues is highly stigmatized in military culture (Greene-Shorridge, Britt, & Castro, 2007). Thus, military service members and their families may be reticent to seek out formal counseling or therapeutic services and may not identify their struggles as potentially benefitting from outside support.

Scholars and practitioners from varied fields and disciplines have long stressed nature's restorative powers. Spending time in natural settings has been shown to improve mood, reduce stress, speed recovery, and enhance health (for reviews see Hartig & Kahn, 2016; Hartig, Mitchell, de Vries, & Frumkin, 2014). Contact with nature meets human needs for tranquility, spiritual experiences, and belonging (Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009). Natural environments evoke appreciation for beauty and provide people opportunities for contact with landscapes that offer respite from daily routines and stress (Gesler, 2003). Green spaces such as parks, community gardens, and wilderness areas, can foster social interaction and thus promote increased levels of support (Groenewegen, van den Berg, de Vries, & Verheij, 2006).<sup>1</sup>

Recognition of the therapeutic potential of natural environments is demonstrated in multiple types of nature-based programs and practices, including camps and recreational therapy which focus on wellness, prevention, and intervention (Russell, 2012). Research on outdoor family camps, in particular, suggests that camps increase coping strategies, promote communication, and build new skills that support positive family functioning (Agate & Covey, 2007). In a review of family camp literature, Agate and Covey (2007) found that family camps can provide intervening and/or therapeutic experiences for families currently experiencing challenges and offer enrichment opportunities to bolster strengths and prevent later issues. Indeed, families make choices to attend camp programs in service to strengthening relationships, spending time with one another, and/or meeting needs for support (Taylor, Covey, & Covey, 2006). The broad spectrum of camp programs suggests that both providers and the public see

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<sup>1</sup> As a note, some scholars have suggested alternative perspectives on nature and how marginalized groups have sometimes expressed fear or concern for safety in natural areas, for example Johnson (1998), raises questions about race in her work with African-Americans' responses to the woods and nature – arguing that a legacy of slavery and lynching have created a sense of fear or caution about the woods.

them as valuable, and indeed, attendance at family camps is growing (ACA, 2010). However, while research points to positive impacts of camp attendance, studies have yet to address the *emplaced experience* of camp participation and the role of the natural settings, in particular, of most camp locations.

In response to these gaps in the research on family camps, I argue that camps offer participants place-based therapeutic experiences via the interactions among three components: physical environment (place), social environment (person), and symbolic environment (process). In practice, family camp programming occurs in the interaction between and among these elements. The “therapeutic landscape” framework (Gesler, 1992; 2003) guides an “understanding of how the healing process works itself out in places” (Gesler, 1992, p. 743) and is thus useful for theorizing what mechanisms are at work in place-based family camps. Healing is understood here to be a multidimensional process that involves biological, emotional, mental, and social elements; these elements interact and impact overall health (Gesler, 2003).

The therapeutic landscape framework has been employed by health geographers and other scholars to understand the relationship between places and well-being in a diverse range of settings (Williams, 2007). Although the concept landscape differs across disciplines, this pluralistic and dynamic term is useful for understanding the environmental, societal, emotional, spiritual, and physical dynamics present in many locations. The majority of studies employing the therapeutic landscape framework focus on experiences of individual adults alone or in groups. A small number of studies focus on children (e.g., Dunkley, 2009; Kearns & Collins, 2000). With few exceptions (see Hallman, 2007), little attention has been paid to therapeutic landscapes for children and parents together. Thus, this study is guided by the therapeutic landscape framework and seeks to extend it by operationalizing mechanisms of healing

landscapes for families with children, and military families in particular, in nature-based family camps.

In order to elucidate this conceptualization of family camps as therapeutic landscapes, I draw on observations of the National Military Family Association's Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs as well as subsequent interviews with 50 participants who attended these programs in 2013. The Operation Purple programs provide useful examples of the interaction between participants and: 1) the natural and built environment; 2) family members and other participating families; and 3) program activities. In what follows, I explicate the theoretical frameworks undergirding the three corresponding and interlocking parts of my conceptualization of family camps as therapeutic landscapes. The methods section describes the qualitative methodology used in this study. Analyses of the observations and qualitative interviews are presented in the results section. The discussion section summarizes findings and reviews limitations to the study. This paper concludes with recommendations for military family support practices as well as guidance for future research.

## **Literature Review**

### **Creating Therapeutic Landscapes to Support Military Family Functioning**

In the early stages of developing the therapeutic landscape concept, Gesler (1992, 2003) studied three locations with reputations for healing (Epidaurus in Greece; Bath in England; Lourdes in France) and paired these case studies with existing research regarding place and health. As a result, Gesler (2003) identified different but related *environments* that contribute to a healing sense of place: natural and built environment (place), social environment (person), and symbolic environment (process). The therapeutic landscape framework is thus operationalized as

the presence and interplay of these distinct and yet overlapping environments (Gesler, 2003; Jiang, 2014).

With regard to family camps, the therapeutic landscape framework permits a dynamic investigation of the elements that may contribute to families' experiences. It allows linkages to be drawn between a family systems understanding of family leisure and outdoor recreation with research on the physiological and psychological benefits of spending time in nature to explain what makes family camps in natural outdoor settings—as place-based family-centered programming—therapeutic. Conceptualizing family camps as therapeutic landscapes allows for an explicit incorporation of the places in which these programs happen, as a contributive factor to the healing process, and includes both the natural and built environment. Furthermore, the therapeutic landscape framework incorporates social as well as symbolic (e.g., meanings people give to places and their experiences) environments in a location.

In what follows, I present a brief overview of the three dimensions of the environmental experience of therapeutic landscapes as they pertain to family camps. By clearly identifying each of these elements, each aspect is recognized for its unique contribution, while acknowledging the transactional nature of the whole. This is important because some of these elements, place in particular and nature especially, have been understudied as critical factors in place-based family support programming (Ungar, Dumond, & McDonald, 2005), for both the general population and for military communities (Krasny, Pace, Tidball, & Helphand, 2014).

### **Place: Natural and Built Environments**

All of human experience is enplaced, that is, life happens “in place” (Warf & Arias, 2009). However, the spaces and places where life is enacted represent more than just backdrops and indeed can be active agents which shape, influence, and contextualize human experience

(Manzo, 2003; 2005). In particular, studies demonstrate multi-dimensional links between nature and health. Pathways that explain how spending time in and having contact with nature impacts well-being include human preference for natural areas (Kaplan & Kaplan, 1989); increased physical activity (Lachowycz & Jones, 2011; Sugiyama, Leslie, Giles-Corti, & Owen, 2008); and environmental aspects such as air quality (Domm et al., 2008; Nowak, Crane, Stevens, 2006), interactions between plant phytoncides<sup>2</sup> and human immunity (Li et al., 2009), and access and proximity to green (deVries, Verheij, Groenewegen, & Spreeuwenberg, 2003; James, Hart, Banay, & Laden, 2016) and blue spaces (i.e., water-focused landscapes) (Volker & Kistemann, 2013).

In addition to the pathways listed above, examinations of nature and well-being have been guided by two central theories: Attention Restoration Theory and Stress Recovery Theory. Attention Restoration Theory (ART) argues that prolonged focus and effortful attention results in mental fatigue which has negative intra- and interpersonal consequences (e.g., impaired emotional regulation, lack of concentration, poor mood) (Kaplan, 1995). Restoration from mental fatigue can be achieved in four possible ways: 1) being away, at least mentally, from activity that requires direct attention and from one's daily routine; 2) being in an environment with enough richness and coherence that it seems to be a whole other world; 3) being fascinated by something that holds effortless attention, and; 4) being in a setting that is compatible with one's purpose (Hartig, Mang, & Evans, 1991). Various studies of ART include measuring attention before and after contact with nature, demonstrating that participants who were exposed to natural environments (e.g., walks in a park, views of natural scenes) after completing a

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<sup>2</sup> Phytoncides are protective compounds some plants use to keep from rotting or being eaten. Studies of practices such as Japanese forest bathing have found interactions between tree phytoncides and lowered stress, increased immunity, feelings of well-being.

mentally fatiguing task reported greater levels of restoration (Han, 2010; Hartig et al., 1991). Nature has also been found to decrease psycho-physiological arousal, thereby reducing stress (Ulrich, 1983). Studies of Stress Recovery Theory measure system markers of stress (e.g., blood pressure, hormone levels, brain activity, pulse, respiration) to determine how exposure to nature aids in lowering stress (Bratman et al., 2015; Han, 2010; Kahn, 1999; Kjellgren & Buhrkall, 2010).

Links between increased health and outdoor environments suggest that spending time in nature is good for one's health (Frumkin, 2001). The natural settings of many family camps may help to facilitate stress reduction and restore equilibrium for parents and children experiencing increased levels of stress and mental/emotional fatigue. In particular, stress reduction and social cohesion pathways provide useful guidance for understanding the role natural settings play in these programs, not just as "backdrop for activities" but as active components in the emplaced experience (Kaplan, 1995, p. 145).

### **Person: Social Environment and Social Support**

Therapeutic family camp programs often bring together families with shared experiences and similar needs, in many ways representing a "deliberate" context in which targeted support can be exchanged (Thoits, 2011). Parents and children coping with particular issues (e.g., cancer, diabetes) may feel less isolated and more understood as they meet families in the same or similar circumstances. Events or stressors that may carry stigma in larger society (e.g., illness, disability), become normalized at camp where participants can share resources, coping strategies, information, and most importantly, empathic support (Gillard, Witt, & Watts, 2011). Indeed, the social atmosphere created at camps is commonly cited by participants as a highly meaningful aspect of their experience (Agate & Covey, 2007; Ungar et al., 2005).

Adequate social ties, sense of belonging, and access to social support have strong links to psychological and physical health (Kawachi & Berkman, 2001; Thoits, 2011). Acting as a buffer, positive social support serves as a stable resource in the coping process and can ease stress by influencing individual's appraisals of specific events or circumstances (Lazarus & Folkman, 1984). Two contextual factors highlighting the links between support and psychological health help to explain how family camp social environments may positively impact participants' experiences.

First, social support, as explained by Relational Regulation Theory (RRT), may be an outcome of "affectively consequential" interactions that occur in daily life versus stressful circumstances, thus directing attention to social process rather than stress buffering mechanisms (Lakey & Orehek, 2011, p. 486). RRT focuses on relational aspects of cognitive, affective, and behavioral regulation, conceptualizing social support as a dynamic process grounded in interactions that may result in experiences of perceived support. Incorporated in this theory are factors of preference, personality, and personal taste. Namely RRT recognizes that circumstances, people, and approaches that are supportive to one person may not be supportive to another. When individuals possess similar "attitudes, values, and activities," they will more effectively regulate one another and "perceive each other as supportive" (Lakey & Orehek, 2011, p. 488). However, contexts must allow individuals to interact around these shared qualities in a positive way. For example, discussing shared beliefs must carry a favorable effect and settings must allow for the discussion.

When examining the relational connections among individuals who may be exchanging support through daily interactions, as specified by RRT, contexts of group membership and experiential similarity may also play a role. Group membership may be defined as primary (e.g.,

group members with close, long-lasting ties) and secondary (e.g., less personal, more formal roles). Each group may contribute different kinds of support (e.g., informational, emotional, instrumental, Cohen, 1988) depending on their level of experiential similarity or dissimilarity (e.g., having gone through the same event or circumstance) (Thoits, 2011). Primary group members (e.g., spouses, close friends) may possess experiential similarity (e.g., experienced the same stressful event) and thus would be in a better position to give emotional support (i.e., love, trust, caring) versus informational support (i.e., tangible aid and service). However, in some situations, such as an illness or military combat, primary group members who do not share these experiences will potentially lack insight and the ability to offer adequate support. In these cases, secondary social ties linked by shared experiences may offer the necessary instrumental and informational support as a result of having gone through similar circumstances.

Adequate social support is linked with increased functioning in general, however well-structured family camps entail a distinct social environment and experiences of temporary community that have the potential to be highly supportive. Because the camp social environment is temporary, contextual factors such as the two identified above, help to direct attention to specific social mechanisms that are particular to camp-based social support. Camp settings are often highly conducive to allowing and facilitating supportive discussions. Indeed, family camps may be “an ideal setting for the development of positive relationships because of increased opportunities for unstructured and informal interactions between people as they go about daily routines in a cooperative living environment” (Gillard et al., 2011, p.1519). Therapeutic family camp programs involve primary (e.g., family members) and secondary group members (e.g., experientially similar individuals) who share some aspect of a specific experience. Thus, the

resulting spatially contextualized social environment may be particularly supportive for all family members.

### **Process: Symbolic Environment as Family Leisure Activities**

Family functioning is broadly understood as a family's capacity to create and maintain an environment that is conducive to supporting individual and family-level development (Izenstark & Ebata, 2016; Patterson, 2002). Factors that contribute to positive family functioning include warm but firm parenting styles, low levels of conflict, avoidance of aggression, adequate social support, and effective coping skills (Mupinga, Garrison, & Pierce, 2002; Patterson, 2002). Poor parental psycho-social functioning as well as exposure to stressful family environments have been linked with negative child and adolescent outcomes (Goodman & Tully, 2006; Hudson, Dodd, & Bovopoulos, 2011; Repetti, Taylor, & Seeman, 2002). Thus, increasing family functioning is a central goal for family-centered prevention and intervention efforts. Research on family development has sought to understand what many families do well in order to translate these findings into prevention programs, interventions, and treatment for more distressed families (Spoth, 2008).

Research on family leisure demonstrates a relationship between participation in family leisure activities and positive family functioning (Hawkes, 1991; Orthner & Mancini, 1991 as cited in Zabriskie & McCormick, 2001). Participation in, and satisfaction with, leisure activities is significantly linked with family life satisfaction (Agate, Zabriskie, Agate, & Poff, 2009; Zabriskie & McCormick, 2003). These activities support bonding, attachment, and cohesion (Hallman, 2007) and allow family members to define roles and boundaries, develop coping skills, and enhance communication (Orthner & Mancini, 1990). Leisure activities provide families with memorable experiences and opportunities for meaning making. Shaw and Dawson

(2001) found that parents planned leisure activities with goals of improving and maintaining family relationships, strengthening family identity, instilling values, and fulfilling what many saw as a *duty* of parenthood, supporting the belief that “family leisure is considered integral to the emotional labour of constructing a positive family life” (Hallman, 2007, p. 134).

A family systems approach to understanding family leisure, especially outdoor recreation, helps to locate the role such leisure activities play in supporting outcomes that have been demonstrated to foster positive family functioning (Izenstark & Ebata, 2016; Ungar et al., 2005). Informed by family systems theory, the Core and Balance framework models how different patterns of family leisure contribute to family functioning (Poff, Zabriskie, & Townsend, 2010). Family systems theory characterizes the family as a system continually seeking homeostasis, a state found within the balance between needs for stability in relationships and interactions as well as novelty in experiences and input. Feedback loops inform the family system of the effective or ineffective consequences of actions in maintaining this balance (White & Klein, 2002). Intentionally structured leisure and recreation activities help to support needs for both stability and adaptability within the family.

The Core and Balance model articulates two general patterns of family leisure that assist families in strengthening outcomes of cohesion (defined as a sense of togetherness) and flexibility (ability to cope with change) which contribute to positive family functioning (Smith, Freeman, & Zabriskie, 2009). The first, “core” refers to family leisure patterns that support the steady contexts that nurture relationships and include common, daily, and easily accessible activities (e.g., playing board games, watching a movie, sharing meals) (Freeman & Zabriskie, 2003; Poff et al., 2010; Zabriskie & McCormick, 2003). Many core patterns include socializing and conversation, which, when occurring within a relaxed and comfortable family leisure

experience, can bolster overall family cohesion by enhancing relationships (Smith et al., 2009). Secondly, “balance” refers to family leisure patterns that foster family flexibility and include activities that are less common than core activities, and generally require more time, resources, and planning (e.g., vacations, theme park visits). Balance activities present family members with opportunities to learn new skills, take on challenges, and confront unpredictable factors (Freeman & Zabriskie, 2003) helping to strengthen family adaptability and flexibility (Zabriskie & McCormick, 2001).

Interpreted through the Core and Balance model, family camps represent a predominantly balance leisure activity (Agate & Covey, 2007), in that they present families with novel environments and experiences in which to enact family life. Furthermore, camps structured around these principles foster contexts in which families can specifically focus on building and strengthening relationships, learning new skills, improving communication, and spending quality time together through both specific core and balance activities at the camp.

Family leisure research provides an entree into the investigation of how family camps support families. However, while family leisure studies help to illuminate the potential benefits of camp activities and processes on family functioning, they fall short of extending the analysis to draw focus on the important spatial dimensions of place-based programming. Specifically, this body of literature does not attend to the contributions of the natural settings in which many camps take place (Izenstark & Ebata, 2016). While research on family camps acknowledges the role of recreation activities in enhancing family functioning, it has not explicitly examined the contributions that the retreat sites themselves, that is, how *place*, and natural environments specifically, are critical components of the camp therapeutic landscape. Despite empirical evidence on the restorative impact of spending time in nature and the existence of on-the-ground

practices and programs that connect individuals and communities with nature, the role of the natural environment has still not been well incorporated in intervention research with distressed populations.

In summary, family camps may be understood as therapeutic landscapes in that they contain physical, social, and symbolic components which work in concert to achieve therapeutic program goals. Family camps, as therapeutic landscapes, use the natural and built environment to increase family functioning. Research suggests that simply *being* in nature is psychologically and physiologically restorative, contributing to the reduction of stress and recovery from mental fatigue. With regard to the social environment, family camps offer distinct contexts for the exchange of social support, development of temporary community, and interactions that can help to diminish feelings of isolation while coping with a challenging situation. Additionally, camps provide families with opportunities to engage in core and balance family activities, including outdoor recreation that fosters cohesion and helps strengthen relationships. It is this symbolic environment, which incorporates camp participants' meaning making and appraisal processes, which animates experiences of the physical and social environments in family camps.

## **Methods**

### **Operation Purple Family Program Description**

The National Military Family Association's Operation Purple family camp initiatives include the Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs for service members and their families. OPFR applicants have experienced deployment within 15 months prior to the program and OPHA applicants have a

wounded, ill, or injured service member parent.<sup>3</sup> Both programs offer multi-day retreats<sup>4</sup> for families affiliated with all military branches, including National Guard and Reserve components. OPFR typically serves 18 families, while OPHA serves 12 families. Since the program started in 2009, OP programs have been hosted in 14 states across the country.<sup>5</sup>

The stated goals of the OP family programs include: Increasing military family cohesion and resilience; promoting healing through the outdoor experience; and fostering community-level social support (Green, Mogil, Buchanan, & Lester, 2016, p. 15). In service to these goals, OP programs are hosted by existing camp and retreat sites, located near or within national or state parks.<sup>6</sup> Host site staff facilitate family-level therapeutic recreation activities and environmental education, with supervision provided by OP staff and host site directors. In addition, programs offer clinical support through the FOCUS<sup>7</sup> program and Military Family Life Consultant program.<sup>8</sup>

The typical retreat schedule, while varying by site, is comprised of recreational (e.g., hiking, canoeing, ropes courses, archery) and intervention-based activities. These activities are typically facilitated by host site staff, and families may engage in these activities individually or

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<sup>3</sup> OPHA applicants go through an additional screening to assess family's needs and goodness of fit with the program.

<sup>4</sup> Programs are free of charge, and typically run four days, Friday through Monday. Wyoming retreats last five days.

<sup>5</sup> Alabama, California, Colorado, Georgia, Hawaii, Maryland, New York, North Carolina, Pennsylvania, Tennessee, Texas, Virginia, Washington, and Wyoming.

<sup>6</sup> OP is typically the only program using a host site during the weekend.

<sup>7</sup> The FOCUS program, headquartered at UCLA, operates on military bases around the country offering short-term resilience-based interventions for military families.

<sup>8</sup> FOCUS facilitators and Military Family Life Consultants are typically licensed clinicians who attend each retreat to provide additional targeted support as needed. FOCUS facilitators lead parent and family resilience sessions. Clinicians do not provide formal counseling but may connect participants with resources and referrals as needed.

in assigned groups. In addition, FOCUS program facilitators lead separate parent and whole family sessions between the outdoor activities. These sessions incorporate psycho-educational activities and family-based narrative work to support family resilience. Meals are served in the dining commons, where families eat together and staff lead games and ice-breaker activities. In between scheduled activities and meals, families have free time, during which they may engage in activities on their own or with other families. On the last night, retreats host a campfire program and slideshow of the weekend.

### **Program Observation and Theory Development**

Between March 2009 and July 2011, I attended 12 OPFR and OPHA retreats as a clinical consultant and gained important insight into the therapeutic mechanisms at work through close observation of programing and the inner-workings of the retreats. Within the scientist-practitioner model, which integrates of research and clinical practice (Jones & Mehr, 2007), these observations framed my conceptualization of the retreats as family-centered therapeutic landscapes, capturing the multi-dimensional elements of the program. These observations, coupled with interviews with participants and staff in 2013 helped me to sharpen theoretical concepts and ground what I found in corresponding areas of research (therapeutic landscapes, family leisure, nature and health). Ultimately, this sustained engagement with my research sites and the literature led to the refinement of my conceptualizations of family camps as place-based, family-centered programs.

## **Interview Participant Selection and Recruitment Procedures**

Following early program observations, I carried out in-depth, qualitative interviews with parents from 50 families<sup>9</sup> who attended the OPFR and OPHA retreats in 2013. Respondents were chosen through purposive sampling and met the following criteria: 1) parent primarily responsible for applying for the OP family program;<sup>10</sup> 2) attended an OP family program in 2013; and 3) was an active duty or veteran service member or spouse of an active duty or veteran service member. Seven retreats took place in 2013.<sup>11</sup>

Respondents were recruited in two ways. I worked with OP to recruit respondents who had already attended retreats prior to data collection (May through July, 2013). OP informed these respondents that a study was underway, and that their contact information (phone and email) would be shared unless they indicated that they were not interested in participating. Respondents who attended retreats in August through November of 2013 were recruited directly at the retreats. Participants received a brief overview of the study, and were asked to provide their contact information.

Upon receiving contact information, I emailed participants with additional information about the study (objectives, types of questions I would be asking, interview length, and incentives). Participants who wanted to participate contacted me and I directed them to a password-protected website where they could enroll. After enrollment, I provided an Information Statement and scheduled the interview. Participation in the study was confidential, and OP had

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<sup>9</sup> Most interviews were conducted with one parent from each family; however, in one interview, both the spouse and service member participated.

<sup>10</sup> The parent primarily responsible for applying for the OP program was used as selection criteria in order to choose participants who would be most aware of current family challenges and goals for attending the retreat.

<sup>11</sup> In 2013, OP retreats were hosted in Maryland, North Carolina, Tennessee, Texas, Washington, and Wyoming.

no knowledge of which families participated in the study. This study was approved by the University of Washington Human Subjects Division.

### **Interviewing Procedures**

All interviews took place over the phone and verbal consent was secured for participation and the digital recording. Most respondents chose to be interviewed in their homes. Interviews lasted one to two hours, and averaged 83 minutes. Each participant received a \$50 gift card for their participation.

I used an interview guide consisting of open-ended questions and follow-up prompts (Charmaz, 2006). This format allowed respondents to discuss their experiences in detail. The main questions of the interview included those that helped to capture respondents' most prominent experiences, as well as observations of their family members' experiences. The interview guide included questions that asked respondents to describe place and space experiences of the retreat program. Sample interview questions include: *Why did you apply for the retreat program? What are some things from the retreat you remember most? What did you learn about yourself and your family members? How did the retreat affect your family? What benefits, if any, did you experience? Was there anything surprising or something you hadn't expected to experience? What stands out to you most about the outdoor environment at the retreat? How did you experience being around other military families at the retreat? Describe any challenges your family may have experienced.*

### **Demographics**

Demographic information was gathered for respondents and their spouses as applicable to provide a more complete picture of the families represented in this study (see Tables 2.1 and 2.2). All but two of the participants were married, and all had children ( $M=2.9$  children). About

one-third of spouses and service members identified as a racial/ ethnic minority. Educational background ranged from some high school to graduate degrees. Approximately one-half of respondents reported some degree of family economic hardship.

Almost one-half of the service members were active duty at the time of the interviews, 20% were active National Guard or Reservists, and about a third were separated from the military (retired, medically retired, honorably discharged). The majority of families (38%) were Army-affiliated. Military rank/paygrade ranged from enlisted to officer, with mid-level enlisted ranks (E-5 to E-7) comprising the majority.

All service members had been deployed at least once, with an average of 2.8 deployments. Almost three-quarters of service members reported one or more service-related injuries, including post-traumatic stress disorder (PTSD) and traumatic brain injury (TBI).

### **Data Analysis Procedures**

All interviews were transcribed verbatim (Poland, 2002). In line with a grounded theory approach (Glaser & Strauss, 1967; Corbin & Strauss, 2008), which “focuses on the nuances of people’s experiences to develop and explore concepts and theories” (Manzo, 2005, p. 71), I employed an open coding strategy and multiple phases of code development (Charmaz, 2006). Analyses were conducted using the qualitative analytic software ATLAS.ti, version 7. Demographic information (e.g., family member names, places of employment) was de-identified and participants were assigned unique identification numbers.

Transcripts were first read in full and coded line-by-line (Charmaz, 2006). During the first phase of coding, themes and patterns were identified in relation to the research questions (Braun & Clark, 2006). To this end, the contents of first-phase codes consisted primarily of respondents’ comments. A priori meta-labels based on the three components of place-based,

family-centered programming (place, person, process) were also used to help identify and articulate major patterns, and were linked to specific interview questions.

The second phase of coding involved a more conceptual level of analysis (Charmaz, 2006). Initial codes developed in phase 1 were further developed to reveal sub-categories and relationships between concepts (Corbin & Strauss, 2008). Thematic networking was used to organize and understand links between codes (Attride-Stirling, 2001).

To support a peer review process verifying code development and interpretation of data, regular consultation with dissertation committee members was arranged by the researcher, and with stakeholders familiar with the needs of military families (Lincoln & Guba, 1985). Throughout the analytic process, relevant literature was consulted to confirm themes and patterns, and identify new theoretical developments.

## **Results**

Study findings are organized by the three components of family camps as therapeutic landscapes: place; person; process (See Table 2.3 for a list of themes). Starting with place, I first describe respondents' narratives that highlight their experiences in and of the physical locations where retreats took place. Findings then focus on the social environment created at the retreats and the social support that respondents experienced during the weekend. Finally, respondents' descriptions of the retreat processes and the meanings assigned to these processes, representing both balance and core activities, are explored.

### **Place: Natural and Built Environment**

Operation Purple programs capitalized on elements of the natural and built environments to support program and participant goals. The majority of retreat programming occurred outside with only a few indoor yet nature-focused activities (e.g., arts & crafts, zoology lab, wildlife

museum). Some activities centered nature in the forefront, for example canoeing on Percy Priest lake in Northern Tennessee, while others took place outside, but did not make nature central to the activity (e.g., ropes course challenge in the Pacific Northwest), although nature's presence was unmistakable. Nevertheless, nature-based settings provided the venues and at times the physical structures for activities. In addition, the camp built environment was generally designed to facilitate participants' practical needs and process-based experiences (e.g., residential cabins, meeting rooms, and communal spaces). Respondents' descriptions of their interactions with the natural and built environments revealed two themes: 1) simplicity of the natural retreat environment relaxes and calms and, 2) natural spaces draw people together.

**Simplicity of the natural retreat environment relaxes and calms.** Nestled in snowcapped mountain ranges, in wooded areas, and in close proximity to lakes and streams, OP retreat locations provided participants opportunities to enjoy nature's restorative powers and experience a distinct sense of calm that stood in contrast to the hustle and bustle of their lives back at home.

Participation in the retreats allowed families to be *emplaced* within the natural settings. Structured, cultivated, and built spaces maximized contact with and experiences of the natural surroundings. Cabins opened up to the scenic vistas of mountain ranges, wooded areas, or natural bodies of water. Pathways in the woods or along lakes took participants to and from activities. Waves lapping at the lakeshore or tree frogs calling to each other stood out in the otherwise quiet spaces. Evenings brought darkness undisturbed by streetlights. Most retreat sites, even those relatively close to towns, felt secluded and far removed from city life.

Bethany<sup>12</sup> described the pace of life at the retreat she attended in North Carolina as simpler and relaxing:

Nobody drove anywhere there. Everybody walked. It was nice... When the lights went out and they had some lighted paths, it was just—it was nice. It was simple, the simplicity. The simplicity of it was great.

Similarly, Veronica, mother of three, noted the impact of this removal into nature: “You're not in a rush, and you're just not stressed out. It is a really good experience. The whole tone of everything is just down a couple of notches.”

Respondents found the natural environment of the retreats to be relaxing and calming. Raquel, mother of three, described nature as “cleansing and healing,” telling me that while at the retreat, “[my family] responds so much better when they're outside. No one's as cranky. It made things positive.” Similarly, Veronica found that the natural environment of the retreat contributed to her feelings of calm and ease:

Your stress level is just so much lower that you're not snapping at the kids about every little thing. The fresh air, I guess, it's good for the soul. It's just so calm. You feel your stress level calming down.

**Natural spaces draw people together.** Respondents said that feeling more relaxed in the natural spaces at the retreats provided opportunities for more enjoyable family connections. Many respondents indicated that the natural settings invited interactions that brought family members together in a distinct way.

Courtney, mother of five, found that the densely wooded grounds, quiet meadows, and relative stillness at the retreat she attended in Washington provided a “space to think and talk and be together,” that was different from other places where her family might spend time. Similarly, Raquel, said that the beauty of same location, including the intensely lush and green

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<sup>12</sup> All respondent names and potentially identifying information have been changed to protect confidentiality.

surroundings and the wandering trails that invited participants to further explore, compelled her family to get outside: “You didn’t think, ‘I just wanna go sit inside.’ You wanted to get out.

When we had any extra time, we would get out and walk, because it was too pretty not to see.”

A few respondents humorously talked about being “forced” to find ways to pass the time in between the more structured aspects of the retreat. They identified how accustomed their family members had become to occupying any bit of down time with technology. Being at the retreats, where there were no electronics to distract and a “whole wealth of outdoors” to explore, in essence drove respondents outside to take advantage of being in the retreat environment. All of these respondents described positive experiences once their family members got outside and engaged with places they were occupying for the weekend. Tonya found that “being in nature itself” and having to “entertain yourselves” really helped her family connect.

Brenda provided a detailed account of her family’s realization that their options were completely open with regard of how they would spend their time after arriving at the retreat in North Carolina, they simply had to step outside the cabin door. After checking into their room, her children announced that there was no TV in the room. While Brenda was thrilled she observed that her family had to adjust. They turned to her and asked, “Well, what do we do?” To which she replied, “Why don’t we go outside and go for a walk and find out what’s here?” As a result of being “forced” to “find other things to do than to sit down in front of the TV,” they went for a hike and discovered a labyrinth of trails.

Brenda said she hoped the retreat would help bring her family closer and better integrate her husband into the family structure. She was glad that they were able to do things all together, as she tended to be the parent who did most of the activities with their two boys (e.g., Scouts). She hoped being outside together, something her boys love, would help to show her husband

how to interact with their sons and maybe lead him to do more types of outdoor activities once they got home.

### **Person: Social Environment Fosters Support**

In addition to therapeutic properties of the natural environments at the retreats, the social environment offered participants opportunities to connect and exchange support with other families facing similar circumstances and challenged by common stressors. Participants were coping with reintegration post-deployment and, for some, moderate to severe combat injuries. The gathering of these families, then, created a social context that was military-family-friendly. Describing this atmosphere, Serena told me, “It was really easy to connect with everybody. Everybody had kids. Everybody had some problems. It just worked.” Anna simply said, “We were in a place where everybody was feeling the same thing.” This particular context supported connections across the retreat community of participants, as well as relationships among individual family members. When recalling the facilitated and more informal exchanges with other participants, two specific dimensions of the social environment emerged in the data: 1) reprieve from feelings of isolation, and 2) mutual understanding: “they just know.”

**Reprieve from feelings of isolation.** At the retreats, participants had many opportunities to spend structured time together which helped to reveal shared circumstances. Some connecting conversations occurred while completing challenge or teamwork activities, and focused on inter-familial processes of cooperation and communication. Other discussions occurred during intervention sessions that brought participants together to share more about their particular situations and get tools to use in their everyday lives. Beyond the skill-building nature of those sessions, respondents singled out the benefits of sharing their experiences with other families. The purposeful act of bringing families together in a therapeutic setting to talk about their

struggles and to learn coping skills fostered an environment where families could recognize commonalities and provide support both to their families and to other retreat families. These exchanges helped families to feel as though they were not alone in their challenging and stressful experiences. As Juana told me, “We felt like we were normal, for once.”

For some, like Nicole, listening to other spouses of wounded service members articulate similar struggles helped her to feel as though she was part of a larger community, something she and others spoke of knowing at an intellectual level but it was made real through the exchanges with other families and the support offered through those exchanges. Another respondent, Carolyn, observed how being around other military dads supported her husband in some of his parenting challenges:

I think just hearing other military families and connecting with them and knowing that we're not alone, helped my husband a lot...It's not that he doesn't love his children, it's not that he doesn't have the patience for his children, it's just reintegrating. And to hear other military dads talking about that was really helpful for him.

Rob, service member and father of three, reflected on how being in a group with other deployed service members, validated their experiences, and not only legitimized their feelings but also helped them seek help for troubling issues or problems:

When [service members] get together with [each other], and see that they're not alone, it gives them permission to feel that the way that they are feeling, and that it is okay for them to grow and maybe seek some assistance as well.

Vivian observed that the retreat helped her husband, who had PTSD, a brain injury, and physical injuries which did not allow him to walk without assistance, to “feel less alienated.” This was particularly important as she identified that he normally “feels very alone in his injuries.” Similarly, Cherie observed that her husband, who was also coping with multiple injuries, felt more “comfortable” and was “able to fit in” at the retreat because “there were other people in his shoes.”

For some respondents, these sessions helped to provide perspective on their challenging situations. Although Taryn, mother of three and injured service member, found it difficult to hear other people's stories and talk about her own experiences, listening to other participants share their challenges during a structured parent session helped her to feel less alone. She said, "It just kinda opened my eyes to a lot of the same issues that we all face. That was really helpful."

Marcela told me, "I didn't feel so secluded. Like, 'Oh, my gosh. My family's got all these issues.' Really, somebody else is having the same problems. It just doesn't seem as serious."

Raquel summed up what many respondents expressed, noting the differences between talking with other families at the retreat and interacting with other military families in her daily life. While she admitted that she knew her military friends had similar struggles, she said that the contexts in which they would get together did not necessarily provide opportunities to speak deeply and openly about those struggles, thus obscuring many of the experiences that united them. For her, the context of sharing in a group where the focus was on sharing and not judging or giving advice, "just speaking from their hearts," provided an "amazing change to hear that our family isn't weird and different, and everyone goes through the same struggles."

**Mutual understanding: "They just know."** In addition to the more formal therapeutic components of the program, families also had casual opportunities to engage with each other during other parts of the weekend. In many ways, aspects of the built environment in the retreat locations helped to facilitate these interactions among family members and between families. Many retreat sites had open fields, walking paths, campfire circles, and chairs and benches scattered around to invite play, reflection, and togetherness. Central gathering halls and dining commons provided spaces to gather and engage in activities or share meals. For example, a large playfield in Wyoming and a cabinet full of various balls and other recreation gear allowed

multiple families to play together after dinner, in the last light of the evening. The common space in the residential lodge at one Healing Adventures retreat in Washington prompted an informal nightly gathering of wounded service members after children had gone to sleep. Several respondents who attended this particular retreat formed friendships that continued months after the retreat had ended.

These more spontaneous interactions, while primed by experiences in the more structured and staff-facilitated groups, gave participants further opportunities to exchange support. Sharing similar experiences helped program participants to foster a sense of empathetic understanding. The acceptance they felt by each other translated to a feeling of being understood. Bethany described it this way, “Everybody was on the same level playing field there. Everybody was together...It didn’t matter who you were, what you are. You were all equal.”

Many respondents found support and a level of understanding within the retreat community that they did not have back at home. For some, like Brenda, the civilian world just “doesn’t really understand everything that military families go through,” adding to a sense of being alone with challenging experiences. Similarly, Heather said:

It's more comfortable to me to be around other military families as a family in a group because I feel like they may have a little bit more sense of what we do go through. If I do say something, or even a military term, if that comes out of my mouth, I don't feel like I have to explain as much to another military family.

Because participants shared so many experiences, a natural exchange of information, advice, and guidance seemed to occur. These conversations took place on hikes through the wilderness, across the dining hall table, while watching children play together, and in the light of an evening campfire. Respondents spoke positively about this exchange. They found that the similarity of their experiences allowed for a level of understanding that made conversations particularly meaningful and also seemed to transcend conversation, because the person across

from them simply knew, at the deepest level, what they had gone through. Carolyn described the power of this unspoken communication:

Being around somebody that knows what you've been through and being able to talk about it and, just, I don't know, I guess, at the same time, I don't feel like I have to talk about it because they just know. It's like that unsaid knowing.

Nicole echoed this sentiment when she told me: "It was really nice to be able to talk to another spouse, and not even having really finished my thought, and just look at them, and they know exactly how I feel." These experiences stood in contrast to Heather's descriptions of the civilian world, where she felt like she had to explain "an awful lot because they ask a lot of questions."

In addition to feeling more understood by those around them, some respondents also felt like the atmosphere of shared experiences at the retreats increased understanding between and among their family members. Carolyn, for example, gained more insight into her husband's experience returning home from deployment after listening to the experiences of other service members:

I got new insight on it from military men and their actual feelings on being at home, losing their patience...and so it was like, for me, from an educational setting, I learned that, oh wow they see this totally different.

Similarly, Elsie shared how conversations between her adolescent son and other teens at the retreat helped him to better understand her experiences in the military, including reasons she had to deploy and limitations she experienced because of her injuries. She reflected that this had been one of her central goals of attending the retreat:

That's basically what I wanted, the outcome that I wanted...he was able to come back and say, "Hey mom, I'm sorry, I understand a little bit more." He's still a little bit angry but it was refreshing for him to come back and say, "Hey mom I got a little bit and I understand a little bit more."

The impact of feeling understood is perhaps best exemplified by the Healing Adventures families. For those families with injured service member parents coping with multiple challenges

pertaining to group belonging and identity, being around other wounded veterans in the social environment provided opportunities to engage with similarly situated peers in an environment absent of everyday stressors. Cherie explained that the injured service members “helped each other just by being there” where there was an unspoken “we’re in this together” mentality.

Vivian observed an experience of common ground as her husband interacted with other service members:

For him to meet other soldiers—he had time to take a break, and take a breather, and just talk. Whether they were talking about football stuff, or whether they’re talking about injuries, he made a connection with somebody who understands where he’s coming from or what he’s going through. He really seemed to enjoy that.

While most families with a wounded service member maintained military identities, the majority of injured parents were no longer serving. Whereas their lives were circumscribed by the treatment for and recovery from their injuries, many lived in civilian neighborhoods and had little to no contact with support networks that adequately understood or could relate to life post-combat injury.

With the opportunity the retreat provided to bond with others in similar circumstances, respondents expressed that they felt understood at the retreat in ways that they did not experience in the outside world. Courtney said it best:

We don’t have too many friends on the outside, because they see us as military. On our block we’re the military people...and he’s got all these injuries and stuff so they...kind of leave us to ourselves. So it was nice to finally make connections and being at a camp where [other families have] problems too so they deal with some of the same questions and issues we do.

### **Process: Symbolic Environment Orchestrates Meaning-Making**

A major aspect of the OP program is the set of structured and unstructured activities in which respondents participate that allow them to engage both with the natural environments and each other. In particular, the process elements of the retreat program illustrate the three

components in concert and in interaction with each other. Core and balance activities take place in nature, at minimum and, in many cases, also incorporate nature. As such participants interact with the natural setting. They also interact with their own families while engaging with other military families.

Respondents' descriptions indicated that activities were enjoyable for all family members and that they stimulated conversation—within individual families, and among the larger group of participants. Some respondents described renewed connections during guided activities such as learning how to canoe or completing a long hike for the first time as a family. Others cited the daily routines of the retreat (e.g., eating meals, getting ready in the cabin, participating in camp cleaning tasks) as activities that gave their families the best time to connect. Dimensions of the process component of OP programming are divided into balance activities (balance activities offer learning experiences) and core activities (core activities build cohesion and nurture connections), in line with the Core and Balance model of family leisure.

**Balance activities offer learning experiences.** Within family leisure studies, “balance” activities are those less common pursuits that often novel experiences and help to foster new learning and increase family flexibility. Each retreat provided activities that involved some element of challenge and opportunities for safe risk-taking (e.g., high ropes course, zip line, canoeing). Respondents shared stories of watching children or spouses engage in activities that pushed them to new levels—an adolescent overcoming a fear of heights, an injured spouse powering through emotional and physical discomfort, a child with a disability trying new activities and pushing past perceived limitations. Being present while family members attempted and completed these challenges created new family memories and also enhanced family members' understanding of each other's skills and abilities.

For example, Juana discussed insight she and her husband gained into their disabled daughter's physical abilities and emotional courage, when she decided, on her own, to try a zip line activity—something they would have stopped her from doing in another place and time. Her husband's experience of watching his daughter complete the activity was very emotional. Their other children were equally surprised and excited when their sister participated. There were “a lot of lessons [learned] in that one little thing,” Juana remarked. Juana said that while she knew the staff could safely accommodate her daughter after watching them expertly guide injured adults through the activity, she had been unaware that that her daughter perceived herself as able enough to complete the task.

Lydia found that a climbing activity helped to activate her family's connections and sense of mutual support. When Lydia was half way up the tower, she questioned whether she could complete the activity. Her daughter, who was afraid of heights, had already passed her. Her son, age 5, offered to hold her hand and help her up. Lydia said that the activities at the retreat taught her that her family is “a lot stronger than I thought.” She also was able to see not only their connection in action, saying, “We know that even though someone's not expressing it, we know when somebody needs something,” but learned to enjoy their relationships more:

I think just the whole retreat just opened our eyes, just to relax and just slow down. That every day is a new day, and there's time. We just need to slow down with the kids and realize that they're still kids and enjoy them.

Deborah observed that participating in activities that took her family members out of their comfort zones helped her husband to feel as though he was still part of their family. Four year-long deployments had taken their toll on his relationships with his three children. At the retreat, Deborah could not participate in the climbing and higher impact activities because of an injury, and thus her husband had to do them alone with their children. In addition to spending time with their children in this way, he was also more present for their daily routines like getting

dressed for the day and getting ready for bed. Because of this level of participation, Deborah said, “I think this helped him realize that they do need him, even if it feels, like, out-of-place. I think that was a big issue as well. He thought that they wouldn’t need him anymore and that he wasn’t of value, but I think that’s helped a lot.”

And, finally, the experience of Evey’s husband provides a powerful example of the ways in which participation in the retreat activities was contextualized within the distinct social environment made up of military families. Despite his injuries, he was spurred to participate in a ropes course challenge after watching another injured service member, with more severe and obvious injuries, successfully complete it. Rather than Evey assuming this familiar role of nudging and urging participation, it was the community of fellow veterans who pushed him past his preconceived limits:

My husband would get frustrated with something and then he would see [another wounded veteran] William...My husband was like, “Dammit William, now if you’re gonna do it, I have to go ahead and do it.”...It was good, because he copied other people...He felt instead of me saying, “Oh, come on. Give it a try, honey.” He saw these other guys doing it. It was good.

**Core activities build cohesion and nurture connections.** Whereas the “balance activities of the retreat provided participants opportunities for interpersonal and intrapersonal learning experiences, the “core” activities—those common and easily accessible activities that foster cohesion—helped respondents and their families to nurture connections. In-between rock climbing, canoeing, zip-lining, and hiking, participants also spent time together engaging in more low-key, common activities. Whether they were in their cabins getting ready for the day or settling down for the evening, wandering around the retreat grounds or sharing a meal together in the dining hall, many respondents experienced enhanced connections in these moments.

Mealtimes provided opportunities for unhurried and undistracted connections. Neva told me that eating meals together was her favorite part of the retreat, saying it’s “sharing time... With

all the other stuff we did, it was the little things for me that made the biggest impact.” Other respondents also found similar value in mealtimes. At home, many meals were rushed or did not include everyone in the family due to activity and work schedules. As a result, many families had gotten out of the habit of eating meals together. For Anna meals at the retreats included “sitting there and actually interacting.” This prompted her and others to ponder, “Why aren’t we doing this at home?”

In addition to mealtimes, other core level activities facilitated spontaneous and connecting conversation. Many respondents talked about how sharing a cabin, essentially one room for the weekend, prompted spontaneous conversation and a sense of greater closeness with their children. Very few respondents found these arrangements to be problematic, and for those who did, they were able to resolve their issues (e.g., were able to secure a larger room).

Josie admitted that the room her family of six shared at their retreat in Washington was small, but also told me that it was “what we needed, just to sit in front of each other and just talk.” She observed that the closeness of the space prompted her adolescent children to bring forward conversation topics that she and her husband normally had to try to address. She said, “It was nice to see them bringing up different things and talking about it versus us having to ask.” She said it was funny because half the time, those conversations came up in the room, “getting’ ready for bed or waking up, cause we were so close to each other.” These conversations often included thoughtful reflections on their family or issues that ended up being resolved, “just sitting there with each other.” During one particular moment in the cabin, one of her children said, “You know what mom? I think we can live like this. You know, we don’t need much. We just need a bed and we need a toilet and a shower and we have everything we need right here.”

Josie reflected that “everything we need” especially included her husband who had been sorely missed during two recent deployments.

Like Josie, Felicia, single mother of four and active duty service member, found that sharing a room with her children for the weekend translated into increased connections. Specifically, it provided her children with undistracted time and complete access to her. Felicia had just returned from a six-month deployment, her first in 13 years of service that challenged her family’s coping. Being so physically close for Felicia and her children helped them to mend after the long separation, “sit down and really talk.” She said, “We just talked, and it wasn’t necessarily about the family. It was just talking: ‘Well, Mama, while you was gone, we did this, we did that...Mama, this is why I missed you.’” Felicia went on to say that as a result of these many conversations over the course of the weekend, she realized how much the deployment and military life in general affected her children:

Before [the retreat], I would’ve said I’m the only one doing this [military] thing. It gave me a realization: no, your kids are doing it. They’re not out deployed with you, but they’re doing this with you. They’re doing this military lifestyle too.

Core-level activities also took place outside as families explored the retreat grounds during free time or played one of the various games available to them. Veronica’s family discovered a love for playing Frisbee while at their retreat in Maryland. The experience of playing together supported Veronica’s beliefs that “a family that plays together, stays together.” She said the retreat reminded her and her husband of the importance of creating quality memories while her children were still young, something she hoped would support connections that would carry through the adolescent years. Her family had already been through a lot with six deployments and physical and psychological combat injuries. Memories like those created while tossing the Frisbee at the retreat were essential to bolstering her family’s abilities to handle future challenges.

In addition to opportunities to play as a family, moments of connecting in quiet conversation or silent togetherness were particularly meaningful for many respondents. Marcie recounted a midday moment in Wyoming when she sat in rocking chairs with her 8-year-old daughter for over an hour watching other family members play basketball in the rain, keeping an eye out for a fox who had a den on site. She said, “everybody was happy, there was no complaining.” Similarly, Lydia emotionally described a moment when her husband and 6-year-old son were walking “hand in hand” on a trail, “very connected and very in tune.” Lydia had hoped the retreat would allow her spouse and son to rebuild their relationship after multiple deployments had seemed to wear down their bond. Of this moment on the trail and others at the retreat, Lydia said, “It was nice to see [the connection] happening...I just watched. I got to sit back and enjoy it.”

### **Discussion**

This study sought to conceptualize family camps as therapeutic landscapes by examining the experiences of military families contending with reintegration post-deployment and parental combat injury who attended Operation Purple family retreat programs. Conceptualizing the OP programs as therapeutic landscapes draws important links between place-centered, and particularly nature-focused research, and family camp studies. As emplaced experiences, family camps support families in part through the physical environments where camps are located, as well as the social environments that are formed, and the meaning and learning participants derive from camp recreational and intervention activities. Framing family camps as therapeutic landscapes allows for an explicit articulation of both individual program components, and, perhaps more importantly, the ensemble nature of these elements. That is, as part of the

therapeutic landscape, place, person, and process components work in concert to produce healing experiences.

### **Therapeutic Landscape Ensemble**

For purposes of analysis and also in corresponding with the related yet distinct literatures, I analyzed each therapeutic landscape environment (physical, social, symbolic) individually. In practice, the OP retreats bring all three components together in concert, one cannot be found existing on its own. At an OP retreat, one is in nature, participating in activities along with family members and other individuals with similar life experiences, and engaging in making-meaning processes about the holistic and emplaced experience. While all three elements were not always equally foregrounded in my respondents' narratives, they were always present. In reality, every experience at the retreat was contextualized to varying degrees by what participants were doing and meanings they assigned to these activities (process), the physical environments where they were located (place), and the people who surrounded them (person).

The majority of retreat activities took place outside and many used the natural environment as the venue for therapeutic, reflective, and relational processes. Families engaged in these activities individually or in small groups of other military families. Staff facilitated and guided the processes. Even activities that were not using natural elements, per se, were happening in natural locations, conveying potential restorative qualities to participants. Participants' experiences were connected to the experiences of those around them, often intimately, as family members or other participants observed and engaged with them. The overall social environment was supportive, participants explicitly knew that they were among people who understood their challenges. Retreats provided spaces that seemed to compel participants to

gather together with family members and other participants. Activities further created opportunities for interaction and interpersonal and intrapersonal learning.

**Family camp physical environments.** Many family camps take place in wilderness settings and utilize aspects of the environment in programming for healing, bonding, education, and strengths-building (Agate & Covey, 2007). However, in addition to providing locations and elements for outdoor activities the natural environment contributes therapeutic benefits. When considering nature-based family camps programs that specifically bring stressed families to natural settings to enhance relationships and individual and family functioning, nature's therapeutic contribution seems integral to program goals. As many family camp programs occur in natural settings, extending the beneficial mechanisms of such programs to include the role of the natural environments in which they take place, allows for a fuller articulation of how such programs impact family functioning.

Additionally, nature-based retreats do not simply offer beautiful wilderness settings, but rather provide families spatial contexts—physical *and* metaphorical spaces—that promote restoration and positive interactions. Landscapes become and are experienced as therapeutic in part through the production of healing spaces and contexts. Such spaces are constructed by societal, individual, and environmental factors.

Findings presented in this paper reflect common themes of how the natural and built environments can structure and influence participants' experiences. More than backdrops to recreational activities, natural settings contribute to participants' feelings of relaxation and calm. Natural environments draw family members together by offering inviting spaces and providing opportunities for novel interaction among family members—whether playing in a field, inspecting plants, or exploring trails.

At retreats families spend time with one another surrounded by mountains, lakes, old-growth forests, open meadows, and all that each camp setting offers. These natural settings offer the possibility of reducing stress which may support parental functioning and parent-child interactions. One could imagine that as camp participants experience lowered stress, they might be better able to join in program activities and goals, as well as build connections with family members and other participants.

Built environment spaces at the retreats also facilitate a sense of forced proximity, which fosters distinct social interactions. Whereas nature has obvious therapeutic benefits, the built environment also contributes to the holistic therapeutic landscape of the retreats. In the bounded environment at the retreats (e.g., a one room cabin, boundaries of the retreat grounds), with nowhere else to be, families found deeper levels of connection and openness. In the forced proximity, increased interactions were an important outcome. Residential buildings, in particular, fostered a distinct sense of closeness, as families often shared a room or single cabin for the weekend and spent downtime playing or talking in the evenings. Televisions were absent from all spaces, and instead participants found shelves stocked with board games. In the intimacy of the cabin and the absence of electronics, families found themselves discussing the day's adventures or naturally entering conversations about current challenges or family circumstances.

Features of the natural and built environment can bring people together, potentially increasing social cohesion (Groenewegen et al., 2006; Kuo, Sullivan, Colely, & Brunson, 1998; Milligan, Gatrell, & Bingley, 2004). Natural areas, in particular, have been found to promote increased social interaction by providing spaces that draw individuals together (e.g., parks, trails) (Hartig et al., 2014). Local neighborhood spaces that contain natural elements are viewed as safer and more desirable by residents, thereby supporting the development of community ties as

people are more likely to spend time in these areas (Kuo et al., 1998). Elements in the built environment can also increase or inhibit social interaction (e.g., tables and benches in a city square versus restrictive spaces with nowhere to sit or rest) (Flusty, 2005).

The built environment can constrain or catalyze, prohibit or encourage interaction (Mitchell, 2003; Putnam, 2000; Soja, 2010). Findings demonstrated how spaces at the retreats brought family members together and provide opportunities for contact with each other and the broader retreat community. This study adds to the topic of family geography and the spatiality of family life (see Hallman, 2010), specifically, how natural and built environments shape and organize family behavior, and can be used to promote positive relationship outcomes.

**Family retreat social environment conveys social support.** Social support is a well-established protective factor in the research on physical and mental health, stress, and coping. Indeed, healing may be considered an inherently social activity (Gesler, 2003). The presence of adequate support networks can buffer the impacts of toxic acute and chronic stress. Lack of social support has been found to increase negative mental health outcomes, including depression, substance abuse, and suicidal behavior (Kawachi & Berkman, 2001).

Respondents in this study overwhelmingly described the social environment of the retreats as supportive. The temporary community formed at the retreats comprised of people with shared circumstances helped to normalize participants' experiences and decrease their sense of isolation. Experiential similarity has been theorized as a requirement for the exchange of support between individuals (Thoits, 2011). Furthermore, respondents gained insight into their experiences, and those of their family members, increasing empathy and understanding across the family. Importantly, the retreat program offered many opportunities for structured and

unstructured sharing, thus providing a setting that enabled support-yielding conversations and interactions (Lakey & Orehek, 2011).

Respondents who had felt isolated discovered that they were not alone in their experiences of, and reactions to stressful circumstances, especially concerning reintegrating after deployment and coping with a spouse's combat injury. Respondents identified similar experiences of support for their children and spouses. Thus, the social support generated at the retreats was normalizing and reassuring for the entire family. Findings presented here emphasize the role of social support in promoting military family health, especially considering the stigma that still pervades military culture regarding asking for help and admitting to weakness (Greene-Shortridge et al., 2006). They also demonstrate how isolating military family life stressors can be, particularly for spouses and children, and the need for support services across the family.

This study also adds to the research on therapeutic recreation with veterans that links increased social support with positive psychological outcomes by including the family member experience. While social contact was limited to the retreat program, some respondents maintained contact with other participants they met at their retreat. Others received informational support by talking with other spouses or service members at the retreat. While most respondents did not report ongoing friendships, they did report positive impacts of the experience of being with a group of people who seemed to know exactly what the respondents were experiencing.

Socio-spatial contexts that help to enhance family cohesiveness and nurture parent-child relationships, as well as facilitate integration of the family and individual into a larger community, are what Groc (2007) refers to as *family-friendly* spaces. At family camps, family-friendly spaces are cultivated to facilitate specific program goals and produce particular social environments. One reason the socio-spatial context produced by family camps supports family

functioning is that family camps compared to the “fragmented patterns of daily life in the modern urban household,” are more “spatially bounded and interwoven” (Garst, Williams, & Roggenbuck., 2010, p. 104). This forced proximity fosters communication and supports the practice of families getting away in order to come together. Creating opportunities for spontaneous and unstructured communication is an important element of the family camp socio-spatial context as communication is the mechanism by which core and balance leisure activities support family functioning and is a critical component of the Core and Balance model (Orthner & Mancini, 1991; Smith et al., 2009).

**Therapeutic family leisure: Process at the OP family retreats.** When considering the family retreats as an example of place-based family-centered programming, it is evident that the Core and Balance model of family leisure and family functioning fits well into this conceptualization. The Core and Balance model provides a foundation for identifying mechanisms to support both family cohesion (via core activities that meet the needs for stability and structure) and family flexibility (via balance activities that meet the needs for change and novelty). Additionally, the concepts of core and balance recreation activities help to explain what is therapeutic about family leisure, an essential factor when considering family camps as therapeutic landscapes.

While the Operation Purple family retreat is considered primarily a “balance” activity, core activities play a role at family camps (e.g., eating together as a family, reading stories before bedtime, playing games) (Agate & Covey, 2007). However, because they occur in the novel environment of the camp setting, they may take on “balance” characteristics (e.g., eating together in a dining hall with other families, sleeping in cabins with bunk beds, playing new games led by

camp staff), giving families an opportunity to develop flexibility as they meet the challenge of doing these otherwise routine activities in different circumstances.

Within the core and balance model, core activities help to create stability and a foundation for positive family interactions. Although many core activities seem typical and represent everyday occurrences, for many military families, participation in such activities while at camp may remind them of the “little things” that have been forgotten or set aside during a deployment. So in addition to the contribution the novel environment of the retreat, even these everyday activities themselves are imbued with novelty, and therefore may be more memorable—adding to the overall experience of being at camp.

Respondents often mentioned mealtimes at the retreats. For many, eating every meal together for several days in a row particularly stood out, as mealtime routines at home had been disrupted by busy schedules, deployment, and injury symptoms. Eating a meal together as a family is considered a core family leisure activity and supportive of family cohesion (Zabriskie & McCormick, 2001). While it is not a guaranteed bonding experience, in the socio-spatial context of the retreats, mealtimes represented an opportunity to check in without typical home life distractions of TV, phones, and work and school responsibilities that can pull people away from the table. In the communal space at mealtime, families were supported in enacting family life in ways that perhaps they had not in many months. In this manner, even the camp dining halls served as a therapeutic landscape for families working to reconnect.

Engaging families in activities and processes that provide opportunities for spontaneous and connecting communication is a central goal of the OP program. For military families, extended deployments and separations are incredibly disruptive to maintaining relationships and increasing and improving family communication is central to prevention and intervention efforts

(Hinojosa, Hinojosa, & Hognas, 2012; Lester et al., 2011; Lester et al., 2011b). Communication with the deployed service member, generally via electronic and postal mail, telephone, and web-cam offers contact unlike what families relied upon in previous wars, but is not without its problems. Restricted access and technical problems in addition to general miscommunication and feelings of having “nothing new to say” have been reported as sources of communication problems among military families (Hinojosa et al., 2012). Military families may engage in patterns of silence and express anxiety about upsetting other family members with concerns or fears surrounding deployment, separation, the service member’s job duties, and issues of safety which can contribute to misunderstandings and misperceptions that can decrease family functioning (Lester et al., 2011a; Lester et al., 2011b). While “good communication” between parents and children can lead to strong and healthy ways of understanding life events, a general lack of communication around stressful, stigmatized, and traumatic events within the family perpetuates maladaptive personal and family level narratives (Fivush, Berlin, Sales, Mennuti-Washburn, & Cassidy, 2003).

### **Implications for Military Family Programs**

Military families (active duty and veteran) contend with multiple stressors and risks to family functioning. Family retreats offer a distinct venue for supporting military family coping. This study specified three elements of family camps as therapeutic spaces and described how these elements functioned in a military family retreat program. Military family-friendly programs must consider all aspects of service provision and the program landscape, including the environments where programs are located. While not all military programs are retreat-based, cultivating a sense of retreat can convey powerful benefits in giving participants a break from

stress and a place to focus on family relationships. These findings can be translated to support current practices with military families and work with other vulnerable family populations.

This study illustrated how the natural and built environment added to respondents' experiences, conveying relaxation and restoration and enhancing the role of other retreat processes (e.g., outdoor activities). Programs should capitalize on environmental elements to encourage family member interaction. As shown in this study, respondents' descriptions of retreat highlights and most memorable moments were only partly determined by their participation in structured recreational therapy activities. Other activities such as meal times and unstructured free time, combined with socio-environmental supports, yielded positive outcomes as well. In this sense, intentionally utilizing all aspects of the retreat landscape is crucial to creating the therapeutic experience.

The therapeutic landscape concept provides a holistic lens for understanding mechanisms at work in family retreat programs. More research that conceptualizes places as family-friendly therapeutic landscapes will help to structure programmatic understandings of using place to support family health. With the increase of military family programs, articulating the role of place within programming allows providers to be more intentional about where programs take place and how place can be used to enhance participants' experiences.

### **Limitations**

Although this study attempted to analyze the family unit as opposed to individual family members, interviews were conducted with only one parent and relied on this family member's experiences, perspectives, and observations of their family at the retreat. Future research would be well-served by interviewing all family members who participated in a family retreat program in order to more accurately represent the entire family experience. Although it was not feasible to

interview all family members in the current study, OP has been collecting post-retreat surveys from all family members over the age of 7 since the retreat program started in 2009. A review of these surveys as background preparation for this study demonstrated similar experiences across family members, suggesting that overall, families agree in their appraisal of their experiences at the retreats.

While respondents described many positive impacts of the natural environments, this was not a randomized controlled trial of a retreat intervention; therefore, definitive statements cannot be made as to how the experiences of retreat participants would compare to participants in another kind of military family program. Furthermore, studies have demonstrated that natural environments may not be experienced positively by all populations, especially those who may link rural and nature-based landscapes with historic trauma (Johnson, 1998; Taylor, 2000).

While the non-clinical context of family camps may diminish barriers to accessing support for military families, programs like the Operation Purple family retreats do have factors that might limit or restrict participation by various groups including: financial strain of being away from home or work; outdoor/ environmental orientation; and physically demanding activities. A wilderness-based family retreat may be appealing to only a certain demographic of families and limit the range of applicants.

The OP retreats also took place in locations known for providing access to pristine and well-preserved nature and wilderness environments. Thus participants had opportunities to spend time in places designated as restorative and healing. Questions of access to these kinds of areas for other distressed families are pertinent and speak to broader issues regarding how nature can be used to support all families who may benefit from the potential ways that contact with nature can promote health.

Lastly, interviews with respondents took place after they attended the family retreat program, from one week to several months after participation. How long positive impacts last, and how they will transfer to more permanent behavior change is unknown. Follow-up interviews with participants would help to answer these questions, and future research should seek a more longitudinal approach to understanding family camp participation. Despite this limitation, some research suggests that novel family experiences contribute to family change due to the impact of memorable experiences serving as a reference point for feeling connected and bonded.

## **Conclusion**

Family camps have an important role as therapeutic landscapes in supporting family functioning and providing families, and distressed parents and children in particular, with places and spaces to nurture relationships. The Operation Purple family retreats provide targeted programming for military families coping with reintegration post-deployment and combat injury and purposefully used the natural environment to assist families in strengthening relationships.

The most challenging aspect of a study of social, environmental, familial, and spatial program elements is identifying how to highlight specific components that work in concert with all other components. For example, while a high ropes course represents a family retreat activity in which participants engage, in reality, it offers opportunities for safe-risk taking, increasing communication, and strengthening trust while located in a pristine natural environment that itself promotes health. Furthermore, it is not just an individual alone on the ropes course, but an individual within a family unit and camp community, surrounded by staff and other support persons sharing in the event. And this event is only one part of an ongoing, multi-day retreat in which many other activities and processes are occurring. Adequately analyzing and representing

the transactional nature of something like this activity was supported by the therapeutic landscape framework that emphasizes the interplay of social, spatial, environmental, literal, and symbolic aspects at play.

Table 2.1. *Respondent and family demographics*

Respondents (N=51)	N	%
Female	46	90.2
Male	5	9.8

Note: Of the 51 respondents, non-military female spouses=43, non-military male spouse=1, female service members=3, male service members=4.

Non-military parent (N=48)			Military parent (N=50)		
	Mean	(SD)		Mean	(SD)
Age (range 27-47)	34.8	4.79	Age (range 27-48)	36.9	4.97
	N	(%)		N	(%)
<b>Sex</b>			<b>Sex</b>		
Female	46	95.8	Female	4	8.0
Male	2	4.2	Male	46	42.0
<b>Race/Ethnicity</b>			<b>Race/Ethnicity</b>		
White	34	68.0	White	35	70.0
African American	2	4.0	African American	7	14.0
Hispanic	9	18.0	Hispanic	6	12.0
Asian American	2	4.0	Asian American	1	2.0
Other	1	2.0	Native American	1	2.0
<b>Education</b>			<b>Education</b>		
Some HS	2	4.2	Some HS	-	-
HS graduate	3	6.3	HS graduate	4	8.2
Some college	18	37.5	Some college	26	53.1
AA or tech. deg.	8	16.7	AA or tech. deg.	7	14.3
College graduate	10	20.8	College graduate	7	14.3
Post-college	7	14.6	Post-college	5	10.2
<b>Employment*</b>			<b>Military Status</b>		
Not employed	20	41.7	Active duty	23	46.0
Registered caregiver	2	4.2	Reserves	7	14.0
Self-employed	2	4.2	National Guard	3	6.0
Part-time	16	33.3	Retired	7	14.0
Full-time	8	16.7	Medically retired	10	20.0

\*Note: All parents were parenting at least one child under the age of 18, here employment refers to public sector paid work, acknowledging that parenting is more than a full-time job for most parents.

Table 2.2. *Family-level demographics (N=50 families)*

	Mean	(SD)
# of deployments (range 1-8)	2.9	1.64
# months/ total time apart	24.8	14.0
# of children (range 1-5)	2.9	1.12
	N	(%)
<b>Children age groups (N=145)</b>		
0-3 years	19	13.1
4-6 years	29	20.0
7-12 years	54	37.2
13-17 years	34	23.4
>18 years	9	6.2
<b>Financial situation*</b>		
Struggling, paycheck to paycheck	6	13.3
Have necessities, no \$ for extras	17	37.8
Okay, some \$ for extras	11	24.4
Comfortable, have \$ for extras	11	24.4
<b>Housing situation**</b>		
Own	22	45.8
Rent	14	29.2
On installation	9	18.8
Other	3	6.3
<b>Military branch affiliation</b>		
Army	19	38.0
Marine Corps	6	12.0
Navy	8	16
Air Force	3	6.0
Coast Guard	1	2.0
Reserves/National Guard	13	26.0
<b>Military rank/paygrade***</b>		
E-1 – E-4	6	12.5
E-5 – E-6	28	58.3
E-7 – E-9	7	14.6
Warrant Officer	1	2.1
Officer	6	12.5

\*Note: 5 respondents refused to provide information about income

\*\*Note: 2 respondents refused to provide information about housing

\*\*\*Note: 2 respondents refused to provide information about rank

Table 2.3. *Significant themes of nature-based family camps as therapeutic landscapes*

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Place: Natural and Built Environment

Simplicity of the natural retreat environment relaxes and calms

Natural spaces draw people together

Person: Social Environment Fosters Support

Relieve from feelings of isolation

Mutual understanding: “They just know”

Process: Symbolic Environment Orchestrates Meaning-Making

Balance activities offer learning experiences

Core activities build cohesion and nurture connections

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PAPER 3: CATALYZING CONNECTIONS AND REDUCING FAMILY STRESS:  
NATURE-BASED RETREATS FOR MILITARY FAMILIES

**Introduction**

United States military families contend with serious risks to family well-being. In addition to physical and psychological combat-related injuries, frequent and prolonged deployment cycles pose challenges to family reunification and reintegration (MacDermid Wadsworth & Southwell, 2011; Sullivan, 2015). As such, the needs of military families warrant programs and interventions tailored to address a multitude of interconnected challenges.

Nature has long played a salutary role for military personnel coping with the physical and psychological repercussions of war (Helphand, 2006; 2014), dating back to the creation of rest camps in national parks to provide respite for battle worn soldiers returning from WWII (McDonnell, 2015). More recently, in the aftermath of today's military conflicts—where at least one in five service members is returning home injured (Tanielian & Jaycox, 2008)—a resurgence of these practices demonstrates, once again, the use of natural environments to promote healing and rehabilitation in military communities (Krasny, Pace, Tidball, & Helphand, 2014).

Studies of nature-based interventions with military members demonstrate a diverse set of benefits such as increased social support, greater physical and mental health, and enhanced recovery (Dustin, Bricker, Arave, Wall, & Wendt, 2011; Ewert, Frankel, Van Puymbroeck, & Luo, 2010; Hawkins, Townsend, & Garst, 2016; Lundberg, Bennett, & Smith, 2011; Townsend & Gillette, 2016; Vella, Milligan, & Bennett, 2013). These adventure and recreational therapy practices include river running (Dustin et al., 2011), fly-fishing (Alger, 2016), mountain climbing (Burke & Utley, 2013), as well as many other kinds of outdoor and sports activities. Most of these programs cater to individual service members, the majority of whom are male,

while a smaller number focus on the needs of specific groups within the military community (e.g., female veterans, families).

Nature-based recreational therapy designed for military families with children ranges from local encounters, such as gardening or tree planting projects, to more in-depth outdoor experiences, including multi-day camp/retreat programs (Krasny et al., 2014). Like therapeutic/interventional camps for civilian family populations (Agate & Covey, 2007), these programs focus on supporting family relationships, are tailored specifically for military parents and children negotiating the challenges of military family life, and importantly, are located in natural settings.

Benefits of family camp programs have been largely examined in broader studies of family leisure. Notably, this research has shown a positive relationship between family-centered activities, including camp participation, and improved functioning (Agate, Zabriskie, Agate, & Poff, 2009; Huff, Widmer, McCoy, & Hill, 2003; Shaw & Dawson, 2001; Zabriskie & McCormick, 2003). As a specific family leisure experience, family camps have the potential to enhance family relationships and provide experiences that can bolster strengths and increase coping (Agate & Covey, 2007; Garst, Baughman, Franz, & Seidel, 2013; Henderson, Bialeschki, & James, 2007; Taylor, Covey, & Covey, 2006).

Whereas much of the literature exploring the beneficial aspects of nature engagement has isolated individuals, within a family—children alone or parents alone—family leisure research examines how recreational activities support children and parents together. But, whereas its strengths lie in linking family camp participation and family functioning, it falls short in fully exploring the nature-based contexts of these experiences more centrally and the potential contributions of being in nature to family experiences and outcomes (Gass, Gillis, & Russell,

2012). Moreover, it does not address important questions, as Ashbullby and colleagues (2013, p. 139) argue, of “how and why families spend time together in natural environments,” especially with regard to how nature experiences can support social well-being (Izenstark & Ebata, 2016). And, finally, family leisure and camp research also has not examined the experiences of military families.

Our knowledge regarding nature’s role in family camp and retreat programs especially with regard to military family experiences and outcomes remains limited. This study responds to this gap by examining military family social interactions in nature as *emplaced* experiences. That is, the focus of this study is not solely the individual experience of nature, nor just the social interaction among family members, but the relational interactions that occur in natural environments.

Drawing from in-depth interviews with parents from 50 families who attended the National Military Family Association’s Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs in 2013, this study examines families’ experiences of spending time together in nature via a retreat program for those coping with deployment and parental injury with the aim of better articulating the role of nature in place-based military family retreat programs.<sup>1</sup> Following this introduction, a brief review of pertinent literature summarizes research on military family stress, links between nature and health, and family leisure and family camp participation. A description of the qualitative methods used in this study is provided in the methods section. Findings highlight the value of these programs for supporting military family relationships and are organized into three broad domains related to nature experiences including being away from daily life and routines and the

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<sup>1</sup> The family experience as described through the perspective of the parent respondent.

influence of nature's fascination on family relationships. The discussion section weaves the implications of these findings together with relevant literature and concludes with recommendations for future research and programming.

## **Literature Review**

### **Military Families and the Challenges of Reintegration**

Reintegration after a deployment can challenge all members in military families. The consequences of combat service on the physical and mental health of military service members are well-documented (Mustillo, Kysar-Moorn, Kelley, & MacDermid Wadsworth, 2015). Although technological advances in protective armor have reduced the number of service member casualties (Gawande, 2004), risks for psychological and physical injury remain (Holmes, Rauch, & Cozza, 2013). The last 15 years of military engagements have been marked by a prevalence of "invisible" injuries from posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI) (Tanielian & Jaycox, 2008), as well as increased rates of service member suicide (Bryan et al., 2015). Deployment has also been linked with moderate to severe mental health problems (e.g., depression, posttraumatic stress disorder, suicidal ideation), substance use, and significant relational problems in returned service members (Jacobson et al., 2008; Milliken, Auchterlonie, & Hoge, 2007; Sayer et al., 2010). Transitioning back into civilian life can be fraught with psycho-social-economic issues, including finding employment, negotiating new routines, and adjusting to post-military life (Pease, Billera, & Gerard, 2016).

Research has found that the repercussions of combat deployments and military service have also had far-reaching effects on children, spouses, and other dependents (Lester et al., 2016; Paley, Lester, & Mogil, 2013; Sullivan, 2015). Deployment is a major and ongoing stress among military families and has been linked to negative impacts on psycho-social health and

functioning (e.g., depression, anxiety, increased mental health treatment) for military spouses (e.g., de Burgh, White, Fear, & Iverson, 2011) and children (e.g., Alfano, Lau, Balderas, Bunnell, & Beidel, 2015). In two-parent families, the non-deployed parent maintains the home environment and cares for children with varying degrees of support and stress (Green, Nurius, & Lester, 2013; Lapp et al., 2010). Reintegrating with the service member after a significant absence can be challenging, requiring family members to (re)adjust their roles, responsibilities, and routines (Balderamma-Durbin et al., 2015).

In addition, once service members return home, combat injuries, both physical and those of a psychological nature that impact social and emotional functioning (Cozza et al., 2010; Hisle-Gorman et al., 2015; Holmes et al., 2013; Kreutzer, Mills, & Marwitz, 2016; Shively et al., 2016), require significant support from family members, and can strain coping capacities (Bowen, Mancini, Martin, Ware, & Nelson, 2003). Although much of the burden for care falls on the non-deployed parent, his or her manner of coping has a direct impact on children's socio-emotional functioning (Lester et al., 2010; Lester et al., 2016; Posada et al., 2015).

### **Benefits of Spending Time in Nature**

Physical environments impact health and well-being and a diverse group of scholars have highlighted natural environments, in particular, as important to enhancing health, improving mood, and reducing stress (for reviews see Hartig & Kahn, 2016; Hartig, Mitchell, de Vries, & Frumkin, 2014; Kahn, 1999; Kaplan & Kaplan, 1989; Louv, 2005; Maller, Townsend, Pryor, Brown, & St. Leger, 2005). Studies in this area indicate that time spent in environments with natural elements reduces stress and negative mental states and increases positive emotions and behaviors (Bratman, Hamilton, Hahn, Daily, & Gross, 2015; Hartig & Staats, 2006; Herzog, Maguire, & Nebel, 2003; Ryan et al., 2010). People who live in areas with more natural

surroundings report better physical and mental health (deVries, Verheij, Groenewegen, & Spreeuwenberg, 2003), and have lower rates of mortality than those who live in areas with less green space (James, Hart, Banay, & Laden, 2016). Contact with nature can also foster a sense of belonging (Hartig, 1993; Mayer, Frantz, Bruehlman-Senecal, & Dolliver, 2009; Williams & Harvey, 2001), increase social interactions and support (Groenewegen, van den Berg, de Vries, & Verheij, 2006), and provide respite from the stress of daily routines (Gesler, 1993). Furthermore, merely having a view to nature has been found to have restorative effects (Han, 2010). In a classic study, Ulrich found that patients with hospital room windows that provided views of natural elements, healed faster and required less pain medication (Ulrich, 1984).

Several modalities have been identified to explain how contact with nature impacts human health. Hartig and colleagues (2014) identified the four most prevalent areas through which nature impacts health, as indicated in the research: air quality, physical activity, social cohesion, and stress reduction. They concluded that while these particular modalities are most often studied individually, they often occur in combination. For example, visiting natural areas often entails access to clean air and requires some kind of physical activity (e.g., hiking, climbing). This interaction, in turn, is linked to stress reduction.

With regard to social cohesion, natural areas promote increased social interaction by providing highly preferable spaces that draw individuals together<sup>2</sup> (Hadavi, Kaplan, & Hunter, 2015; Kaplan & Kaplan, 1989), thus combatting ill effects of social isolation, especially in vulnerable groups such as the elderly (Milligan, Gatrell, & Bingley, 2004). Local neighborhood

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<sup>2</sup> Natural environment preference has been assessed in various ways (e.g., see Green, 2015; Hunter & Askarnejad, 2015). For example, in a study of the health benefits of spending time in nature, Mary Carol R. Hunter (as cited in Green, 2015) assessed preference via photographs study subjects took of natural areas where they spent time. These photographs (N=470) were then analyzed, resulting in 60 attributes that included such labels as complexity, structural coherence, form, proportion, openness, and access.

spaces that contain natural elements are viewed as safer and more desirable by residents, thereby supporting the development of community ties as people are more likely to spend time in these areas (Kuo, Sullivan, Colely, & Brunson, 1998). Most visits to natural places occur in groups (Staats, Van Gemerden, & Hartig, 2010), and most often with family members (Le, 2012). Nature fascinates, and its distractions—a frog croaking in a pond, a bright flower poking through the snow, a mouse rustling in dry leaves invite exploration and encourage conversation (Kaplan, 1995). Thus natural elements may illicit social interaction through a process of triangulation, whereby individuals, even strangers, observing the same feature or phenomenon, join together in mutual fascination and dialogue (Whyte, 1980).

In addition to the pathways identified above, Stress Recovery Theory (Ulrich, 1983) and Attention Restoration Theory (ART) (Kaplan & Kaplan, 1989) play a central role in explaining links between nature and health. While these theories are most often studied independently, some scholars have also sought to explain how processes of physiological and attention restoration complement each other (Hartig, Evans, Jamner, Davis, & Garling, 2003). Stress Recovery Theory states that spending time in nature reduces psycho-physiological arousal, thereby lowering stress but not necessarily replenishing attention (Han, 2010; Kjellgren & Buhrkall, 2010). Self-report surveys and physiological measures (e.g., pulse, blood pressure, muscle tension, brain scans, skin conductance) used in various studies show marked reductions or recovery in system markers of stress (Hartig et al., 2003; Kahn, 1999). Studies demonstrate that being in a natural environment or even viewing nature through a window or on a screen assists recovery from a stressful situation more effectively than being in an urban environment or having non-nature views.

Attention Restoration Theory (ART), asserts that nature benefits health by restoring individuals from mental fatigue that has negative intrapersonal and interpersonal consequences (e.g., irritability, reduced self-regulation, lowered inhibition, distractibility, and decreased problem solving skills) (Kaplan, 1995). According to ART, restoration from mental fatigue can be achieved by: 1) avoiding activity that requires direct attention and being away from one's day-to-day routine; 2) being in an environment with "extent," that has enough richness and coherence that it provides a reprieve from everyday life and stressors; 3) being fascinated by something that holds effortless attention and enjoyment, providing a respite from everyday tasks and demands, and; 4) finding compatibility between one's purposes and the environment (Hartig, Mang, & Evans, 1991).

Taken together, research on nature's impact on health provides strong evidence of its therapeutic benefits. Empirical support for these modalities continues to grow (e.g., Bratman et al., 2015; Hadavi et al., 2015). However, limitations do exist, especially with regard to dosage, or how much nature is needed to achieve certain benefits, and the need for better measures with which to assess the restorative qualities of nature-based locations (Hartig et al., 2014). In addition, little is known about the benefits nature bestows on collective units, such as families, who interact with nature together.

### **Family Leisure and Outdoor Recreation**

Leisure is an important element of family life, yet many families struggle to find ways to fit family leisure activities into their routines. Research consistently supports the idea that family leisure contributes positively to parent-child relationships (Zabriskie & McCormick, 2003), social cohesion and adaptability (Zabriskie & McCormick, 2001), communication (Huff et al., 2003), and overall family functioning and family satisfaction (Agate et al., 2009). Away-from-

home family leisure activities, in particular, offer reprieve from daily life stressors and access to family-friendly places (Hallman, 2007; Schanzel & Smith, 2014; Torretta, 2004).

This body of research reflects a considerable range of locations, activities, and dosage (e.g., outings to the beach or to zoos, time spent in national or regional parks, and participation in wilderness family therapy). However, research in this area has tended to treat all leisure experiences as equal. As a result, the knowledge base it has generated fails to provide a thorough understanding of how the context—or the places and spaces—where these activities take place shape families' experiences (Izenstark & Ebata, 2016). As a result, it limits our understanding of how family leisure participation in nature might differ from other forms and how it might distinctly impact family functioning (Ashbullby et al., 2013; Izenstark & Ebata, 2016).

### **Family Camps**

Within family leisure research, the study of family camps is noteworthy. Family camps represent a particular type of family leisure activity that places families in outdoor or nature settings. Unlike shorter, more indirect nature experiences (e.g., trips to local parks or zoos), family camp programs typically span multiple days, take place in areas with greater concentration of nature, and thus, more fully remove participants from their daily lives. Families seek out family camp programs in order to strengthen relationships, spend quality time together, participate in outdoor-based activities, and experience an away-from-home, shared experience (Garst et al., 2013; Schanzel & Smith, 2014; Taylor et al., 2006). Family camps can also provide an enriching family-level experience that bolsters strengths and prevents negative outcomes (Henderson et al., 2007). Therapeutic/ interventional family camps in particular, leverage multiple aspects in support of program goals including shared experience and social support,

recreational therapy activities, informational support (e.g., managing an illness or specific issue), and clinical services (Agate & Covey, 2007).

Although most family camps take place in natural or wilderness settings, the focus of most family camp research has not adequately included nature as an active ingredient in the camp experience and therefore, it has been missing as a central aspect of the analysis. Instead, it has treated nature as a “backdrop for activities,” rather than a contributory element (Kaplan & Kaplan, 1989, p. 145). As a result, the role of the nature environments in which most camps are located has not been fully addressed.

In what follows, I bring together these three important domains of research—the natural environment, family leisure and outdoor recreation, and family camps—to analyze parents’ perspectives on their own and their families’ experiences of the natural settings of a military family retreat program. Specifically, this research aims to illuminate: 1) the potential benefits and/or downsides of contact with nature for military families coping with deployment and/or parental combat injuries; and 2) the manner in which nature can be used as a therapeutic pathway in a family camp program designed for military families.

## **Methods**

In-depth, qualitative interviews were conducted with parents from 50 families who attended a therapeutic family retreat program. A grounded theory approach (Glaser & Strauss, 1967) was employed in order to understand respondents’ lived experiences of the natural environments where the retreats occurred. Through the systematic examination of data—people’s experiences and the meanings they assign to those experiences—grounded theory seeks to develop concepts and build theory. A priori theoretical frames based in a review of nature-

health studies provided a means with which to link and locate emergent themes from the interviews with existing concepts.

### **Participant Selection and Recruitment Procedures**

This study draws from in-depth, qualitative interviews with parents from 50 families<sup>3</sup> who attended the National Military Family Association's Operation Purple family programs in 2013. These programs bring military service members and their families to national parks or similar areas (e.g., state park, environmental education center) for multi-day retreats<sup>4</sup> in order to strengthen connections after a recent deployment (Operation Purple Family Retreats), and/or while coping with a parental injury (Operation Purple Healing Adventures) (Green, Mogil, Buchanan, & Lester, 2016).

Study respondents include active duty and veteran service members (e.g., medically retired, honorably discharged) as well as spouses of service members. All of the respondents had experienced deployment (as a service member or spouse) and the majority of active duty and veteran service members had experienced a service-related injury. Purposive sampling was used to select respondents, who met the following criteria: 1) parent primarily responsible for applying to the OP family program;<sup>5</sup> and 2) was an active duty or veteran service member OR spouse of an active duty or veteran military service member. A total of 83 families participated in the retreats in 2013, indicating a 60% response rate for the study.

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<sup>3</sup> Most interviews were conducted with one parent from each family; however, in one case, the spouse and service member felt equally responsible for applying to the retreat program and both participated in the interview.

<sup>4</sup> Most retreats lasted four days, Friday through Monday; Wyoming retreats lasted five days.

<sup>5</sup> The parent primarily responsible for applying to the Operation Purple family program was used as selection criteria in order to select participants who would be most aware of current family challenges and goals for attending the retreat.

After securing approval from the University of Washington Human Subjects Division, respondents were recruited in two ways. Respondents who attended retreats prior to data collection (May through July, 2013) were informed by Operation Purple that a study was being conducted, and their contact information would be shared with the researcher unless they were not interested in the study. Respondents who attended retreats August through November, 2013, were recruited at the retreats. Participants were given a brief overview of the study and asked to provide contact information, which was then sent to the researcher. Participation in the study was confidential, and Operation Purple was not informed about families' participation.

Upon receiving participants' information, the researcher emailed more information about the study (objectives, types of questions, estimated length of interview, and incentives), and asked participants to contact the researcher to be interviewed. Participants were also directed to a password-protected website to learn more about the study and enroll. Once participants enrolled in the study, the researcher provided an Information Statement and scheduled the interview.

### **Demographics**

Demographic information was gathered for respondents and their spouses (as applicable) in order to capture a more complete picture of the families in this study (See Tables 3.1 and 3.2). All but two of the respondents were married,<sup>6</sup> and all had children. About one-third of spouses and service members identified as a racial/ ethnic minority. Educational backgrounds of respondents and their spouses ranged from some high school to graduate degrees; the majority

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<sup>6</sup> Study sample was primarily comprised of two-parent, heterosexual families, a prevailing norm in the military, but the study acknowledges the need for research on other military family constellations including families of gay and lesbian service members, single-parent families, and dual military families.

reported completing some college. About half of the respondents reported some degree of family economic hardship.

Almost half of the service members were active duty at the time of the interviews, 20% were active National Guard or Reservists, and more than one-third were separated from the military (retired, medically retired, honorably discharged). Mid-level enlisted rank service members (E-5 to E-7) comprised the majority. All families experienced at least one deployment, with an average of 2.8.<sup>7</sup> One-third of the families experienced four or more deployments. Deployment length ranged from under six months to over 18 months. One-third of families experienced three or more years of cumulative absence due to deployment. Almost three-quarters of all service members included in the study reported one or more service-related injuries.

### **Interviewing Procedures**

All interviews took place by phone and were recorded. At the beginning of the interviews, verbal consent was secured for participation and the recording. Most respondents chose to be interviewed in their homes. Interviews lasted one to two hours, and an average of 83 minutes. Each respondent received a \$50 gift card for their participation.

The interview guide consisted of open-ended questions and follow-up prompts (Charmaz, 2006), and included questions that helped to capture respondents' most memorable experiences as well as observations of family members' experiences. Examples of interview questions include: *What experiences from the retreat do you most remember? How did the retreat affect your family? What benefits, if any, did you experience? Was there anything surprising about*

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<sup>7</sup> One respondent and her children had not experienced any deployments with the respondent's current husband with whom she attended the retreat. Previously, she and her children went through four deployments with the respondent's first husband/children's father. The respondent's current husband was deployed once before they were together.

*your experience? What does nature mean to you and your family? What are the differences between spending family time outside vs. inside? What stands out to you most about the outdoor environment at the retreat?*

### **Data Analysis Procedures**

Audio-recorded interviews were transcribed verbatim (Poland, 2002). Each respondent was assigned a participant identification number and demographic data was de-identified. Interview data was analyzed using a grounded theory approach that focuses on the discovery and generation of theory from data (Corbin & Strauss, 2008). All analyses were conducted using the qualitative analytic software ATLAS.ti, version 7.

Each transcript was read in full and coded line-by-line in the initial phase of analysis (Charmaz, 2006). Respondents' comments primarily provided the contents of early codes (e.g., nature is relaxing; everyone was less stressed; my children had space to roam). The goal of the first phase of coding was to identify themes and patterns related to the research question (Braun & Clark, 2006). As analysis continued, new codes were developed to reflect the respondents' varied experiences, in line with the open-coding approach in grounded theory (Corbin & Strauss, 2008). Broadly-based a priori codes were used to group major themes and patterns (e.g., nature-based retreat process; inside versus outside). These meta-label codes were linked to specific interview questions (e.g., What is the difference between spending family time inside versus outside?).

The second phase of coding, which occurred after all transcripts were read, involved a more selective and conceptual level of analysis (Charmaz, 2006). Initial codes were further developed to reveal sub-categories and relationships between concepts (e.g., nature is relaxing: separation from technology, distance from normal life, reduced stress across family members).

In order to support a peer review process of verification of code development and interpretation of data, regular discussions with dissertation committee members was arranged by the researcher. Additionally, throughout the analytic process, relevant extant literature (e.g., nature-health studies, family camp research) was consulted to confirm themes and patterns as well as new theoretical developments.

## Results

Emergent themes and sub-themes were grouped into three broad phenomenological domains I refer to as: being away; being in; and being fascinated (see Table 3.3). The first domain, *being away*, captures themes related to how spending time in nature provides physical and emotional distance from daily life. The second domain, *being in*, encompasses themes regarding what respondents experienced while in contact with the natural environment at the retreats. The third domain, *being fascinated*, highlights themes of nature's power to captivate attention and catalyze social interaction.

Respondents signed up for the Operation Purple retreats because they wanted to spend time with their family members doing outdoor activities, away from the distractions and demands of home which, to most, felt disruptive to quality family time. They also appreciated being in an environment that catered to and was supportive of the distinct contours of military family life. Having the kind of space they hoped would promote togetherness was particularly important, as their families were not only coping with the typical demands of busy lives that get in the way of family connections, but were also facing stressors linked to deployment and parental injury that further impeded their abilities to connect. Reflected in respondents' motivations was a belief that getting *out* of the house and *into* nature was necessary in order to experience being together, especially during periods of strain and disconnect. What they

discovered during their time together at the retreat is the subject of the analysis that follows.

Although there were many elements to the Operation Purple retreats, including the programmatic aspects, my analysis focuses on respondents' experiences of the retreat's natural environments.

### **Being Away**

One beneficial aspect of natural environments is that they offer a space away from daily life routines and stressors. Not unexpectedly, respondents said that the nature-based settings of the retreats contributed to their feelings of being removed from the busyness and stresses of daily life. For example, Hannah,<sup>8</sup> mother of two and spouse of an injured service member, expressed that being in nature allowed her family to get away from “all the things in life that are distracting...medical appointments and making meals and gettin' to the grocery store and cleaning the house and—everything in life that you have to do on a daily basis.” She continued, “When all that's out of the way, I think then you can actually breathe and just relax and be.”

While respondents welcomed a reprieve from the endless cycle of errands and responsibilities, including work, school, and activity schedules, they astutely pointed out that these demands and distractions also hampered family connections. In this sense, retreats offered the opportunity to regain emotional connections. Respondents' narratives brought out several aspects of being away that positively contributed to their experiences at the retreats.

**Shutting out the life noise.** Respondents frequently mentioned experiencing quietness at the retreats. For them this sense of quietness was geographic, as many retreat locations were miles outside of towns and city centers and thus were quieter than the places where most respondents lived. Retreat locations also lacked the ambient noise of traffic, televisions,

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<sup>8</sup> All respondent names and potentially identifying information have been changed to protect confidentiality.

telephones, and appliances. In addition, some respondents also discovered a more metaphorical quieting of life, one that was supportive of their goals for attending the retreats.

For Jamie and her family who were attempting to reconnect after being separated for most of the last three years due to her husband's training and deployment schedules, the silence at the retreat created room for healing and a positive visioning of her family's future. Jamie described the environment at the retreat as devoid of "life noise," saying, "life can get so noisy and none of that stuff followed us there." She told me that in the absence of life's noise, the quietness had a "therapeutic effect." "I think the silence there really was helpful to filter out and know that [life] could be different."

Similar to Jamie's experience, Tara, mother of three, also found that the noisiness of home had not followed them to the retreat; its absence brought a reprieve from stress that made room for reflection and togetherness. She described a moment at the retreat when she was quietly sitting with her husband on the lakeshore, feeling a rare sense of ease:

You're looking at these mountains and you're sitting on the bank of this gorgeous lake and...It's amazingly quiet...We can just enjoy it and we don't have to think about anything, you know? We don't have to worry about 8,000 things that we have waiting for us at home...All the stress we have in our relationship wasn't an issue, really, at that point. Not that it would just disappear and not be there when we came back; however, it's just totally different—it gives you better perspective when you go back home.

Their experience of leaving behind the life noise enabled them to find new perspectives on their challenges, including coming together as a recently blended and new military family, as her spouse had only been in active duty for the last three years, and negotiating the repercussions of a deployment that seemed to leave her husband "harder" and less empathetic.

Michelle, mother of two, also enjoyed time away from the life noise on early morning walks with her young adolescent daughter while at the retreat. During these walks, they were "quiet a lot, but also talked about stuff." Time to connect with her daughter, who had been busy

with school and activities and her social life, had been hard to come by. Those walks, in the quiet mornings, when there were no other sounds, “other than the birds,” removed from the “hustle and bustle of everyday life,” gave mother and daughter much needed “face time.”

**Unplugging.** When respondents described the distractions they felt interfered with family connections at home, technology (e.g., smart phones, video games, and other hand-held devices) was a central concern. Spending the weekend “unplugged,” as many respondents called it, was a result of accommodation arrangements (no TVs in rooms), geographic locations (some retreat sites were out of cell phone range), and program goals (participants were asked to leave phones in cabins). However, beyond suggestions and restrictions around use of technology, respondents’ descriptions implied that they felt like nature was antithetical to technology and that being in nature afforded them an opportunity truly get away from distractions and be more connected, or plugged in, with each other rather than their devices.

Julia, mother of four who had been through two deployments with her Army spouse, said that “being away from all the electronics, the internet especially” facilitated opportunities to simply spend time “talking and getting to know each other as a family,” important activities that reminded her family of their bonds and mutual support. Veronica, mother of three who had been through several deployments and multiple combat injuries with her Marine Corps spouse, agreed, saying, “any time you can get away” from the distractions of technology, it “gets your focus back on what it should be, which is family.” Kimberly, whose family of three had been through four deployments, struggled to find the right word to describe how being without phones impacted her family, finally saying, “We were just more—I don’t know, it’s hard to explain—more open.”

Removed from screens and electronic tethers to the outside world, family members turned to each other. Raquel, mother of three and Navy spouse, described the experience, “We’re

just all present in the same moment, experiencing the same thing together.” Similarly, Bethany told me that being outside and separated from devices, facilitated direct interactions among her three children, herself, and her Navy service member spouse:

You can't go to your phone to text somebody and tell 'em, “Oh, my gosh, I just seen this thing. This is what happened,”...[Instead, my kids] have to tell me, or they have to tell their brother, or their sister, or their dad. They have to tell one of us.

Being unplugged at the retreats catalyzed deeper reflections surrounding technology use, especially realizations that being away from devices did not leave family members feeling deprived and that fun was not dependent on access to electronics. For example at the retreat Josie’s four children, who ranged in age from 3 to 17, surprised her when they told her that the retreat made them realize that they didn’t need TV and electronics. “Our family, all of us being together, including dad being there was, I guess, what counted.” As a relatively new military family, with two long deployments in the last six years, the lack of electronic distractions and the ability to be together for multiple days, made them keenly aware of what their family valued.

Similarly, Jamie reflected on how technology created obstacles to taking time to work on family relationships: “How many times do you say that, in any marriage, military or not, that you need to...[take] time to unplug and look inward.” The retreats, she said, gave her family an opportunity to actually have that time. Upon returning home, many respondents were more aware of the role technology played in their everyday lives and how it intruded upon relationships, and made efforts to create unplugged family time by decreasing screen-time among themselves and other family members.

### **Being In**

Respondents attended the multi-day Operation Purple retreats in diverse locations which transported respondents from cities, towns, and their everyday lives to the dramatically different

sights and rhythms of nature. These scenic settings, nestled in snow-capped mountain ranges or alongside serene bodies of water, afforded participants with opportunities to not only get away from daily life but to spend time in natural environments, to be in the elements, and vividly experience family participation in nature (e.g., snow-shoeing, hiking, canoeing, river rafting). Two central themes surfaced regarding being in nature: lowered stress across the family, including the service member parents, and nature's distinct form of in vivo instruction.

**Natural environments lower stress.**

*Being surrounded by green.* A particularly impactful element of the natural retreat environments that several respondents mentioned was the presence of so much green vegetation. Some respondents equated greenness with restoration, serenity, and calm. Juana, mother of four and spouse to an injured service member, found the natural environments of the retreat she attended in southern Texas on the Guadalupe River, to convey a particular affective ease, saying, "It's just a grounding experience to be outside, see the grass and trees." Being surrounded by and emplaced in so much greenspace highly contributed to their feelings of reduced stress.

But for some participants it was about more than just being in the greenness at the retreats, but the contrast to the lack of greenness in other spaces in their lives that made the retreat environments particularly impactful. For example, Elsie, injured service member, said that for her teenage son, the environment at the retreat was meaningful because of how green it was, especially compared to the brown of the desert surroundings where they lived. She said, "his big thing was ... all the green."

On an even larger scale, Rob, father of three and an active duty Marine, discussed the restorative impact of being surrounded by the green valleys, mountains, and trees at the retreat after spending so much time in Afghanistan and Iraq. He said that the extreme contrast between

the green of the retreat and the brown of the desert was a “big deal for a lot of the veterans,” so much so that he had often seen service members planting seeds and nurturing small patches of green while overseas, in order to “keep their sanity with seeing something green.” Rob described his impressions of the natural environment at the Operation Purple retreat:

Just the fact that it’s so—everything is green...For me, green trees and bushes and stuff, it’s gonna have a different meaning for the rest of my life now...[The green] makes you think that there is hope, really.

He added:

I think that for most of us that were in Iraq and Afghanistan, it was so brown, all the time. You really get used to it while you’re over there, until you come back and you see green. Then it just blows you away. I don’t know. It’s almost like proof of life.

I asked if he had heard any of the other service members at the retreat he attended mention this contrast between the green of the retreat and the brown of the desert. He said that he didn’t remember anyone specifically mention it but did say that in his daily military work experiences, “[it’s] always in discussion...It’s like polar opposites to the environment we were in.”

***Stress reduction for the family.*** Respondents’ narratives, including their experiences in nature and observations of their family members, indicated that stress felt lowered across the family. They said that the natural retreat environments were relaxing, and had calming and peaceful effects. As Courtney, mother of four and spouse to an injured service member, put it: “I think there’s just something about just looking at it all that just automatically relaxes people, I know [my family] felt that way.” Evelyn, mother of two, said the natural environments were “peaceful...beautiful, refreshing, energizing.”

Respondents described their family interactions at the retreats as easier, more joyful, and more emotionally satisfying. They felt as though everyone in their families were in better moods while at the retreat and attributed this, in part, to the natural environment. As Monique, said of her family, including four children and her injured service member spouse, “I can’t really say

what it is, but it's something about being outside, I guess, brings out the best in all of us."

Similarly Raquel said, "Everyone responds so much better when they're outside. No one's as cranky. It made things positive."

Many respondents said that their children seemed happier, fought less with siblings, and were less argumentative with parents. In an example of the impact of nature on child participants, Elsie spoke at length about how the environment at the retreat affected her son so much so that he "forgot to be angry." She said, "just the entire atmosphere...all of it combined together is one of the reasons why my child forgot to be angry, it was just so calming, so peaceful, you know." Another respondent, Taryn, mother of three and former service member as well, said that while at the retreat her whole family was "more peaceful and calmer" and that instead of fighting, her three daughters were "interacting, and loving it, and just running and playing and finding things, and just getting dirty." She concluded by saying, "There's something about being outside that is incredible and unexplainable."

Several respondents identified how exposure to natural elements (e.g., fresh air, trees, water) contributed to the better moods and lowered stress they observed in their families. Rob commented on how nature made his family members seem more open and willing to interact. "You can tell that the exposure to the sun, the fresh air, it makes you just want to express things more. I think that there's happier moods." Similarly, Jamie described the interactions among her family members as "earthy, natural, [and] raw." She said, "It's almost like when you're at home and you want to open the windows and get some fresh air. That urge to let the outside in is always so comforting." Veronica said that the fresh air was "good for the soul," and felt like she was a calmer parent, "not snapping at the kids about every little thing."

Several respondents attributed the lowered stress they observed in their families to the fact that being in nature was something that everyone in their family enjoyed. Thus, for these families, they were in a place that simultaneously lifted everyone's moods. Hannah reflected that even though her family of four consisted of individuals with their own "issues or personalities" that being outside together was one place they could all "definitely connect." About her family of six, Molly said, "we all love to be outside." The opportunity to be outside together, to "explore" and "get out there," was an added benefit of the retreat, because they were able to increase their bonds while doing something they all loved.

A few respondents used the word healing to describe what they experienced. For these respondents, as stress seemed to go down, and feelings of calm and relaxation went up, the quality, depth, and enjoyment of family interactions increased. The result of this was a sense of emotional healing, as much needed connections happened more easily, characterized by laughter, affection, and a lack of strain. In the relative absence of stress, tensions eased, and respondents experienced their families as having returned to a more balanced and connected emotional space.

*Stress reduction for the service member.* The impact of spending time in nature at the retreats was particularly positive for service members. According to the observations respondents shared about their spouses and from my interviews with service members themselves, the outdoors contributed stress relief that translated into a calmer affective state that carried over into family interactions. Several dimensions contributed to service members' experiences of lowered stress while at the retreats. For most, it was not just being removed from stressful routines and potentially over-stimulating locations, but being in a restorative, relaxing, and rejuvenating environment.

Hannah described the change she observed in her husband while at the retreat. She began by talking about how anxious he had been before the retreat, “a lot of anxiety about doing a lot of things. The unknowns and who’s out there and the things like that.” She discussed how the natural settings allowed her husband to relax and change his mood, impacting the entire family. Hannah described a conversation she had with her husband while at the retreat where she commented on his mood, saying, “You just seem so much more cheerful and happier more often being here.” To this he replied, “Yeah. I do feel pretty good.” About his greater sense of ease and visible happiness, she said, “it’s something we see at home but not as often as I would like to see it.” When asked if she thought her two children, ages 6 and 10, noticed a difference in their dad, she agreed and said, “My kids were definitely like, ‘Yo dad, you’re not even bein’ crabby. You’re bein’ cheerful and we’re having fun. This is great.’” She concluded by linking her husband’s state of mind with her own and her children’s positive experiences at the retreat. Being outside, she said, “[takes] the anxiety of my husband, which in turn follows over to me and my children. It takes that anxiety out of everything for everybody.”

The retreats reminded some injured service members of their pre-injury identities and love of outdoor recreation, when they were unburdened by injury symptoms. Being in environments that brought back positive memories gave some service members a respite from stress, including traumatic reminders linked to their injuries. Courtney said that being in nature was stress relieving for her husband because it made him remember when “he was young and able to do all the climbing and going anywhere he wanted in the woods without his feet or his back preventing him from climbing or doing whatever he wanted to do.” She said that the last time she heard her husband “anywhere near stress free and happy” was when they were at the Operation Purple retreat.

Tammy, who had been through four deployments with her Army spouse also linked the reduced stress she observed in her spouse with a childhood love of the outdoors, saying, “by nature, my husband, even from a young kid he’s an explorer, he loves to explore.” Hannah said that nature was particularly helpful for her veteran husband because it connected him back to being in the military, saying, “that’s what he’s done his whole life. That’s what he likes.” While being at the retreat was obviously “not the same thing,” it did create a sense of “getting out and away from everything,” something that enabled him to relax.

Nicole, mother of three, said, “going from the city to nature, just surrounded by quiet and forest and trees and water was something that helped” her injured service member husband feel calm and less stressed. Deborah, mother of four who had been through four deployments, said that her husband seemed more relaxed at the retreat and that being in nature helped him to get the “anger or stress out.” As a result she said he seemed to be sleeping better when they returned home.

Throughout our interview, Taryn found herself at a loss of words to describe how the natural environment impacted her experience of the retreat. In trying to convey what she experienced she told me:

If you understood where my mindset was, [with] PTSD, where your mind goes. I don’t think I slept for...six weeks straight because of nightmares and bad dreams. You go from that severe symptoms, and then you put yourself in somewhere like [the mountains], and something just miraculously happens.

When I asked her what she thought happened, she said:

Something about nature just gets me out of my head...Nature is a huge part of me escaping...There’s something about being somewhere that you know is peaceful and calm versus a combat zone...I know now, there’s something about nature that’s very healing. Even on my worst days, I won’t go into details, if I went and sat along the river, or something like that, or took a walk outside, it’s way different than even taking a run, or listening to—you know what I mean...it really puts me in a frame of mind that’s—I wish I could stay in all the time.

Taryn discovered something healing and transformative in the natural environments at the retreat. While she described it as miraculous, she also indicated that she was aware of how being in nature affected her more positively than other types of stress-relieving activities.

*Nature as a safe place for injured service members.* An important dimension of stress reduction for the service member was the difference between the natural environments at the retreats and environments of other destinations where respondents' families might go to spend quality time—in particular, the quiet and calm of nature was not triggering for them as were many places in their everyday worlds back home. Places like restaurants, children's sports events, movie theaters, malls, and even neighborhood parks presented multiple difficulties for injured service members, and by extension the entire family. Crowds, loud noises, screaming children, unpredictable and uncontrollable situations, and a host of other circumstances inherent to these locations activated service members to the degree that they could only spend a brief time in them, or more commonly, could not be in these places at all. For example, Hannah told me:

I can take my husband to the movie theater but he's gonna be freakin' out the whole time. We can go to a place that's more busy and yeah, it might be fun for the kids but it's not gonna be fun for him so in the end it's not gonna be fun for anybody.

In contrast to the types of places listed above, respondents said that the natural environments at the retreats provided a calmer environment that did not aggravate, and in some cases, eased injury symptoms. And in that calm serenity, many service members and their families found safe spaces. Serena, mother of three, informed me that over-stimulating environments exacerbated her husband's PTSD symptoms and challenged his abilities to cope. She said that calm and quiet at the retreat, "took away the stress" and brought him comfort and a much needed "time out." Similarly, Molly's observation of her husband in the natural environments at the retreat helped her to realize that nature represented a safe place for her husband. Furthermore, because her husband was able to join in family activities at the retreat in

ways he was not able to in other places they tried to go as a family, the natural setting provided her ideas for how she wanted to change family time when they returned home.

**Nature instructs.** Another aspect of respondents' descriptions of being in nature that stood out was the ways in which nature taught through metaphor and holistic experience. Engaging with the natural environments at the retreats offered respondents in vivo learning opportunities that translated into deeper intra- and interpersonal experiences. This was particularly apparent in respondents' observations of their children.

The experiential nature of outdoor play allowed child participants to engage with their surroundings and express themselves in ways that respondents described as freer and more holistic. Carolyn observed that a mountain stream at the retreat she attended in the Black Mountains of North Carolina provided her children, ages 2 and 4, with an opportunity to explore and imagine. She said, "They just got in the stream and they were in the water, on the rocks, and it really let them be carefree and whoever they want to be." Bethany also joined with her children, ages 4, 9, and 11 in exploring the same stream, climbing up "barefooted all the way as far up as we could go." When I asked her why her children "loved" this activity she reflected that there were no obligations to the activity, her kids didn't have to do it, instead "it was pure want to do."

Bethany also reflected on how a rope swing at the retreat that her children (and spouse) enjoyed immensely required "physical strength" but didn't require "the emotional stuff." She reflected that "it was not win or lose; it was just fun." Similarly, Kristina, mother of four, said, "there are no rules to the outdoors," and therefore no squabbling over whether or not someone was playing a game correctly or whether or not a win or loss was valid.

Nature is an easy to access, open canvas, receptive to non-verbal expression. This was illustrated in Marcie's recounting of an activity in which her family participated while at the retreat. They were instructed to make a "nature creation" that described their experience at the retreat.

[My kids] made these little things out of stones and sticks and pinecones and things and my 10-year-old...made this huge pile of rocks, he was walking all over trying to find all these different rocks, this pile that we had to put them all back when he was done, but he said it was all the things that he had learned on the trip...that's what the rocks represented.

Here Marcie's son was able to express and convey the depth of his experience at the retreat with his family, summed up in a giant pile of river rocks. Marcie finished her story by saying, "it was, you know, an amazing place."

Ally found that the retreat surroundings were "very therapeutic" in the ways they allowed her family to get out of their comfort zone and spend time together in a different environment. She found that this especially pertained to her 5-year-old daughter, whom she described as a "very girly girl" who preferred dresses to pants and did not like to get dirty. Being outside at the retreat, Ally said, gave her daughter "a chance to just relax...a break from the norm," and permission for her "hands to be dirty." Ally hoped that this kind of experience would translate into broader life lessons about overcoming discomfort and fear when trying new things as her daughter got older.

Many respondents were keenly aware of relationship difficulties they hoped might begin to ease through participation in the retreat program. In particular, respondents described bonds between service member parents and children that had become strained or weakened because of parental absence. Deployment had physically removed service members from their families for months at a time, cumulatively adding up to several years for some families. In other families, injury had left service members psychologically and emotionally distant from their children and

spouses. While simply spending time together was one vehicle through which respondents hoped would begin to bring family members closer, respondents also found that engaging *together* in the natural environments created dynamic opportunities for emotionally instructive experiences.<sup>9</sup>

Markus, a service member and father of four, told me, “the wilderness is an ideal setting” for learning lessons of “acceptance and “resilience,” where natural consequences and in vivo experiences force one to “adapt, and accept, and not shut down.” These lessons emerged when his adolescent daughter became stuck in mud while participating in a service project. It was a humorous situation that resulted in him digging his daughter out of the mud and carrying her on his back. The retreat was a particularly powerful experience for Markus who was coping with multiple stresses, including a strained relationship with his teen daughter, and a desire for her to bond with his new wife and their two young children. He said:

That’s what happens in nature sometimes. Sometimes, you get a little bit dirty, and things are a little bit nasty, and things suck, but you can also have fun with it too. That’s part of being able to traverse challenges and diversity. You have to have a little bit of humor, and you have to have some persistence, and you just get through it.

The experience of getting stuck and unstuck in the mud created moments for learning and bonding between Markus and his daughter, who he said realized that he was “a safe person who does want to care for her and take care of her.” Being rescued out of the mud gave Markus’ daughter the experience of trusting her father and feeling cared for. After this experience he observed she was more affectionate and emotionally open with her family members during the rest of the retreat. As an example of this, he said she asked to hold her baby sister for the first time in almost six months.

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<sup>9</sup> Nature-based recreation activities were part of all retreat programs and many of these experiences had therapeutic recreation goals such as increasing communication, teamwork, self-awareness. However, this section pertains more broadly to the in vivo learning that respondents experienced while being in nature with their families versus learning that occurred while participating in a more structured educational activity.

## **Being Fascinated**

Respondents' descriptions indicated that families experienced a shared focus and mutual fascination in the natural settings of the retreats. Being together in the natural settings united parents and children in the moment, catalyzed conversation, and invited joint reflection. The natural environments provided simple and highly accessible opportunities for social interaction. Neva, mother of three who had been through multiple deployments with her Marine Corps spouse, captured one aspect of the link between fascination and interaction when she talked about how natural environments are always changing, "there's always something different to see," and thus generate conversations that are always different as well. Indeed, the seasons bring about changes in the color and thickness of the foliage, lake levels, and the presence or absence of snow on mountain peaks. Even for families participating in Operation Purple, who only inhabited the natural spaces for a few days, the discovery of animal tracks outside the cabin in the morning, the changing shape of the moon over the course of their stay, the mist in a field before breakfast, and the chance to see a fox who had a den within the retreat grounds, elicited similar reflections and interactions among family members.

Retreat participants were at times accompanied by environmental education staff who further enhanced the fascination experience, teaching respondents and their family members about the natural environments and helping them to deepen their understanding of the places they temporarily inhabited. Spending time together in captivating environments also had an added dimension of creating highly memorable family experiences. For military families, creating memories that include the service member parent is not always easy as deployment and injury can remove the military parent from noteworthy family events and activities. Thus, spending time together that will be remembered, was a highlight for respondents.

**Nature captivates attention.** Respondents' descriptions of their experiences in the natural environments revealed that they and their family members were captivated by what they saw, smelled, touched, and heard. Nature provided distinct sensory experiences that drew in children and parents alike. Raquel told me that the location of the retreat she attended in Washington state, allowed her children, ages 2, 4, and 9, to "experience all the senses." She continued, "They get to touch things. They get to feel things. They smell things. They see things. It's just an awakening of the whole body."

Molly described her whole family a spellbound staring up at the Grand Teton mountains, saying, "We were just amazed. I mean, there weren't any words. They wouldn't form." Tara had a similar observation of her children, ages 12 and 14, as they looked out on the mountains and surrounding parkland in Wyoming, saying:

The mountains are just so immense that even a child is like, "Wow," you know? They all sat up and took note as soon as we—you know once we got through the lower part of Wyoming and we were approaching the mountains. They were just like, "Wow."

In this day and age of high-resolution images, respondents' observations of their family members being mesmerized by their natural surroundings—*sitting up and taking note*—revealed distinct ways in which nature can awe and impress.

While nature fascinates with its displays of beauty and magnificence—for example glacier capped peaks and old growth forests, it can also captivate in smaller, and seemingly simpler ways. At the retreat Monique and her family attended, located on the shores of the upper Chesapeake Bay in Maryland, they discovered a seemingly endless world of captivating elements. Monique said she was surprised with just how little it took for her family to be engaged with the outdoors, explaining that "even when there weren't scheduled activities, just going for a walk, and looking for seashells and stuff, they were fine with that." In contrast with where they walked and what they discovered at the retreat, Monique described the military

housing where they live, saying, “All the houses look exactly the same. Even when you walk on a different street, it’s like looking at your street again. It’s like you don’t want to walk if there’s nothing to look at.”

When I asked Monique what stood out most about the retreat setting, she said the beach. During the retreat, her family had time to explore just how far it went and Monique commented that her kids, ages 7, 9, 11, and 14, “had fun seeing what washed up,” including rocks, seashells, and bones. In contrast to stepping out the door at home, where every house looked the same, extinguishing Monique’s desire to even take a walk around the neighborhood, simply stepping outside at the retreat provided ample elements of fascination (e.g., water, bones, seashells). Brenda had a similar experience of recognizing what opportunities for discovery existed just outside the door of her family’s lodgings at their retreat in North Carolina. She described her family of four sitting around after unpacking, trying to figure out what they would do next. Her response to them, “Well, there’s a whole wealth of outdoors. Why don’t we go outside and go for a walk and find out what’s here?”

**Fascination catalyzes interaction.** Operation Purple participants were captivated by the natural settings of the retreats, and this captivation occurred in the presence and company of their family members and other military families. Thus, when a sound, sight, or sensation caught a participant’s attention, there was someone next to them with whom they could share the experience. Findings capture here the lived (family) experience of fascination with nature and respondents’ narratives indicated that interaction and conversation were a by-product of this phenomenon.

Towering or tiny, nature fascinates. For children, especially, who still may be mesmerized by insects, puddles, and small winding paths, nature represents an endless source of

discovery and thus, infinite opportunities for interaction. Bethany said one of her favorite parts of the retreat was “just the walking, and my kids going, ‘Mom, look, there’s a bug.’” Molly said that when her children, ages 4, 6, 9, and 12, were outside at the retreat they attended in Wyoming, she saw their “minds kind of click...and come alive,” noticing things that even she failed to see. Joining with them in their exploration and discovery allowed her to connect with them over what they found meaningful. Furthermore, this connection and interaction was child-directed. The natural environments spurred children’s interests and parents then joined with them in an investigation of the places and objects of fascination.

Many respondents said they learned, or were reminded, how easily their children became enthralled with the outdoors. These realizations were instructive for parents who were seeking to improve family connections, and were searching for places and activities to strengthen those bonds. This was true for most respondents, but was especially so in families where emotional distances due to deployment separations or parental injury symptoms felt difficult to bridge.

Jamie shared a conversation she had with her husband while at the retreat, during which he said, “Who knew [our kids] could be so excited about a slug or a mushroom?” By spending time in nature with his two children after almost three years of being away from home, he realized that reconnecting with them could occur in very simple ways. Jamie continued:

[My husband] doesn’t have to be the hero that comes home and says, “Hey everybody, let’s go to Great Wolf Lodge,” for us to have a good, valued time together...In that moment it was like the pressure’s relieved. “I can just show the kids a pinecone and they’ll be thrilled.”

Like other service member parents post-deployment, Jamie’s husband had felt a “pressure” to reconnect with his children, build new memories, and excite them with big family experiences, making up for lost time. Jamie’s husband, and many other parents, discovered that the natural environments provided many opportunities for quality moments of engagement. “Pressure” was

relieved in part, because these environments captivated children (and adults too) while opening and creating a space for conversation and interaction.

Another respondent, Jennifer, mother of four and spouse to an injured service member, shared a favorite memory from the retreat. It was nighttime, and her family members were all still awake yet lying quietly in their bunks, in the dark cabin. There were no blinds on the windows, something Jennifer commented on as being in contrast to their windows at home. In the dark and quiet cabin, her young adolescent son said, “Dad, you up?” Her husband, lying in his bunk across the room, answered, “Yeah, why?” To which her son replied, “Did you see how bright the moon is?” The bright moonlight, streaming through the cabin window, captured this young teen’s attention. In this fascination, he was compelled to call out in the dark, and not to his mom or one of his siblings, but to his dad, asking him to join him in the moment. This triangulated experience between a child, a father, and the moon may not seem particularly impressive as a family connection moment. However, for Jennifer’s family, who continue to negotiate her husband’s recovery from an Improvised Explosive Device (IED) explosion that left him physically and psychologically wounded, for whom nights are plagued with PTSD-related nightmares, the positive, shared experiences at the retreat provided much needed connections.

**Guided fascination increases access and understanding.** One aspect of the Operation Purple retreats that sets it apart from other outdoor recreation experiences in which families might participate on their own, is the presence of environmental education staff who spend time with them in small groups throughout the weekend. These staff members help to facilitate nature-based recreation activities that include hiking, canoeing, ropes courses, and education around local flora and fauna. Respondents spoke positively about having the opportunity to explore the retreat environments on their own as well as with a guide. For some respondents,

experiences they had with a staff member, created experiences of what I call *guided fascination*. In other words, the environmental educators helped to deepen respondents' experiences of the natural environments by teaching them names for plants or animals, explaining natural processes, and guiding their access to natural spaces.

Respondents and their family members were not just captivated by their surroundings, but were assisted in further directing their attention to phenomena that might have otherwise gone unnoticed. Or, respondents may have noticed aspects of the retreat environments but, without guidance, would have had little information about what exactly had captivated their attention. For example, Josie and her family had noticed a particular sound coming from the trees at their retreat in Washington State, what she described as a "racket." As they walked to and from the dining hall, or on the trail back to their cabin, they heard this sound all around them. Without knowing more about it, the sound became a somewhat annoying buzz in the woody surroundings. However, they soon were educated that the noise they heard was actually the song of a particular frog that lived in the trees all around the retreat grounds. This information provided them a deeper understanding of the place they inhabited for the weekend and transformed what they had previously thought of as a "racket" to a "cool sound."

Guided access to the retreat environments helped to meet participants' desires to understand their environments, to know more about what was fascinating them. Many respondents spoke about how powerful this was for their children. Marcela said that while her two boys, ages 6 and 8, liked being outdoors, that the experiential, nature-based learning at the retreats, helped to "open their eyes," showing them that there was more to do in the outdoors "besides just kick a ball around." Heather described her 6-year-old daughter as her "little nature girl" who was excited about all that she learned in a retreat activity for children, especially

concerning all the mushrooms that could be found around the camp. The result of her daughter's education was that she then wanted to teach her parents all that she had learned. Guided fascination took place then between children and parents, as children lead the way in educating their parents about what they were seeing.

The presence of guides who were trained specifically to educate children about nature, particularly helped to model different kinds of interactions for some respondents and their children. Environmental educators at the retreats were tasked with making nature-based education highly inclusive for all family members, from adults to the youngest participants. At times this meant directing parents' focus to natural elements that were apparent to children but potentially overlooked by adults. It also meant guiding parents to engage with their children wherever their children happened to be placing their attention. As Raquel said, being in nature at the retreats with the staff support helped her and her husband to take a pause, and "get down and see the world from their [children's] perspective." Molly talked about going on a hike where her group discovered a bison skull left behind by a poacher. Her children were fascinated and in response to their interest, the environmental educator provided in depth education about the bison, including their immense size, migration patterns, and the need to respect and protect wildlife. Molly reflected on this "hands-on learning" experience and what it meant for her children:

if you're gonna talk about being outdoors and how to have an appreciation for and how to preserve what we have, it's best taught in that environment...It's not until you see, like I said, the bison head that you can fully comprehend, "Hey, these people did this, and that's not right. What can we do to prevent that from happening again?" It makes more sense seeing it. I think the majesty of being there, is there's nothing equal to that. I don't think you can sit in a hotel room and look out your window at a parking lot and get what you're going to get.

**Longevity of family memories made in natural environments.** Parents plan family leisure activities to help build family connections and increase quality time. Novel and

extraordinary activities, (e.g., vacations, visits to theme parks, family camp weekends) as well as traditions and rituals (e.g., holiday celebrations), have a special place in the collective family story. While routine and more mundane moments of typical family life help to build stability, predictability, and structure, positive shared family experiences that especially stand out, can help to build long-lasting memories, giving families reference points to times when they felt particularly close and connected.

For military families who have negotiated deployment and other periods of family separation, including those related to an injured parent's medical treatment, building shared memories can be challenging when a significant family member has so often been missing. Many respondents talked about taking trips and doing activities with their children while the military parent was deployed. While these experiences allowed them to provide their children with special times during deployment, they did not help to build a family story based on memories in which everyone was present. Similarly, respondents with injured service member spouses talked about challenges they had faced in trying to find activities and locations for family outings that did not trigger injury symptoms and thus prohibit their spouses from participating. Attending the Operation Purple retreats gave many respondents an opportunity to have all their family members in one place, sharing an extraordinary experience, that they hoped would help to make up for lost time together and carry them through future challenges and time apart.

Many respondents talked about the high memorability of the retreat experience, in large part, because of the natural environments in which they were located. The novelty of the settings and activities made the whole experience stand out, and most importantly, when respondents looked around at who was participating, all their family members were present. Many

respondents spoke emotionally about the tolls deployment separation had taken on their families, especially the amount of time apart from the military parent that their children had endured. Furthermore, for active duty families, deployments, trainings, and missions, are always a future possibility as well as risks for injury and death. Thus, making memories that included the military parent was an important goal for attending the retreats.

The natural environments were particularly conducive to memorability for two reasons. First, these environments were captivating, drawing participants' attention and invoking both individual and collective fascination. Secondly, this captivation helped to increase interaction and conversation, thus, family members were engaged together in their discovery, wonder, and experience with the natural world. Marcela described this when she compared watching a movie with her family versus being in nature at the retreat. After her family watches a movie, she said, they'll talk about it and then go to bed, with a good chance that no one will even remember the movie's name the following week. However, being outside together is something they can talk about for the rest of the day and will continue to talk about down the road. The retreat experience, she said, "it's something they'll remember further along down the line, further down for years." With two deployments under their belt and more to come, building long-lasting memories is essential for Marcela's family, especially for her two young children who have already known significant time away from their military father.

Raquel was surprised with how memorable the retreat was for her children. In particular, a story the environmental educator had told them about the Douglas Fir tree pinecones that could be found all over the retreat grounds made a lasting impression, so much so that every time they saw a pinecone that resembled the Douglas Fir pinecones they would talk about the retreat. Raquel said, "That has been really cool, to see that they connect back to it on a regular basis."

Again, for Raquel's family who had been through two back to back deployments, with more possible, positive reminders of being together can be hard to come by and so necessary for her young children's experiences of their family.

### **Discussion**

This paper examined the experiences of participants in the National Military Family Association's Operation Purple family programs. By focusing attention on the natural environments of the retreat settings, it is among the first studies to investigate families' perspectives on the ways in which nature contributes specifically to military family reintegration and connection experiences. While programs that connect military personnel and their families with nature to promote healing, recovery, and social connections are increasing, very little research addresses the nature-based contexts of these *emplaced* experiences specifically and the potential contributions of being in nature to family experiences and outcomes. Findings presented here have implications for future military family programming and broader research on the links between nature contact and family well-being.

Respondents' narratives into three central empirical domains: Being away, Being in, and Being fascinated. Respondents described how the natural environments of the retreats removed them from their daily lives, reduced stress and increased positive affect for all family members, especially military parents coping with PTSD or TBI, instructed and provided emotional lessons, and fascinated parents and children alike leading to increased interaction and highly memorable experiences.

Spending time in nature, participating in family leisure activities, and attending family camps all potentially share the characteristic of having time and space away from daily life and its corresponding stressors. Attentional Restoration Theory specifies that mental or attentional

capacity can be restored when one changes location—being away, which provides an experience of temporary escape from daily life and regular settings (Kaplan & Kaplan, 1989). Getting away from life's routines and demands is a central motivation among outdoor recreationists and those who seek out brief and longer-term wilderness experiences. Additionally, family leisure studies suggest that distance from daily life conveys similar benefits to family recreation participation, activities which provide families with needed breaks from schedules and relational patterns that may take away from quality connections (Agate et al., 2009).

Findings presented here both confirm and extend the ART concept of *being away*. Respondents found distance from their daily lives and routines to be helpful and experienced a quieting and simplifying of life. Additionally, findings illustrate the separation respondents experienced and enjoyed from electronics and technology (e.g., cell phones, TVs, internet, social media). In regard to this aspect of having restorative distance from daily life, this study offers insight into the different dimensions of being away in contemporary times where technology is ever-present and potentially ever-intrusive. Respondents described technology as distracting and disruptive to quality family time and were appreciative of the chance to have a break from being “plugged in.” With regard to how being away from regular life restores attentional capacity, technology and smart phones in particular pose a particular conundrum, one that is due to receive more attention from nature-health research as well as family leisure studies. One may be removed from home, even hiking a trail miles from town or camping with family in the backcountry, and yet the smart phone in the backpack or back pocket can instantly connect one back to all levels of responsibilities, to-do lists, gossip, shopping, entertainment, etc. As natural and built environment locations alike seek to increase (Internet) connectivity, a question remains as to what this means for in-person connections, especially among family members.

To date, studies that examine technology use and family functioning present mixed findings and an unclear consensus of how the digital age may be interfering with family relationships (McCabe, 2015; O’Keeffe, Clarke-Pearson, & Council on Communications and Media, 2011). However, more popular media, including parenting books, reflect concerns about how screen time, Internet access, social media, and a host of other potential associate problems (e.g., cyber-bullying, violence exposure, loss of social skills) are impacting their children and families (e.g., Freed, 2015; Steiner-Adair & Barker, 2013; Turkle, 2011). Respondents’ experiences of being unplugged at the retreats sheds some light on perceptions of technology as a hindrance to daily quality connections and the need away from home and into nature to be truly unplugged.

When considering family-friendly places in today’s technologically hyper-connected world, creating places that are technology and screen-free may be an essential ingredient to supporting connections. Natural environments may offer settings that seem in opposition to use of technology, as the goals of being in nature often revolve around inter and intra-personal connection as well as engagement with the outdoors (e.g., walking, hiking, biking, canoeing). As spaces (homes, public spaces, and even the physical body) alike strive to become ultra-tech-connected, awareness of what emotional and relational (human-to-human) connections are compromised, risked, and sacrificed must be part of the dialogue, especially around family relationships. While military families in particular are incredibly dependent on advanced communication technology to manage family relationships while separated by deployment or other parental absences (Paley et al., 2013), these mechanisms may also be detrimental to real “face-time” as one respondent called what she discovered in the TV-free, serene landscape at the retreat she attended.

Stress reduction is a main pathway through which research has examined and explained links between spending time in nature and increased health (Hartig et al., 2014). By decreasing physiological arousal (Ulrich, 1983) and mental fatigue (Kaplan & Kaplan, 1989; Kaplan, 1995), contact with natural environments can leave individuals feeling restored. Findings presented here revealed that respondents expressed feeling restored and attributed this to the natural environments of the retreats. While no physiological measures of stress were collected, respondents used words such as relaxed, at ease, serene, and calm to describe how they felt in the natural environments at the retreats, contributing to their evaluation of having accomplished their goals for attending the retreats. Understanding relationships between perceived stress levels and actual physiological restoration represent an ongoing conversation in nature-health research (Han, 2010).

Findings from this study are in line with other nature-health studies that link contact with nature with experiences of reduced stress (e.g., Han, 2010), but they also provide additional dimensions. Because respondents attended the retreat program with their family members, they were in the position to observe and witness their family members' reactions to and experiences in the nature-based settings. In addition to their own experiences, respondents observed better moods and greater ease in their family members and family interactions which they described as more enjoyable. Furthermore, many respondents identified interactions between their own stress levels, perceived spousal stress, and children's emotions and behavior; noting that their family members seemed to positively respond to one another's improved mood at the retreat. The fascinating environments and the social interaction that resulted while engaging with these settings left respondents with highly memorable experiences and most spoke to a distinct longevity of these positive memories for their families. Lastly, the experience of guided

fascination helped respondents to feel more connected and informed about the natural environments, which then allowed them to more deeply emplace their experiences at the retreats.

Respondents' descriptions of their own and their family members' responses to nature demonstrated several dimensions of how being in natural environments seemed to affectively ease injured service members. Some identified how being in the retreat environments brought back positive memories of childhood or pre-injury years in the military. In addition to providing a space that did not aggravate or exacerbate injury symptoms, many respondents identified being in nature as relaxing and restorative for their injured spouses. The result was that service members could spend quality family time, away from home, in an environment that met their needs for fewer symptom triggers (e.g., crowds, busy interactions) and their family's needs for leisure experiences.

Reduction of stress responses is beneficial for parental functioning and parent-child interactions. Evaluation of the effects of parental mental health on children demonstrates that a child's exposure to parental irritability, aggression, and hostility are predictive of child adjustment problems over time (Repetti, Wang, & Saxbe, 2009). The findings presented here demonstrate that as parents experienced lowered stress levels, they were increasingly able to join in program activities and goals, in addition to building connections with family members and other participants.

When considering familial and parental goals of strengthening relationships in times of emotional and circumstantial strain, like the military families at Operation Purple, environments that can restore attention and ease mental fatigue may help to increase family well-being and enhance the family social environment. In addition to providing a place away from daily life and stress reducing environment, nature restores attentional capacity by eliciting fascination—

effortlessly compelling individuals to direct their attention and curiosity to natural objects and processes (Hartig et al., 1991). Daily lives require the use of voluntary attention to focus energy and keep out competing stimuli, which can lead to mental fatigue, attentional exhaustion, reduced functioning, and lowered frustration tolerance. Although natural environments can be highly stimulating and activate all the senses, ART argues that distractions in the natural world require little to no mental effort from the observer/ participant—involuntary attention—which reduces demands on cognitive processes thereby relieving mental fatigue and restoring attention (Kaplan, 1995).

Respondents described the natural environments at the retreat as captivating and especially fascinating to their children. Nature provided a sensory experience that activated and intrigued respondents and their families. Some respondents were particularly surprised with how impressed their families appeared to be with the natural settings, and described both awe with grand demonstrations of nature's power (e.g., Grand Teton mountain range) but also smaller things that captivated children's focus (e.g., stones, streams, shells). As parents and children experienced the process of shared fascination, social interaction appeared as an automatic by-product. This phenomenon was particularly important for these military families who sought to enhance their connections and rebuild relationships that were strained from time apart and injury. In particular, service member parents who had been deployed or whose injuries lead them to withdraw from family time, discovered an ease to being with their children in nature. Interactions that had been difficult to create, happened easily while engaging within the natural environments at the retreats. Several respondents described learning or being reminded that quality family time could include simple, nature-based activities, rather than entertainment-based outings that involve greater expense and effort, and may not connect their families.

While ART explains how fascination restores attention in the individual psyche, William Whyte's concept of "triangulation" (1980) explains how nature's ability to captivate and fascinate links individuals in joined fascination, with conversation and interaction as natural outcomes. While traditionally applied to external stimuli in the built environment (e.g., sculpture, street performers, bus stop benches) that link strangers in an exchange of comments and observations, triangulation is an apt term for respondents' descriptions of the experiences they shared with their children and spouses in the natural environment. Respondents' goals for attending the retreats included spending quality time together, strengthening or rebuilding bonds, and reintegrating the military parent back into the family unit. Triangulated experiences at the retreats linked family members in mutually experienced events or moments resulting in spontaneous and connecting conversations.

Notably, respondents described their family experiences in nature as more interactive and thus more memorable than other family activities such as watching a movie. Memories of special events, celebrations, and traditions within military families may be punctuated by periods of family separation and parental absence, especially with regard to deployment. Thus, making long-lasting memories that include the service member parent is a particular concern for military families. While families engage in many types of positive, stand-out family experiences (e.g., visits to theme parks, hotel vacation), nature-based family retreats may offer distinct bonding and interactive opportunities as the focus of the experience and activities is on togetherness as opposed to entertainment. Thus, shared memories made in nature may revolve more around the emplaced social experience and better provide reference points for past feelings of closeness and intimacy.

## **Limitations**

This study offers much to our understanding of military family experiences in a nature-based reconnection program but it is not without limitations. Respondents' descriptions of their experiences in the natural settings and retreat in general were positive and while interview questions probed for challenges or stressors encountered at the retreats, no significant patterns emerged. Non-positive aspects mentioned by respondents reflected the natural diversity of human experience. The sample of military families included here was self-selected, representative of a group that desired to be together at an outdoor, multi-day camp as a way to cope with current challenges. There may certainly be other similarly distressed military families who would not seek out a nature-based program and would find the experience stressful, triggering, or otherwise not enjoyable. Indeed, broader nature-health research has demonstrated that spending time in natural environments is not a universally equal experience. In particular, natural environments have been found to trigger historic trauma, especially among African Americans (Johnson, 1998; Taylor, 2000). Outdoor recreation has also been viewed as a pastime for white, affluent, (and male) nature and sport enthusiasts, rather than as an inclusive, and potentially health benefitting, activity for everyone. While small gains are being made as diverse groups reclaim access to natural environments (Martin, 2016; Meraji, 2015), numbers still reflect underrepresentation of racial and ethnic minorities in outdoor recreation.

## **Conclusion**

There is much evidence to support the use of nature in therapeutic practices as well as research that demonstrates that family camps, as a therapeutic family experience, can increase functioning and well-being. These disparate bodies of literature are united in nature-based therapeutic family camp programs; however research on the role of nature in these programs

with regard to participant experiences and outcomes remains inadequate. Furthermore, although camp and retreat programs for military families are growing, little is known about how these endeavors particularly support military families coping with the complex stressors that deployment and parental injury present.

Operation Purple retreats aim to provide families with a space for reintegration and reconnection away from the distractions, demands, and stresses of military family life. In service to these goals, the natural environment is leveraged not only as the setting but as an active program component, viewed as additive to the recreational therapy activities and interventional elements of the multi-day experience. This study offers insight into how nature supports military family functioning by providing contexts within which families can get away from daily lives, spend time in restorative environments, and join together in shared fascination and easy interaction.

Table 3.1. *Respondent and family demographics*

Respondents (N=51)	N	%
Female	46	90.2
Male	5	9.8

Note: Of the 51 respondents, non-military female spouses=43, non-military male spouse=1, female service members=3, male service members=4.

<b>Non-military parent (N=48)</b>			<b>Military parent (N=50)</b>		
	Mean	(SD)		Mean	(SD)
Age (range 27-47)	34.8	4.79	Age (range 27-48)	36.9	4.97
	N	(%)		N	(%)
<b>Sex</b>			<b>Sex</b>		
Female	46	95.8	Female	4	8.0
Male	2	4.2	Male	46	42.0
<b>Race/Ethnicity</b>			<b>Race/Ethnicity</b>		
White	34	68.0	White	35	70.0
African American	2	4.0	African American	7	14.0
Hispanic	9	18.0	Hispanic	6	12.0
Asian American	2	4.0	Asian American	1	2.0
Other	1	2.0	Native American	1	2.0
<b>Education</b>			<b>Education</b>		
Some HS	2	4.2	Some HS	-	-
HS graduate	3	6.3	HS graduate	4	8.2
Some college	18	37.5	Some college	26	53.1
AA or tech. deg.	8	16.7	AA or tech. deg.	7	14.3
College graduate	10	20.8	College graduate	7	14.3
Post-college	7	14.6	Post-college	5	10.2
<b>Employment*</b>			<b>Military Status</b>		
Not employed	20	41.7	Active duty	23	46.0
Registered caregiver	2	4.2	Reserves	7	14.0
Self-employed	2	4.2	National Guard	3	6.0
Part-time	16	33.3	Retired	7	14.0
Full-time	8	16.7	Medically retired	10	20.0

\*Note: All parents were parenting at least one child under the age of 18, here employment refers to public sector paid work, acknowledging that parenting is more than a full time job for most parents.

Table 3.2. *Family-level demographics (N=50 families)*

	Mean	(SD)
# of deployments (range 1-8)	2.9	1.64
# months/ total time apart	24.8	14.0
# of children (range 1-5)	2.9	1.12
	N	(%)
<b>Children age groups (N=145)</b>		
0-3 years	19	13.1
4-6 years	29	20.0
7-12 years	54	37.2
13-17 years	34	23.4
>18 years	9	6.2
<b>Financial situation*</b>		
Struggling, paycheck to paycheck	6	13.3
Have necessities, no \$ for extras	17	37.8
Okay, some \$ for extras	11	24.4
Comfortable, have \$ for extras	11	24.4
<b>Housing situation**</b>		
Own	22	45.8
Rent	14	29.2
On installation	9	18.8
Other	3	6.3
<b>Military branch affiliation</b>		
Army	19	38.0
Marine Corps	6	12.0
Navy	8	16
Air Force	3	6.0
Coast Guard	1	2.0
Reserves/National Guard	13	26.0
<b>Military rank/paygrade***</b>		
E-1 – E-4	6	12.5
E-5 – E-6	28	58.3
E-7 – E-9	7	14.6
Warrant Officer	1	2.1
Officer	6	12.5

\*Note: 5 respondents refused to provide information about income

\*\*Note: 2 respondents refused to provide information about housing

\*\*\*Note: 2 respondents refused to provide information about rank

Table 3.3. *Phenomenological domains and list of themes and sub-themes*

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Being Away

- Shutting out the life noise
- Unplugging

Being In

- Natural environments lower stress
  - Being surrounded by green
  - Stress reduction for the family
    - Stress reduction for the service member
    - Nature as a safe place for injured service members
- Nature instructs

Being Fascinated

- Nature captivates attention
- Fascination catalyzes interaction
- Guided fascination increases access and understanding
- Longevity of family memories made in natural environments

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## CONCLUSION

This dissertation examined various aspects of military family life, both experiences of stress and coping during deployment, especially among female spouses, as well as family-level efforts to reconnect and reintegrate post-deployment and post-injury through participation in the National Military Family Association's Operation Purple Family Retreat® (OPFR) and Operation Purple Healing Adventures® (OPHA) programs. In particular, this dissertation focused on the *emplaced experiences* inherent to maintaining the home during deployment and attending a place-based retreat. This focus on place incorporates a "spatial turn" in military family research, acknowledging that although "everything happens in space... *where* things happen is critical to knowing *how* and *why* they happen" (Warf & Arias, 2009, p. 1). While person-in-environment approaches to understanding stress, health, and relationships are central to social welfare, more can be done to integrate explicit understandings of place, and natural environments, in the lives of stressed populations and military families in particular.

The first paper in this dissertation focused on the centrality of military spouses' home front duties in their deployment experiences, including managing the household, raising children, and tending to their family's practical and emotional needs. In doing so, this study conceptualized the female military spouses in this study as "stay-behind parents" and presented three dimensions of this concept: 1) de facto single parenting; 2) filling dual parenting roles; and 3) maintaining connections: tending the expanded family home. Layered within respondents' stories were examples of how these stay-behind parents coped with the various demands deployment presented. An examination of respondents' coping processes during deployment revealed three aspects of coping: 1) getting into deployment mode; 2) drawing on sources of support; and 3) appraisals and responses to deployment.

How military families manage deployment is heavily influenced by the experience of the stay-behind parent who may serve as a buffer of stress, shielding children from the strain of parental separation (Lester et al., 2016). Thus, this parent's experiences of separation and coping have impacts for personal health and wellness as well as children's health and well-being. While this study focused on military spouses, a family stress and coping lens was used to situate their experiences and responses within the dynamics of the entire family. This study extends research on how female military spouses experience and cope with the reconfiguration of duties and everyday life realities that accompany deployment, especially those that may be overlooked as traditional women's work pertaining to the care of children and tending of the home.

The second paper used the "therapeutic landscapes" framework (Gesler, 1992; 2003) to examine the multi-dimensional components of the Operation Purple programs, operationalizing them as Place (natural and built environment), Person (social environment) and Process (symbolic environment). Although these components may not have been equally foregrounded in each moment or experience at the OP retreats, they were always working in concert, resulting in the ensemble of place-based programming. Interviews with OP participants revealed the contribution of each of the three program aspects to their retreat experiences, as well as the interactive nature of the whole. This paper integrated multiple bodies of disparate but related literature (e.g., family leisure, social process, nature and health, family systems) and interview data to help explain and guide development and orchestration of place-based military family programs. This paper sought to integrate the therapeutic landscape concept into family intervention research and also extend the framework by addressing healing spaces for families with children, which represents a highly understudied area of the therapeutic landscape literature.

The third paper sought to examine OP participants' experiences of the natural environments at the retreats in particular, and to fill gaps in literature regarding (military) families' lived experiences of nature-based programming. Recreational therapy endeavors with injured and recovering military veterans are growing in popularity and represent the incorporation of alternative healing modalities in veterans' care (Hawkins, Townsend, & Garst, 2016). Most of these programs serve individual service members, the majority of whom are male. Much smaller in number are recreational therapy programs that serve distinct groups within the military community (e.g., female service members, military children, active duty military families with children) (Dustin et al., 2016; Krasny Pace, Tidball, & Helphand, 2014). Family camp/retreat programs represent one form of recreational therapy meant to support the entire family. Despite an increase in this form of programming, very little research exists on these programs (Ferrari, 2015). Furthermore, although a substantial body of literature exists that demonstrates myriad health benefits of having contact with and spending time in nature (e.g., for a review see Hartig, Mitchel, de Vreis, & Frumkin, 2014), this evidence has not been well-integrated in studies of family-based recreation, leisure, and intervention (Izenstark & Ebata, 2016). Even programs that take place in natural settings, such as nature-based family camps, have not adequately addressed the role of the natural environment in the therapeutic process.

Findings for paper 3 were organized into three phenomenological domains: Being away; Being in; and Being fascinated. The themes presented in each of these domains both map onto existing theories of how contact with nature enhances health, especially through Attention Restoration Theory (Kaplan & Kaplan, 1989), and also present new dynamics of family-level social engagement within natural environments.

Military family life is especially circumscribed by place and space through frequent relocations, distance from families of origin, family member separation during deployment, and reliance on cyber-space to maintain connections. Furthermore, when military parents deploy, spouses and children stay behind, in their homes and communities, to carry on with everyday life. During deployment, family members enter long-distance relationships with each other and negotiate tasks of maintaining intimacy and connection, while coping with the ambiguous absence that characterizes deployment, when military parents are psychologically present, yet physically absent (Faber, Willerton, Clymer, MacDermid, & Weiss, 2008). Deployment tests the abilities of military families to psychically and physically inhabit multiple domains, and maintain enough flexibility in their spheres of intimacy to allow the military parent back in and work towards successful reintegration once the deployment ends.

While the end of a deployment represents a chance to reunite physically, the emotional tolls of separation, which may include the presence psychological and physical injuries, may leave many military family members feeling emotionally distant and relationally out of touch. Getting away from home life and its distractions, busyness, and negative emotional patterns to a place that may bolster bonds and renew relationships through therapeutic uses of the environment, recreation, and intervention, may offer distressed military families a means to reconnecting. Addressing family-level needs and challenges is imperative as the demands of military service pull significantly on the relational ties on which all families, and especially those who face myriad stressors, rely on for meaning, connection, and hope for the future. This dissertation sought to enrich our understanding of military family well-being through the integration of multiple domains of literature and the investigation of an on-the-ground initiative

actively supporting military families, hoping to contribute in a small way to research that guides practice with the many military families who sacrifice and serve.

### References for Conclusion

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## APPENDIX

**Operation Purple Family Program Interview Guide**

Respondent first name:	
Interview PID:	
Date of Interview:	
Interview time and length:	
Respondent's hometown (City, State):	
Retreat attended:	

**Respondent's verbal agreement to be audiotaped:**

*"Before we get started I would like to remind you that I would like to audiotape this interview to ensure that I am documenting people's responses accurately. May I have your permission to audio-tape this interview? [CIRCLE ONE: YES NO ]*

[IF YES, PROCEED WITH INTERVIEW. IF NO, ASK RESPONDENT IF THEY NEED CLARIFICATION OF THE STUDY AND/OR REASONS FOR INTERVIEW BEING RECORDED. IF RESPONDENT DOES NOT AGREE TO BE AUDIOTAPED THEN INTERVIEW WILL NOT CONTINUE PAST THIS POINT.]

*"Now as we get started, I wanted to make sure that you have your copy of the study's Information Statement. Do you have any questions or anything you wanted to ask before we start the interview?"*

[INTERVIEWER WILL ANSWER ANY QUESTIONS AND REVIEW INFORMATION STATEMENT AS NECESSARY. IF RESPONDENT DOES NOT HAVE INFORMATION STATEMENT WITH THEM AT THE TIME OF THE INTERVIEW, INTERVIEWER WILL VERBALLY REVIEW THE INFORMATION STATEMENT WITH THE RESPONDENT.]

[BEGIN INTERVIEW]

*"I'm going to start by getting some basic information about you and your family members..."*

**[Complete the following information for respondent and respondent's family members as applicable:]**

**Demographics:**

	<b>Respondent</b>	<b>Spouse/ Partner</b>
Gender		
DOB or age		
Race/ethnicity		
Highest level of education/ degree		
Current labor force status and occupation		
# hours work/week		

**Military History:**

	Respondent		Spouse/ Partner	
	YES	NO	YES	NO
Service member				
Former military?				
Military child				
Military status				
Branch(es)				
Rank				
# Years served				
# of deployments				
Average length of deployments				
Total # months deployed				
Injury?				
# of moves				

**Children:**

How many children in your household currently?								
Who is the primary caregiver?								
Gender/ ages								
Relationship to you?								
Relationship to spouse/partner?								
Any children who don't live with you?								

**Household/residence:**

Number of people in residence	
How long in current residence	
Rent/own/on-off military installation	
Longest you and your current have lived in one place? Where?	

**NOTES:****Family income:**

How would you describe your family's financial situation? That is, how well do you feel able to make ends meet?

*Prompts—Struggling to survive, Barely getting by, Have necessities, Comfortable, have money for extras*

## RETREAT EXPERIENCES

*I'd like to ask you some questions about your experiences at the Operation Purple family retreat.*

- Why did you apply to the retreat program?
  - Probe: what did you hope it might accomplish?
- How did you think the retreat would support your family?
- How did the retreat experience affect your family? Did it change anything?
- Walk me through your experience of the family retreat weekend.
- What kinds of things did you learn at the retreat?
  - What did you learn about yourself? About your spouse/partner? About your children? About your family dynamics?
- What are some things from the retreat you most remember?
  - What of this experience have you taken back home with you?
  - Do you have any pictures or mementos?
  - What stands out most?
- What benefits, if any, did you experience at the retreat?
  - Was there one benefit that was the most impactful?
  - Was there anything surprising or did you experience something you hadn't expected?
  - Did a particular family member benefit most from the retreat?
- What challenges, if any, came up during the retreat?
  - Were there any stressful parts of the weekend?
  - Did it bring up any past or current issues?
  - Did you have any new discoveries?

*Sometimes people want to make changes in their lives after an experience like the family retreat.*

- Was there anything you wanted to change in your family after being at the retreat—big or small changes?
  - Were you able to make those changes?
  - If so, how is it going?
  - If not, what got in the way? What do you need to support those changes?
- What did you learn at the retreat that you will take home with you?
  - Any tools?
  - Anything you learned from other families or from the retreat activities?

*The retreats intentionally are located in natural environments, such as national parks or other protected wilderness settings. We're interested in how nature plays a part in a program like Operation Purple.*

- What stands out to you most about the outdoor environment at the retreat?
- Walk me through your impressions of the retreat location.
- Tell me about your children's reactions to the retreat location? Spouse? Self?
- How did the outdoor setting impact your experience at the retreat?
- What do you remember most about the wilderness area where the retreat took place?
- What do you think your children remember the most? What about your spouse/partner?
- Has the meaning or role of nature shifted for you in any way as a result of this retreat? Can you tell me about that?
- What places are most healing for you? For your family and individual family members?

*Many families attend the retreat program because they want to spend quality time together, away from the distractions of daily life, away from the routines, away from technology.*

- Do you feel this was the case for you? Tell me about quality time you spent with your family at the retreat.
- What about the program allowed for you to spend quality time together with your family? (Probe for: what activities, what elements of the schedule, etc).

*Another important aspect of the retreat program is the opportunity it provides for families to meet other families who may have similar experiences or be in similar situations.*

- Tell me about your experience being around other military families at the retreat?
- Did you form any meaningful connections with other people who attended the retreat?
  - How about your children? How about your spouse/partner?
- Do you feel like the other families at the retreat could understand your situation and your experiences?
- What was it like for you to be surrounded by other people who were able to understand your experiences?

## **STRESSORS**

*We are interested in learning about some of the reasons that you and your family sought out the family retreat program. Most families are dealing with challenges of reconnecting (whether after a recent deployment or after a parent's illness or injury) and want to strengthen their relationships with one another. The following questions ask about some of the stressors and challenges you may be dealing with.*

- What were some of the stresses that you and your family were dealing with before the retreat?
- INJURY—walk me through a day or week in your family of living with (a spouse who has an injury).
- REINTEGRATION- walk me through a day or week in your family trying to reconnect after a deployment.
- Can you describe some of the challenges you and your family are dealing with currently?
- How would you describe these stressors (e.g., normal stresses of family life, military family life stressors, exceptional stressors, rare events)?
- What are some of the ways you deal with these stressors?
- What would you say are some of the stresses for military families that are less understood, less known, less visible, that people don't really think about or understand?

## **COPING**

*Families have all kinds of ways to manage stressful experiences—both those that are typical family events and also less typical.*

- What helps to keep your family together as you deal with some of the things you talked about earlier?
- How would you say your family is coping with current challenges?
- Who is most responsible for taking care of the well-being and health of your family?
- How would one of your close friends or family members describe your family?

- What is important to you as a family? How would someone know this was important to your family—what would they see?
- What are some of your family's best coping skills?
- What are you still working on to improve?

*There are studies that show that family recreation, or playing together, helps to support family relationships. However, spending recreation time together can also be challenging with family stressors, schedules, work, being tired, parental stress, health issues, deployment, etc.*

- Tell me about how your family spends recreation time together.
- What kinds of activities does your family do to spend time together?
- What do you do?
- Who is involved?
- What would you like to do more of?
- How do you decide what to do together?
- Is there anything you do together in particular that really helps you stay connected as a family?

#### **SERVICES AND PROGRAMS/ NEEDS ASSESSMENT**

*There are other programs out there for military families.*

- Can you tell me about any of the other programs you have used, tried, or looked into?
- What stood out to you about the Operation Purple program as compared to other programs for military families?
- What are some unmet needs of military families that you are aware of?

Is there anything else about Operation Purple or your experience with it that you haven't had a chance to mention but think I should know?

**ADDRESS to mail compensation gift card:**

**Curriculum Vitae**  
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**EDUCATION**

---

2017 PhD, Social Welfare, *University of Washington*

Dissertation: Examining the role of place-based interventions in supporting military families: A qualitative study of family-centered therapeutic landscapes

Committee: Paula Nurius (Chair); Susan Kemp; Lynne Manzo; & Robert Mugerauer

2012 MSW, Concentration: Mental Health, *University of Washington*

2007 MA, Counseling Psychology, *University of Santa Monica*

1999 BA, Women's Studies (with Honors), *University of California Santa Cruz*

**AWARDS & HONORS**

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2015-2016 CSWE/ NASW Social Work HEALS Fellow

2013-2014 Horowitz Foundation for Social Policy, Foundation Grant Award  
Special Recognition: Eli Ginzberg Award

2013-2014 UCLA Nathanson Family Resilience Center, Dissertation Research Appointment

2013-2014 University of Washington School of Social Work, J. Scott Briar Award

2012 University of Washington School of Social Work, PhD Candidacy with  
Distinction

2010-2013 National Institute of Mental Health Prevention Research Traineeship (3 year  
award)

2009-2010 Boeing Endowed Fellowship

**PUBLICATIONS**

---

Oppenheimer, S.C., Nurius, P.S., & **Green, S.** (2016). Homelessness history and ACE impacts on health pathways and outcomes: New insights from population data. *Families in Society: The Journal of Contemporary Social Services*, 97(3), 230-242.

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**Green, S.**, Nurius, P.S., & Lester, P. (2013). Spouse psychological well-being: A keystone for military family health. *Journal of Human Behavior in the Social Environment*, *23*(6).

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Lester, P., Mogil, C., Saltzman, W., Woodward, K., Nash, W., Leskin, G., Bursch, B., **Green, S.**, Pynoos, R., & Beardslee, W. (2011). Families overcoming under stress: Implementing family-centered prevention for military families facing wartime deployments and combat operational stress. *Military Medicine*, *176*(1), 19-25.

Rice, E., **Green, S.**, Lester, P., Santos, K., & Rotheram-Borus, M. J. (2010). A lifetime of low risk behaviors among HIV-positive Latinas in Los Angeles. *Journal of Immigrant Minority Health*, *12*(6), 875-881.

Lester, P., Stein, J. A., Bursch, B., Rice, E., **Green, S.**, Penniman, T., & Rotheram-Borus, M. J. (2010). Family-based processes associated with adolescent distress, substance use and risky sexual behavior in families affected by maternal HIV. *Journal of Clinical Child & Adolescent Psychology*, *39*(3), 328-340.

Rice, E., Comulada, S., **Green, S.**, Arnold, E.A., & Rotheram-Borus, M.J. (2009). Differential disclosure across social network ties among women living with HIV. *AIDS and Behavior*, 13(6), 1253–1261.

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#### Reports & Intervention Curricula

**Green, S.**, Mogil, C., Garcia, E., Saltzman, W., Lester, P. & Beardslee, W. (2013). *FOCUS resilience training for parents*. Unpublished manuscript, University of California, Los Angeles, FOCUS Project.

Kleit, R.G., Manzo, L., Cross, C.M., Stanko, A., Pollard, R., & **Green, S.** (2011). *Hope VI: Redevelopment of Westpark Evaluation, Year III Report*. Submitted to Bremerton Housing Authority, Bremerton, WA.

**Green, S.**, Mogil, C., Lester, P., & Saltzman, B. (2011) *FOCUS for military families skill-building groups resiliency training manual*. Unpublished manuscript, University of California, Los Angeles, FOCUS Project.

Mogil, C., **Green, S.**, & Lester, P. (2010) *Operation Purple Family Retreat curriculum*. Unpublished manuscript. National Military Family Association, Operation Purple.

Saltzman, W., Lester, P., Pynoos, R., Mogil, C., **Green, S.**, Layne, C., & Beardslee, W. (2009) *FOCUS for military families individual family resiliency training manual*. Unpublished manuscript. University of California, Los Angeles, FOCUS Project.

Saltzman, W., Lester, P., Pynoos, R., Mogil, C., **Green, S.**, Layne, C., & Beardslee, W. (2009) *FOCUS for military families technical assistance manual*. Unpublished manuscript. University of California, Los Angeles, FOCUS Project.

#### **RESEARCH EXPERIENCE**

---

##### **2011-2013 University of Washington, School of Social Work, Seattle, WA.**

*NIMH Predoctoral Prevention Research Trainee. School of Social Work.  
Faculty Mentor: Paula S. Nurius, PhD*

Assisted with research studying mental health and prevention for children, adults, and families using various datasets and community samples.

##### **2011 University of Washington, Landscape Architecture, Seattle, WA.**

*Research Assistant. HOPE VI Evaluation Research Project  
Principal Investigator: Lynne Manzo, PhD*

Assisted with interview coding using ATLAS.ti software and thematic development for evaluation report and ongoing follow-up studies on Bremerton Housing Authority HOPE VI residents.

- 2011**      **University of Washington, Partners for Our Children, Seattle, WA.**  
*NIMH Predoctoral Prevention Research Trainee. School of Social Work.*  
*Faculty Mentor: Maureen Marcenko, PhD*  
 Assisted with research studying children and families involved with the child welfare system including evidence-based parent-training practices and family-centered interventions.
- 2010**      **University of Washington, Department of Psychology, Seattle, WA.**  
*NIMH Predoctoral Prevention Research Trainee. Project 1,2,3 Go!*  
*Faculty Mentor: Liliana Lengua, PhD*  
 Assisted with study on effects of income and parenting on effortful control in young children.
- 2010**      **University of Washington, Social Development Research Group. Seattle, WA.**  
*Research Assistant. School of Social Work.*  
*Principal Investigator: Karl Hill, PhD*  
 Assisted with research studying prevention of mental, emotional, and behavioral problems in youth.
- 2007-2016**      **University of California Los Angeles, Semel Institute for Neuroscience and Human Behavior. Los Angeles, CA.**  
*Intervention Specialist. FOCUS Project.*  
*Director: Patricia Lester, MD*  
 Participated in research implementation for multi-site intervention project working with active duty military families. Developed intervention materials and curricula including training package, manuals, technical trainer guide, and website. Provided model training and site supervision.
- 2006-2008**      **University of California Los Angeles, Semel Institute for Neuroscience and Human Behavior. Los Angeles, CA.**  
*Research Assistant. Center for Community Health, Project TALK LA.*  
*Principal Investigators: Mary Jane Rotheram-Borus, PhD, and Patricia Lester, MD*  
 Assisted with research study evaluating the effectiveness of group level prevention intervention with HIV-infected mothers and adolescents. Collaborated on academic manuscripts and intervention manual revisions.

## ***PRACTICE EXPERIENCE***

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- 2013**      **Indiana National Guard, Indianapolis, IN.**  
*Clinical Consultant/ Facilitator. Indiana Survivor Transition and Resilience Retreat*  
*Adjutant General, Maj. Gen. R. Martin Umbarger.*  
 Developed child and adult curriculum for annual weekend retreat for surviving family members of deceased Indiana National Guard service members. Facilitated small and large group sessions.
- 2012-2013**      **National Center for Telehealth and Technology, Tacoma, WA.**  
*Clinical Interviewer. Military Kids Connect.*  
*Project Manager: Kelly Blasko, PhD*  
 Interviewed children from military families regarding a range of topics and issues for mini-online documentaries in service to connecting military children with shared experiences.
- 2008-2014**      **National Military Family Association, Alexandria, VA.**  
*Clinical Consultant/ Facilitator. Operation Purple Program, Family Retreats.*  
*Director, Youth Initiatives: Theresa Buchanan.*  
 Developed family resilience curriculum and facilitated small and large group sessions for military children, parents, and families at multi-day retreats. Trained and supervised facilitators.
- 2007-2016**      **University of California Los Angeles, Semel Institute for Neuroscience and Human Behavior.**  
*Intervention Specialist. FOCUS Project.*  
*Director: Patricia Lester, MD*  
 Provided model training, clinical consultation, and site supervision with FOCUS Project site staff.
- 2008**      **My Friend's Place Homeless Youth Drop-in Center, Hollywood, CA.**  
*Intervention Consultant.*  
*Project Director: Eric Rice, PhD*  
 Co-developed and facilitated staff training sessions to support center staff in managing conflict, building rapport, and improving communication with homeless youth clients.
- 2007-2009**      **University of California Los Angeles, Semel Institute for Neuroscience and Human Behavior.**  
*Therapist. Department of Psychiatry, Child and Family Trauma Psychiatry Clinic.*  
*Director: Patricia Lester, MD*

Therapist for Spanish and English speaking families. Implemented multiple approaches including family systems, trauma-focused CBT, psychodynamic, and narrative interventions.

- 2006-2008**     **University of California Los Angeles, Semel Institute for Neuroscience and Human Behavior.**  
*Bi-lingual Intervention Facilitator. Center for Community Health, Project TALK LA*  
*Principal Investigators: Mary Jane Rotheram-Borus, PhD, and Patricia Lester, MD*  
 Facilitated Spanish and English speaking groups for CBT intervention for HIV-infected women and their adolescents. Conducted home intakes, lead parent, teen and conjoint sessions and supported participants in improving parenting skills and reducing HIV risk behavior. Adapted intervention to be culturally appropriate to Spanish speaking participants. Trained and supervised facilitators.
- 2001-2003**     **Interface Children & Family Services, Youth Development Services. Ventura County, CA.**  
*Resident Manager/ Case Manager. Transitional Housing Program.*  
*Project Manager: Sherri Sanchez.*  
 Supervised foster and homeless youth (ages 16-21) in transitional housing program. Lived on site with youth, maintained client files, managed program budget and interfaced with community providers. Facilitated groups and individual case management sessions.

## **TEACHING EXPERIENCE**

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- 2013**     **University of Washington. Seattle, WA.**  
*Guest Lecturer. Instructors: Chris Storey, MSW, LICSW and Taylene Watson, MSW, LICSW.*  
 Soc W 598: Social Work with Military Service Members, Veterans, and their Families
- 2012**     **University of Washington. Seattle, WA.**  
*Guest Lecturer. Instructor: Jessica Rodriguez-Jenkins, MSW*  
 Soc W 531: Advanced Practice with Diverse Children & Families: Child & Adolescent Mental Health
- 2011-2012**     **University of Washington. Seattle, WA.**  
*Teaching Practicum. Instructor: Bonnie Letnich, MSW, LICSW.*  
 Soc W 510: Practice I: Introduction to Social Work Practice.  
 Soc W 511: Practice II: Intermediate Direct Service Practice.
- Teaching Practicum. Instructors: Chris Storey, MSW, LICSW and Taylene Watson, MSW, LICSW.*  
 Soc W 598: Social Work with Military Service Members, Veterans, and their Families

- 2008-2009**     **University of Santa Monica. Santa Monica, CA.**  
*Graduate Reader. Instructors: Ron Hulnick, PhD, and Mary Hulnick, PhD*  
 Counseling Psychology 504: Human Growth and Development.  
 Counseling Psychology 512: Marriage and Family Relationship: The Skills of Intimacy.
- 2007-2008**     **University of Santa Monica. Santa Monica, CA.**  
*Teaching Assistant. Instructor: Marya Foley, PhD, MA, LMFT*  
 Counseling Psychology 601-604: Supervised Practicum.

### ***PRESENTATIONS***

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- Green, S.** (2016, June). *Operation Purple Family Retreat Interview Project: Research Findings and Future Directions*. Presented to the National Military Family Association, Alexandria, VA.
- Green, S.** (2016, June). *Reconnection, Recreation, & Resilience: Wilderness Retreats Support Military Family Health*. Poster presentation, National Association of Social Workers (NASW) Conference. Washington, D.C.
- Oppenheimer, S., **Green, S.**, & Nurius, P. (2014, November). *Impacts of Homelessness History on Health and Economic Hardship: New Insights from Population Data*. American Public Health Association (APHA) Conference, New Orleans, LA.
- Green, S.**, Mogil, C., Buchanan, T., & Lester, P. (2014, September). *Wilderness Retreat Programs: Therapeutic Landscapes for Military Families*. This Land is Your Land: Toward a Better Understanding of Nature's Resiliency-Building and Restorative Power for Armed Forces Personnel, Veterans, and their Families, University of Utah, National Symposium, Salt Lake City, UT.
- Green, S.**, Nurius, P.S., Milburn, N., & Lester, P. (2014, January). *Assessing Layered Stress and Buffering Resources Affecting Contemporary Military Families*. Presentation accepted to Society for Social Work and Research (SSWR) Conference, San Antonio, TX.
- Green, S.**, Nurius, P.S., & Logan-Greene, P. (2014, January). *Resilience in ACE-affected Adult Psychological Health: Complex Roles of Protective Resources*. Society for Social Work and Research (SSWR) Conference, San Antonio, TX.
- Green, S.**, Nurius, P.S., Milburn, N., & Lester, P. (2013, November). *Supporting Military Family Health: Understanding Primary Trauma Experiences of Military Spouses*. Poster presentation, International Society for Traumatic Stress Studies (ISTSS) Conference, Philadelphia, PA.
- Green, S.**, Nurius, P.S., Milburn, N., & Lester, P. (2013, November). *Refocusing the Military Trauma Lens: Primary Trauma Experiences of Military Spouses*. Poster presentation, American Public Health Association (APHA) Conference, Boston, MA.

Lester, P., **Green, S.**, Nurius, P.S., & Milburn, N. (2013, July). *Stress Symptoms in Military Spouses: Considerations for Family Reintegration*. American Psychological Association (APA) Conference, Honolulu, HI.

**Green, S.**, Nurius, P.S., Logan-Greene, P., & Longhi, D. (2013, January). *Stress Pathways to Health Disparities: ACEs, Social Disadvantage, and Protective Factors*. Society for Social Work and Research (SSWR) Conference, San Diego, CA.

Logan-Greene, P., Longhi, D., **Green, S.**, & Nurius, P.S. (2013, January). *Lifetime Health Impact of Early Adversity: A Risk and Resource Cohort Analysis*. Society for Social Work and Research (SSWR) Conference, San Diego, CA.

Rodriguez-Jenkins, J., Marcenko, M.O., & **Green, S.** (2012, January). *Predictors of Parenting Stress for Child Welfare Involved Families*. Society for Social Work and Research (SSWR) Conference, Washington, DC.

**Green, S.**, Mogil, C., Buchanan, T., & Hruska, K. (2011, April). *National Military Family Association Programs and Initiatives: Research, Collaboration, and Implementation*. Workshop presented at the 2011 DoD/USDA Family Resilience Conference, Chicago, IL.

Mogil, C., Bartoletti, M., & D'Amico, J., **Green, S.** (2011, April). *FOCUS: Resiliency Training for Military Families*. Program showcase at the 2011 DoD/USDA Family Resilience Conference, Chicago, IL.

Hill, K.G., Woodward, D.G., & **Green, S.** (2010, October). *Planning for Longitudinal Follow-Up: What Can We Learn from Longitudinal Studies?* Invited paper presented at the Centers for Disease Control DVP Expert Panel Meeting: Impact of Prevention in Preventing Trajectories of Violence and Related Outcomes, October, 26-27, 2010.

**Green, S.**, Rice, E., Comulada, S., & Rotheram-Borus, M.J. (2008, August). *Serostatus Disclosure Within the Social Network Ties of Women Living with HIV/AIDS*. Poster presentation, XVII International AIDS Conference, Mexico City, Mexico.

**Green, S.**, Mandel, T., Jackson, C., Lester, P., Rice, E., & Rotheram-Borus, M.J. (2007, July). *The Use of Visual, Kinesthetic, and Experiential Activities in Evidence-Based Interventions*. Workshop presented at The NIMH Annual International Scientific Conference on the Role of Families in Preventing and Adapting to HIV/AIDS, San Francisco, CA.

**Green, S.**, Lester, P., Rice, E., & Rotheram-Borus, M.J. (2007, April). *Visual, Kinesthetic, and Experiential Activities in Evidence-Based Interventions*. Center for HIV Identification, Prevention and Treatment Services: CHIPTS conference—HIV Research: The Next Generation, Los Angeles, CA.

***REFERENCES***

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Susan Kemp, Professor  
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UCLA Nathanson Family Resilience Center  
plester@mednet.ucla.edu

Lynne Manzo, Associate Professor  
University of Washington Landscape Architecture  
lmanzo@uw.edu

Paula Nurius, Professor (Dissertation Chair)  
University of Washington School of Social Work  
nurius@uw.edu