

Service Dogs for Wounded Warriors with PTSD:
Examining the Couple Relational Experience

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ABSTRACT

At least one-quarter of service members who have returned from combat in Iraq and Afghanistan meet the criteria for a mental health diagnosis, of which Posttraumatic Stress Disorder (PTSD) is the most common. Social support provided by close relationships has been shown to be a buffer against PTSD symptoms. However, PTSD can also have devastating effects on couple relationships, hampering this form of social support. One promising intervention for PTSD has been the use of service dogs specially trained to perform tasks related to PTSD symptoms. Anecdotally, there are promising individual outcomes for veterans with PTSD who are partnered with service dogs; however, the effects of these service dogs on the couple relationship for veterans who are married or in long-term relationships has yet to be explored. Seven couples participated in in-depth, semi-structured interviews related to their experiences of their relationship before, during, and after acquiring a service dog trained to respond to PTSD symptoms. Responses were analyzed using interpretative phenomenological analysis. Themes derived were loss of self, living with the enemy, to hope or not to hope, running the gauntlet, pawisitive reinforcements, and turning the tide. Results are weighed against existing literature in the field, clinical and public policy considerations are offered, and directions for future research are proposed.

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Chapter 1

Introduction

The Problem and Its Setting

During the last decade, as the United States has been engaged in military combat operations in Iraq and Afghanistan, a tidal wave of service members have returned from deployment exhibiting symptoms of a wide range of mental disorders, of which PTSD is the most common (Tanielian & Jaycox, 2008). PTSD is a pervasive nervous disorder resulting from exposure to trauma that is characterized by four clusters of symptoms: intrusive re-experiencing of the traumatic event, avoidance or numbing behaviors, negative changes in mood or cognition, and symptoms of hyper-arousal (American Psychiatric Association, 2013). With limited resources and numerous barriers to care, the military medical community has struggled to find methods of effectively addressing the clinical needs of this ever-increasing population with symptoms that are often resistant to traditional treatment approaches (Hoge et al., 2004; Shalev, 1997).

The use of specially-trained service and therapy animals to address the mental health needs of service members in a wide variety of settings, including inpatient hospitals, rehabilitation facilities, and individual homes, has received strong anecdotal support and significant media attention (Yeager & Irwin, 2012). One such animal-based approach is the placement of specially trained service dogs, able to perform tasks specific to PTSD symptoms, in the homes of service members with PTSD. These tasks can include waking an individual during nightmares, turning on lights, checking rooms for safety, warning of the presence of others, providing tactile stimulation to inhibit anxiety symptoms and dissociative episodes, reminding of daily medication regimens, and nudging the handler away from crowds during anxious episodes, just to name a few

(Esnayra & Love, n.d.). The outcomes related to this type of intervention, while generally reported to be very positive, remain largely anecdotal, due to a persistent deficit in systematic research designed to examine efficacy (Ruiz, 2012; Yeager & Irwin, 2012).

One such deficit is a lack of understanding of the impact of service dog utilization on the couple relationship of those service members who are married or who have intimate partners. To date, public media attention and some research efforts regarding PTSD service dogs have been focused primarily on individual outcomes for those utilizing the animals. However this narrow focus overlooks the fact that many of these individuals exist in systemic relation to others. For combat veterans with PTSD, it is critical to consider systemic relationships in light of an increasing body of research demonstrating strong associations between PTSD in service members and relational problems for couples. These problems can include relationship distress, decreased intimacy and communication, sexual dissatisfaction, intimate partner violence, reduced emotional and physical well-being of both partners, emotional numbing, and divorce (Carroll, Rueger, Foy, & Donahoe, 1985; Galovski & Lyons, 2004; Jordan et al., 1992; Monson, Taft, & Fredman, 2009). Nelson Goff and Smith (2005) theorized that the symptoms of PTSD exhibited by some combat veterans might produce a form of secondary traumatization in intimate partners. Helping to substantiate this theory, Eaton et al. (2008) found that rates of mental health problems among military spouses were similar to those of service members returning from combat deployment to Iraq and Afghanistan. The symptoms associated with a partner's traumatization can, in turn, exacerbate the trauma symptoms in the combat veteran, creating a self-reinforcing feedback loop that can harm relationship functioning. The implication of these studies is

that, in designing and implementing interventions, it is necessary to consider not only the individual mental health of the service member, but also that of his or her spouse, as well as their relationship.

The systemic relational effects of service dog utilization should be explored as this intervention has potential for wider acceptance and utilization. While scholarly literature supports the notion that introducing an animal into a family system will have resultant systemic effects (discussed below), the value of those effects continues to be an issue of ongoing discussion in the mental health community.

Significance of the Study

The symbiotic bond between humans and animals has existed for millennia, and animals continue to have a significant presence and role in our society. Sixty percent of households in the United States, or approximately 150 million people, have some variety of companion animal. Among these pet owners, nine out of ten consider their pet to be a “family member” (Cohen, 2002; Weise, 2007). This statistic helps to reinforce the assertion that an animal can be drawn into the emotional and relational web that forms a family system (Bowen, 1993; Melson & Fine, 2010), even to the point of being “triangled” into couple conflicts in the same way that children tend to be (Cain, 1985). Allen and Blascovich (1996a) and Walsh (2009) noted that couples may come to rely on pets to moderate stressful interactions and maintain homeostasis in intimate relationships.

Research concerning the role of pets in family systems suggests that a wide array of positive systemic and relational outcomes can result from the presence of an animal in the home and from the triangulation that often occurs. Allen (1995), studying the interactions of couples, found that talking to a dog in addition to one’s spouse was related to

increased life satisfaction, marital satisfaction, and physical and emotional well-being. Anderson (1985) noted that in military families, pets often serve as a stabilizing factor for children during family disruptions caused by transfers and deployments. Cain (1985) similarly found that pets are most valued in families during times of crisis, difficult transition, or prolonged adversity, as they are able to help facilitate coping, recovery, and resilience. One should use caution, however, in drawing too many parallels between pets and service animals. As Walsh (2009) notes, “service animals, trained to work with individuals challenged by disabilities, are not regarded as pets...” (p. 491). This differentiation helps maintain the training of the animal and protect the important bond between service dog and handler.

Despite the difference in function between service animals and companion animals, studies suggest the positive systemic outcomes resulting from the presence of a service animal in the family are similar to those of pets. For example, when service dogs have been utilized for children diagnosed with Autism Spectrum Disorder, parents have reported a reduction in stress and anxiety, increased opportunities for rest and relaxation, increased independence, more family outings, increased positive social acknowledgement, and positive shifts in family interactions (Burrows, Adams, & Spiers, 2008; Enders-Slegers, 2012; Smyth & Slevin, 2010). Individuals utilizing service dogs for mobility or hearing impairments have similarly reported better interpersonal relationships with family members resulting from animal’s presence (Valentine, Kiddoo, & LaFleur, 1993).

However, these positive systemic effects may be dependent on any number of individual, family, and contextual factors and thus, cannot be considered a foregone

conclusion in the case of service members with PTSD and their partners. Clark Cline (2010), for example, found that single persons tend to gain more benefit from dog ownership than do married persons and that “for married individuals, dog ownership may be one more role with obligations that are difficult to fulfill” (p. 126). The author further notes that “being extremely invested in a dog could be detrimental because owners may spend so much time with the dog that [they] do not invest enough time in other areas of their life. Therefore, other relationships may start to fail” (p. 127). Beck and Madresh (2008) found that individuals often reported perceiving more security in relationship to their pets than with romantic partners. In the context of an already strained intimate partner relationship, overreliance on the human-animal relationship to supply comfort and support may result in a partner’s resentment of the animal and further relationship strain. Walsh (2009) supports this point, noting that “when pets are treated as family members, feelings of jealousy, anger, control, guilt, and fear can all play out through them” (p. 486). The author goes on to describe a couple that presented in therapy because the wife, complaining of a lack of affection from her husband, was extremely jealous of his relationship with his cat, which received petting and affection every night. Similar detrimental systemic and relational effects have been anecdotally noted in other studies (Sachs-Ericsson, Hansen, & Fitzgerald, 2002; Valentine et al., 1993) and, in some cases, have been cited as a factor contributing to relationship failure (Esnayra & Love, n.d.). In the case of a service animal, these effects may be amplified since, as noted above, service dogs are typically not regarded as family pets but instead, serve a utilitarian role primarily for the individual with the disability.

Along with the potential for negative relational effects, the utilization of service

dogs may also present contextual challenges for individuals and families. Burrows and Adams (2008) highlight the notion that “the integration of a service animal into the home environment is a highly dynamic and interactive process with numerous benefits and challenges” (p. 559). The authors found several themes related to the reported challenges of service dog utilization for children with Autism Spectrum Disorder. These included denial of public access rights and excessive or undesired social acknowledgments, public fear of the animal or challenges from other parents in the school setting, and practical considerations such as finding the necessary time for maintenance of the dog’s training, health, and appearance.

Scholarly research supports the notion that service animals and companion animals alike have a strong functional role in the emotional systems of families and couples. However, the valence of this presence appears to be highly dependent on a wide range of variables, which should be considered when contemplating the use of service animals to moderate service members’ PTSD symptoms. Inattention to these factors and/or failure to properly prepare individuals and families for potential negative outcomes, such as those described, is likely a contributing factor in the relatively high rate of difficulties and failures in service animal placement, as noted in Hart, Zasloff, and Benfatto (1995) and Mowry, Carnahan, and Watson (1994). This study provided the opportunity to examine these myriad factors in the context in which they naturally occur.

Rationale

“The goal of phenomenological inquiry,” according to Dahl and Boss (2005), “is to produce a deep, clear, and accurate understanding of the experiences of participants and of the meanings found in or assigned to those experiences” (p. 80). Use of a

phenomenological approach allowed for an examination of the couple's experience and the meanings attached to that experience following the introduction of a trained service dog into the home. Although there remains a lack of scientifically validated data regarding individual outcomes related to the use of service dog interventions for PTSD, the focus of this study was the couple, as opposed to the individual, for several reasons. First, as previously noted, the valence of service dog utilization is largely dependent on numerous individual, systemic, and contextual factors. Because of the utilitarian role of the animal in the home, each partner is likely to report unique experiences and meanings attached to the animal. As such, a study of the couple facilitates the opportunity to understand the factors influencing the experience for both members of the couple system. Secondly, couples were chosen as the unit of focus for this study because the researcher is specifically trained in systems theories and ecological perspectives.

Dahl and Boss (2005) note that the perceived reality of individuals, couples, or families "is not likely to be found in the laboratory or clinic, but where they naturally interact in their daily lives" (p.65). In light of this observation data for the study were obtained via face-to-face, in-depth interviews conducted at a mutually agreeable location that was comfortable for participants or via web-based video. Special accommodations were made for participants with disabilities who would not otherwise be able to participate in the study using one of these methods. The use of personal, in-depth interviews allowed the researcher to develop a rapport with participants, and provided an opportunity to experience first-hand the subtleties and nuances of the participant experience in the context in which the phenomenon occurs. Alternative forms of data collection, such as questionnaires or impersonal interviews, would not have provided the

same level of immersion and observation possible by use of personal, in-depth interviewing.

Dahl and Boss (2005) also note that “language remains the primary symbol of human interaction and needs to be studied where it takes place naturally” (p.67). In other words, the vocabulary that individuals, couples, and families use to discuss an event or phenomenon represents valuable, information-rich data. Because of this, a focus group format would not have been ideal as a couple’s linguistic descriptions of their experience may be unduly influenced by the language or vocabulary used by other participants. In-depth interviews conducted in the homes of participants, or via web video, gave each participant the freedom to respond to questions using his or her own language, and provided the researcher with a broader tapestry of linguistic descriptions across participants.

Additionally, this approach allowed participants to respond to questions in a comfortable and familiar setting. This aspect of the study is vital in light of avoidance behaviors and hypervigilance that are typically associated with PTSD, as well as the mobility limitations experienced by many Wounded Warriors.

Theoretical Framework

A phenomenological perspective is useful in this study because it serves the purpose of understanding and describing the meanings attached to the lived experience of a specific phenomenon, in this case service dog utilization, from the perspective of multiple individuals (Creswell, 2007). This deeper understanding is important because, at present, there is minimal substantive, in-depth information related to the experience of couples when one partner with PTSD is matched with a service animal. Achieving this

deeper understanding will assist those working with this population to better meet the needs of those whom they serve. A phenomenological study helps to generate this deeper understanding by allowing those who are living the phenomenon to describe their experiences in their own language.

Purpose of the Study

There is strong anecdotal support for the use of specially-trained service dogs to help mitigate PTSD symptoms for combat veterans. This type of intervention, however, lacks rigorous research measuring its efficacy. While there are efforts to remedy this deficit, the focus of current research efforts primarily addresses only individual outcomes for symptomatic markers of PTSD. No known study to date has examined the couple relational experience when a service dog is utilized for combat veterans with PTSD. Considering the strong correlation between combat-related PTSD and systemic effects on couple and family functioning, the lack of a systemic lens in current research efforts represents a significant deficit in the ongoing research related to this type of intervention.

This study seeks to remedy this shortcoming by utilizing a qualitative approach to gain valuable insight into the couple experience and the meaning attached to that experience resulting from the utilization of service dogs by combat veterans with PTSD. This information will also provide considerations for refining service dog utilization and better preparing individuals and couples so as to maximize potential benefits while reducing potential negative experiences and outcomes of service dog use. Additionally, this study's insights will generate grounding and direction for future qualitative and quantitative research, as well as potentially influence public policy decisions regarding the continued use and funding of service dogs for PTSD. Therefore, the research question

guiding this study is: “What is the impact and experience within the couple relationship when one partner is utilizing a service dog to mitigate symptoms of PTSD resulting from combat?”

Chapter 2

Literature Review

Animal-based Interventions in the Military: Past and Present

There is a well-established history of human-animal partnership in military culture. Animals have aided in everything from combat operations, to boosting morale among deployed service members, to aiding in physical and mental rehabilitation. For example, the use of seeing-eye dogs to aid returning service members who had been blinded during combat was commonplace in Germany and Switzerland in the years following World War I. This concept quickly spread to the United States and in 1929, the first American guide dog school, The Seeing Eye, was formally established. During World War II, this organization supplied seeing-eye dogs free of charge to returning American veterans who had been blinded during combat (The Seeing Eye, 2013).

World War II also saw the introduction of what is widely considered the first therapy dog. Smoky, a four-pound Yorkshire terrier, was purchased by Corporal William Wynne of the U.S. Air Force while he was serving in the South Pacific. Smoky served 12 combat missions with Wynne and entertained his fellow troops with a repertoire of over 200 tricks. Smoky's therapy work began when Wynne was hospitalized in the Philippines toward the close of the war. Wynne's fellow service members brought Smoky to the hospital to cheer up their injured comrade. While in the hospital, Smoky began accompanying nurses to see incoming battlefield casualties and became so popular with other wounded service members that the commanding officer of the hospital, Dr. Charles Mayo (cofounder of the now famous Mayo Clinic in Rochester, Minnesota) began taking Smoky on his rounds. By 1944, Smoky had earned significant notoriety

throughout the Pacific theater and was named “Best Mascot in the South Pacific” by *YANK* magazine. Smoky continued her work as a therapy dog for 12 years, frequently performing her array of tricks on television programs throughout the United States.

Other dogs have also faithfully served as mascots in the military setting. In 1922, the U.S. Marine Corps officially enlisted an English bulldog named Jiggs, who was given the rank of Private. Jiggs enjoyed a quick ascension through the echelon, achieving the rank of Sergeant Major by the time of his death in 1927, after which he was buried in a satin-lined coffin with full military honors. General Dwight Eisenhower was also known to travel with Scottish terriers during World War II. He once described the comfort and relief these animals afforded during the conflict, noting, “they are the only ‘people’ I can turn to without the conversation returning to the subject of war” (Chumley, 2012).

A more scholarly exploration of the effect of animals on mental health began in the 1960’s when Dr. Boris Levinson, a child psychologist in New York, was treating a difficult and uncommunicative child. Making little headway with the child, Levinson left him alone in a room with his dog, Jingles, for several minutes. When he returned, he found, to his amazement, that the child had begun talking to Jingles. Levinson began utilizing his dog as a method of intervention with other children and went on to author the first known book addressing the use of animals in a clinical setting. *Pet Oriented Child Psychotherapy* was a collection of Levinson’s observations and suggestions for the use of animals to enhance therapy. Often ridiculed by his peers in the psychological community, Levinson’s work provided significant foundation and motivation for further research.

Interest in the subject grew in the decade that followed, and in 1977 a group of professionals that included four veterinarians and a psychologist formed the Delta

Foundation. The group's mission was to support research that would expand on the developing understanding of the human-animal bond and its effects on human health and well-being. By 1981, interest in the subject grew to include a wider array of professionals representing numerous fields, and the name of the organization was changed to the Delta Society. The organization adopted a new moniker, *Pet Partners*, in 2012 "in order to convey more clearly its mission" (Pet Partners, 2012).

Shortly after the Delta Society was formed, the military community began to take notice of this burgeoning field and the potential it might hold for military medicine and rehabilitation. In 1986, Major Lynn Anderson, a Veterinary Corps officer, became the Human-Animal Bond Advisor to the Surgeon General of the Army. In 1995, the US Army Service Dog Training Center (SDTC) was established at Fort Knox, Kentucky. Using a skeleton staff of two civil service animal trainers, the SDTC utilized inmates at a local prison who were taught to train select stray dogs that were then provided to disabled veterans and their family members. The program fulfilled a valuable therapeutic need for the recipients of the dogs, as well as for the inmates selected to train them. From 1997 to 2004, the SDTC successfully graduated over 60 human-animal teams until the program was finally shuttered late in 2004 due to budget constraints (Chumley, 2012).

The military community continues to utilize animals for a wide variety of service roles. At the Walter Reed National Military Medical Center (WRNMMC), a program allows rehabilitating service members to train service dogs for veterans with mobility impairments. And more recently, the U.S. Army's Combat and Operational Stress Control Teams have deployed teams of trained therapy dogs to combat theaters in Iraq and Afghanistan to provide stress relief for service members. Current studies are

examining these animals' potential impact on the mood, job satisfaction, stress level, and resiliency of those service members (Chumley, 2012). The Department of Defense (DoD) continues to provide funding for service animals for veterans with disabilities, though funding is currently provided only to those veterans with physical, vision, or hearing impairments resulting from military service. The DoD has yet to approve funding for service dogs specific to mental injuries or illnesses, citing a lack of research demonstrating efficacy.

Service Dogs for PTSD: Recent Research Efforts

Efforts have been made in recent years to remedy a lack of rigorous research in the field; however, no known study to date has accomplished this goal. In 2009, Esnayra and Love, members of the Psychiatric Service Dog Society, submitted a study proposal to the U.S. Army to evaluate the benefits of using service dogs to reduce PTSD symptoms among returning combat veterans stationed at WRNMMC. The study was designed as an 18-month "seedling" study, comparing outcomes of 20 service members or veterans who would be randomly assigned to the experimental group (i.e., service dog recipient) or the control group (i.e., wait-listed). Rationale for the study was derived from a survey of psychiatric service dog handlers conducted by Esnayra and Love (n.d.) wherein 82% of respondents with PTSD reported a reduction in symptoms. The study protocol was ultimately rejected by the WRNMMC and the U.S. Army for unknown reasons.

In July of the same year, in his first act as a newly elected member of Congress, Senator Al Franken of Minnesota introduced an amendment to the 2010 Defense Appropriations bill to provide funding for a pilot study examining outcomes for veterans with physical and, for the first time, mental injuries or disabilities who were matched

with service dogs. Senator Franken's interest in the benefits of service dogs for mental injuries originated after meeting Luis Carlos Montalván, a U.S. Army Captain who had served in Iraq, and his service dog, Tuesday.

The proposed study was intended to measure outcomes in three broad areas: therapeutic benefits, economic benefits, and the effectiveness of service dogs in preventing suicide. The amendment was passed and funding was provided to match at least 200 veterans with a service dog, as well as to provide up to several million dollars in medical services and research funding. The program, however, was mired by procedural difficulties and delays. After more than two years, only 17 veterans had been paired with a service animal before it was announced in August of 2012 the program would be suspended. In November of 2013, that VA indicated it was ready to resume the study with changes to the study protocol.

Anecdotal Outcomes for Individuals

In the absence of rigorous, controlled studies and scientifically validated results, the only available information regarding outcomes for veterans utilizing PTSD service dogs comes from numerous case studies and personal interviews of veterans and dog trainers that have inundated mass media in recent years. While the percentage of veterans utilizing this intervention is unknown, personal accounts of those veterans partnered with a PTSD service dog routinely describe the various health benefits they experience, including reduced anxiety and panic, improved mood and sense of self-worth, a reduction or cessation of reliance on medication, and improvements in sleep (Billhartz Gregorian, 2009; Huus, 2012; Lamb, 2009; Moss, 2012a; Moulton, 2013; Ruiz, 2012; Sharpe, 2011; Shim, 2008). Veterans also report that dogs provide them with a valuable companion that

offers unconditional positive regard and a sense of understanding (Ruiz, 2012; Sharpe, 2011; “Vets, Homeless Dogs Paired, and Both Benefit,” 2010). These dogs are also extolled for providing a grounding in reality and for shifting the veteran’s focus away from the disorder and from intrusive thoughts when they occur (Billhartz Gregorian, 2009; Gardner, 2009; Shim, 2008; Taube, 2013; “Vets, Homeless Dogs Paired, and Both Benefit,” 2010). Perhaps the most widely reported outcome is that the presence of a dog aids veterans by drawing them out of the social isolation common with PTSD and facilitating interactions with others, thereby improving contacts with strangers and relationships with friends and family members (Billhartz Gregorian, 2009; Huus, 2012; Moulton, 2013; Ruiz, 2012; Sharpe, 2012; Shim, 2008; Tammen, 2012). Thus, it is no surprise that many veterans also talk about having a restored life or renewed sense of purpose (Huus, 2012; Moulton, 2013; Sharpe, 2011; Tammen, 2012) or, in some cases, literally having their lives saved when their dogs intervened to prevent a suicide attempt (Moss, 2012b; Sharpe, 2011).

This last function, preventing suicide attempts, is especially poignant in light of the trend of service member suicides that has plagued the military in recent years. In 2007, a total of 115 military suicides set an “all time record,” alarming the nation and prompting the DoD to take aggressive action to curb the growing epidemic. Despite efforts to promote awareness and offer additional sources of support, suicides by active duty and Reserve members have continued to rise. In 2012, the number of service members who died as a result of suicide was greater than the number of deaths related to combat. A total of 349 active duty and Reserve service members took their own lives in 2012, an increase from 301 in 2011, and more than double the total number in 2005

(Burns, 2013). However, these figures only represent active duty and Reserve military personnel and do not take into consideration those individuals who have been discharged from military service.

From October, 2008 through December, 2010, there was an average of 950 suicide attempts per month among veterans receiving care from the U.S. Department of Veterans Affairs (VA). The VA has estimated that, among veterans, there are approximately 18 successful suicides per day, or one about every 80 minutes. If that estimate is accurate, then the annual number of suicides among active duty personnel, reservists, and veterans combined would be closer to 7,000. This number reflects the VA's alarming estimate that former service members account for approximately 20% of all deaths by suicide in the United States annually (Department of Veterans Affairs, 2011).

Effects of PTSD on Couple and Family Functioning

PTSD's deleterious effects on interpersonal relationships have been well documented in literature and many researchers have theorized that loss of social support, a valuable buffer to psychosomatic effects of stress, may be strongly related to these negative impacts. Social support is defined as "information leading the subject to believe that he is cared for and loved, esteemed, and a member of a network of mutual obligations" (Cobb, 1976, p. 300). Social support can be derived from a variety of sources including family members, close friends, and organized groups. Unfortunately, the symptoms associated with PTSD, particularly avoidance and numbing behaviors, can interfere with an individual's ability to utilize these sources of support.

Carroll et al. (1985) studied a total of 60 help-seeking Vietnam veterans divided into three groups: 21 positive for PTSD and a history of combat exposure, 18 without PTSD with a history of combat exposure, and 21 without PTSD and minimal or no combat experience. When the groups were compared on measures of cohabiting and marital adjustment, the authors found that combat veterans with PTSD were significantly less self-disclosing and less expressive to their partners, as well as more expressive of hostility and more prone to physical aggression.

Nelson Goff, Crow, Reisbig, and Hamilton (2007) found similar results in a survey of 45 male Army soldiers recently returned from deployment to Iraq or Afghanistan and their female partners. The couples were assessed on measures of traumatic experiences, trauma symptoms, and relationship functioning. Results indicated that high levels of individual trauma symptoms for the soldier were significantly related to reports of lower marital satisfaction for both soldiers and their female partners, with the strongest effects seen among symptoms of sexual problems, dissociation, and sleep disturbances.

A sample of 331 World War II ex-prisoners of war (POWs), 125 with PTSD and 206 without PTSD was studied by Cook, Riggs, Thompson, Coyne, and Sheikh (2004). The two groups were compared on measures of relationship satisfaction, intimacy, and communication. The authors found that 31% of ex-POWs with PTSD reported marital distress on the Dyadic Adjustment Scale (DAS) compared with only 11% of ex-POWs without PTSD. PTSD was also shown to have deleterious effects on measures of intimacy, demand-withdraw communication, and constructive communication. The authors found that emotional numbing, characterized by a sense of detachment from

others and emotional unavailability, was an especially strong predictor of problems in intimate relationships relative to other PTSD symptoms. This conclusion was substantiated by Meron Ruscio, Weathers, King, and King (2002) who found that among the primary clusters of PTSD symptoms (i.e., re-experiencing, avoidance or numbing behaviors, negative mood or cognition, and hyper-arousal), severe emotional numbing was most highly associated with negative perceptions of relationship quality among 66 male Vietnam veterans and their children.

To make matters worse, as family members of service members with PTSD bear witness to the symptoms associated with the disorder, a form of secondary traumatization has been known to occur. For instance, Dirkzwager, Bramsen, Adér, and van der Ploeg (2005) conducted a study of 708 partners and 332 parents of Dutch peacekeepers who participated in international peacekeeping operations. Partners and parents were assessed on measures of posttraumatic stress, health problems, relationship quality, and social support. The results showed that the severity of PTSD symptoms in peacekeepers was strongly correlated to partners' reports of sleeping and somatic problems, perceived negative social support, and diminished marital satisfaction.

Jordan et al. (1992) observed similar trends in a study of 1,200 male Vietnam veterans and the spouses or co-resident partners of 376 of those surveyed. The veterans were surveyed regarding the presence of PTSD symptoms, family and marital adjustment, parenting problems, and presence of violence in the home. The spouses and partners were surveyed regarding these same markers, as well as each partner's view of her personal mental health, drug and alcohol problems, and any behavioral problems of children in the home. The study found that veterans positive for PTSD and their

spouses/partners were both significantly more likely to report marital or relationship problems when compared with veterans without PTSD and their spouses/partners. Among the group positive for PTSD, more acts of violence were reported in the home, both by the veteran and the spouse/partner. Spouses/partners of veterans with PTSD also reported lower levels of happiness and life satisfaction as well as increased feelings of demoralization. Perhaps most striking during the interview process, among spouses/partners of veterans with PTSD, 55% reported feeling as though they were close to having a nervous breakdown.

Calhoun, Beckham, and Bosworth (2002) found similar trends in a sample of 71 Vietnam War combat veterans, 51 of whom carried a diagnosis of PTSD. The partners of those combat veterans with PTSD experienced significantly higher levels of caregiver burden and poorer psychological adjustment. The authors found that partners of combat veterans with PTSD experienced higher levels of depression, anxiety, hostility, and obsessive-compulsive symptoms when compared with partners of combat veterans without PTSD. The authors also reported that PTSD symptom severity for the combat veteran and reports of interpersonal violence were related to increased levels of caregiver burden.

The authors of this study concluded that “there is a need to design interventions aimed at reducing caregiver burden and helping partners cope more effectively with the demands associated with living with individuals who have chronic and severe PTSD” (Calhoun et al., 2002, p.211). Similarly, many scholars have proposed the need for a more comprehensive, systemic treatment plan for veterans with PTSD that includes interventions designed to reduce stress in the family system and improve psychological

functioning of other family members (Carroll et al., 1985; Cook et al., 2004; Dirkzwager et al., 2005; Eaton et al., 2008; Jordan et al., 1992; Riggs, Byrne, Weathers, & Litz, 1998). Existing literature suggests the utilization of service animals may prove beneficial in this area.

Relational Impacts of Service Animals

While there remains a dearth of literature regarding the effects that the presence of a service dog may have on couple or family functioning specific to PTSD, research examining the effects of service dog utilization for a variety of other disabilities and impairments suggests a strong, positive systemic impact. For example, service dog utilization has become more common in recent years for families with children diagnosed with Autism Spectrum Disorder. For these children, the primary role of the service dog is to provide a measure of safety by preventing a child's impulsive "bolting" toward potentially dangerous situations (the child is typically tethered to the dog) as well as inhibiting self-injurious behaviors. The dogs can also aid with sensory integration tasks and can help interrupt disruptive behaviors such as screaming, tantrums, or sneaking away (Burrows et al., 2008; Pawsitive Service Dog Solutions, 2013). Studies have shown that as the autistic child's level of functioning and security have increased, family members report numerous systemic benefits, including an increased sense of safety and security in the home, reduced anxiety and worry about the child's well-being, the ability to sleep more soundly at night, increased family mobility and positive community engagement, more time for rest and relaxation, and a more pleasant atmosphere in the home (Burrows et al., 2008; Enders-Slegers, 2012; Smyth & Slevin, 2010).

These systemic effects are also present with the more traditional use of service dogs for individuals with physical disabilities. Allen and Blascovich (1996b) conducted a study of 48 individuals with severe ambulatory disabilities requiring the use of a wheelchair. Half the group ($n=24$) were provided with a trained service dog one month into the study while the remaining half were placed on a wait list. In comparing the two groups, the authors found that the experimental group improved significantly on measures of self-esteem, internal locus of control, and psychological well-being within six months of receipt of a service dog. In their discussion, the authors noted that five members of the experimental group who had been separated or divorced were reconciled with their spouses. The authors also observed that no participant who was married prior to receiving a service dog became separated or divorced. Participants and family members alike showed a high degree of enthusiasm in describing their experiences with the service dog. Valentine et al. (1993) also found that, among a sample of ten participants utilizing a service dog for mobility impairments, 60% reported improvements in relationships with family members.

Dogs can also be trained to provide assistance to individuals who suffer from epileptic seizures and, in some cases, have been known to alert a handler prior to a seizure, though the dog's mechanism for seizure alerting remains unknown and is subject to scrutiny in the scientific community (Dalziel, Uthman, McGorray, & Reep, 2003; Ortiz & Liporace, 2005). Seizure response dogs may provide assistance to a handler by summoning help from another person, retrieving necessary medications, removing dangerous objects near the person during the seizure, providing tactile stimulation to rouse an unconscious handler following a seizure, providing physical and emotional

support and security while in public, and carrying emergency supplies and information on behalf of the handler. Even without such specialized training however, some dogs appear to have instinctual seizure episode responses that can be beneficial to individuals and families. Kirton, Wirrell, Zhang, and Hamiwka (2004) analyzed survey results of 122 families with an epileptic child and found that families who owned a dog reported significantly higher scores on quality of life measures relative to families without a dog.

In each of these examples, increases in individual independence, sense of self-esteem, psychological well-being, and safety seem to be inextricably linked to improvements in intimate relationships and general family functioning. Increases in individual functioning for persons with a disability may equate to a reduction in demands placed on family members, resulting in decreased family burden and the opportunity for more enjoyable family experiences (Sachs-Ericsson et al., 2002).

The studies cited herein suggest that combat-related PTSD is associated with significant deteriorations in relationship satisfaction among couples, as well as the potential for the development of secondary trauma symptoms in partners of those who are diagnosed. The trauma symptoms present in the family system may then lead to a negative, self-reinforcing relational pattern, synergistically exacerbating trauma symptoms in both partners over time. The studies reviewed also suggest that the presence of an animal in the home, either a specialized service animal or a pet, has been associated with improvements in both individual and family functioning, communication, and general quality of life. While it would be presumptuous to assume that couple and family relational effects resulting from the presence of a PTSD service dog would be similar to other studies, existing literature in the field along with scant anecdotal evidence points to

a potential impact. Considering the storied history of animals in military culture, prior research pointing to the efficacy of animals in family systems, and the anecdotal popularity and praise of service dogs for PTSD, a careful study of relational experiences for couples utilizing this intervention is warranted.

Chapter 3

Methods

Study Design

The guiding theory for the study was that of a phenomenological inquiry. Data were collected primarily in the form of transcripts derived from semi-structured interviews conducted with couples who have experienced the phenomenon being studied. The researcher also employed other forms of data collection, including participant observations, observation of photographs, and analysis of participant descriptions of meaning attached to relevant artifacts. These varied forms of data sources served the purpose of strengthening the reliability of the study through triangulation of data (Creswell & Miller, 2000; Patton, 2002). Prior to beginning the process of data collection and analysis, the researcher made efforts to bracket his experiences in order to identify personal biases and presuppositions before conducting interviews.

Participants

A total of seven couples (14 individuals) were interviewed for the study (see Table 1). Every couple consisted of one male and one female partner. All couples were married and/or in a committed relationship with one another and living together before, during, and after acquiring a PTSD service dog. Within each couple, the male partner was a combat veteran, had been previously diagnosed with PTSD as a result of his combat experiences, and had received a service dog trained to perform tasks specific to the PTSD symptoms (though the service dog also assisted with mobility impairments in some cases). The service dog assigned to each veteran had been present in the home at least six months in order to be included in the study. Participant ages ranged from 41 to 71 years

($M = 50.79$). Approximately 86% of participants self-identified as White/Caucasian, 7% as Black/African American, and 7% as Other. Fifty percent of participants indicated their highest level of education completed as high school, approximately 29% completed a two-year degree, and 21% reported completing a four-year degree. Among the couples, the length of time in relationship with one another ranged from 10 years to 42 years ($M = 20.86$ years). The length of time since the veteran was diagnosed with PTSD ranged from 2 years to 18 years ($M = 8.14$ years). The length of time from the PTSD diagnosis to the time the veteran was partnered with a PTSD service dog ranged from 1 year to 18 years ($M = 6.57$ years). The length of time that the service dog was present in the home ranged from 6 to 36 months ($M = 20.14$ months). Approximately 71% of participants reported receiving mental health services either through individual psychotherapy, medications, or group counseling. Only one of the seven couples indicated having participated in couple-focused treatment. Study participants were compensated with a \$15 gift certificate to a major pet supply store in exchange for their participation.

Procedures

Bracketing. Following review and approval from the Virginia Tech Institutional Review Board (IRB), the researcher engaged in the process of bracketing, or attempting to actively set aside preconceived ideas, assumptions, biases, and expectations. This process, suggested by Creswell (2007), allowed the researcher “to take a fresh perspective toward the phenomenon under examination” (p. 59-60). To achieve this, an independent third party, versed in the fields of service animals and qualitative inquiries, conducted a personal interview with the researcher regarding prior experiences and preconceived ideas about the subject matter being studied, including experience with

military culture, prior knowledge of PTSD, knowledge about service dogs, and the researcher's relationship with his own pet dog. The bracketing interview allowed the researcher to become more cognizant of his level of understanding related to the participants' experiences and fostered an increased sense of curiosity related to the phenomenon, which was beneficial during participant interviews. The bracketing interview also aided the researcher in actively setting aside preconceived ideas and biases, allowing the researcher to generate a more accurate report of the participants' experiences of their relationship from their perspective. A synopsis of the bracketing interview was written by the interviewer and was provided to the researcher for consideration. This synopsis was reviewed by the researcher throughout the process of collecting, analyzing, and presenting the data.

Recruitment and sampling. Following the bracketing process, the researcher visited a service dog training organization in the Southern-Atlantic United States that provides service dogs specifically for clients with PTSD. During this visit, the researcher engaged in participant observations and performed informal interviews with animal trainers, as well as two couples that have received a PTSD service dog. The researcher undertook this initial step to develop a deeper understanding of the culture, language, and experience of study participants, as well as to provide an opportunity for those experiencing the phenomenon to assist in generating research questions to be used with study participants, a procedural adjunct to phenomenological inquiry suggested by Dahl and Boss (2005).

Participants for the interview portion of the study were then recruited with the assistance of various service dog trainers throughout the United States. These trainers,

who provide training and placement of service dogs for combat veterans with PTSD, were contacted by e-mail to determine which organizations were willing and able to assist with participant recruitment. Some trainers who responded to the email were then sent a recruitment letter, as well as additional recruitment materials. Assistance Dogs International (ADI) was selected by the DoD as the accrediting body for organizations that train service dogs allowed access to VA hospitals and other facilities. Because of this, selection of trainers to be contacted was primarily made using ADI's online database (located at <http://www.assistancedogsinternational.org>) of member or member-eligible trainers. However, accreditation by ADI was not a requirement for training organizations, as many veterans currently utilizing a service dog received their service dog prior to the designation of ADI as the regulating body. Therefore, the researcher contacted additional non-ADI-affiliated trainers who provide service animals specifically for PTSD symptoms.

The recruitment letter sent to these trainers provided a brief summary of the research study being conducted and outlined inclusion criteria for participants. Participant inclusion criteria included couples where one partner was a combat veteran who was clinically diagnosed with PTSD as a result of combat experiences, couples who were married or in committed relationship before, during, and after service dog partnership, the combat veteran was partnered with a service dog able to perform tasks specific to his/her PTSD symptoms, the service dog had been present in the home for a minimum of six months, and the couple's experience of PTSD service dog partnership must have been representative of the typical experience of others matched with PTSD service dogs.

Trainers were requested to contact clients who met these inclusion criteria and to provide instructions to contact the researcher using one of the methods provided, including e-mail, telephone, and/or mailing address. In most cases, follow-up phone calls were conducted with trainers who responded to the recruitment letter in order to establish personal contact and answer any relevant questions about the study. In addition to recruitment through service dog training organizations, flyers were sent to select counseling offices and professional agencies that serve the population being studied. These flyers were posted in a conspicuous place and contained the researcher's contact information.

When initial contacts were received from prospective participants, the researcher asked screening questions via telephone to ensure prospective participants met the study's inclusion criteria. In one instance, the screening was conducted via email due to a disability that prevented that participant from speaking on the phone. For participants who did not wish to contact the researcher by phone due to privacy concerns, representatives from the training organizations were permitted to act as proxy for the researcher in determining a participant's eligibility for participation in the study. Because no interviews were conducted on U.S. military installations and the U.S. military was not involved in participant recruitment, the study was not subject to any military IRB process.

Informed consent. Following the screening process, appointments for each couple interview were scheduled at the convenience of selected participants. For each couple participating in the interview portion of the study, the researcher placed reminder phone calls approximately one week prior to the scheduled interview. On the date of the

interview, prior to conducting the interview, the researcher provided participants with an informed consent form for them to review and sign. This form outlined the rights of each participant, including the right to confidentiality, the right to withdraw from the study at any time, the right to refuse to answer any question, and the right not to have their responses used in the study. The potential risks and benefits of the study were also outlined for the participants to review. The researcher retained the original, signed form and a copy of the form was provided to each participant for his or her personal record. In cases where interviews were conducted via web-based video, or where special accommodations were made due to disability, informed consent forms were mailed to each participant. Interviews were scheduled when original signed copies of the informed consent forms were returned to the researcher and participants had been given an opportunity to ask questions about the information contained therein.

After receiving the signed informed consent, each participant was asked to complete a demographic questionnaire with questions regarding age, sex, race, education level, length of time married/in committed relationship, approximate date of the PTSD diagnosis, length of time from diagnosis to receipt of the service animal, length of time owning the service animal, and information regarding other forms of treatment in which each individual or couple is participating (e.g., individual psychotherapy or marital counseling). The purpose of this form was to gather and present relevant demographic information about the entire study population and, as such, no personally identifiable information was recorded on this form. Following completion of this form, in order to ensure participant confidentiality, each couple was assigned a couple number and each participant was asked to select a pseudonym that was used during the transcription

process in place of his or her actual name. The couple was also asked to select a pseudonym for their service animal, as this may be personally identifiable information. Couples who did not elect to select a pseudonym were provided one by the researcher during the transcription process. A key containing the couple number, actual names, and corresponding pseudonyms was maintained in a separate locked document safe and was destroyed upon creation of the transcripts, leaving all remaining data anonymous.

Interviewing. Whenever possible, interviews with couples were conducted at a mutually agreeable, discrete location that was familiar and comfortable for the participants. Four couples were interviewed in-person and each of the couples opted to conduct the interview in their home. In-person interviews were not possible for two of the couples due to geographical limitations. For these couples, interviews were alternatively conducted using web-based video. For one couple, special accommodations were made to allow the couple to hand-write interview responses due to a disability that would have otherwise prevented participation in the study.

Interviews with participants were conducted over the course of approximately five weeks. Prior to conducting each formal interview, the researcher allowed approximately 15-30 minutes to examine any personal items offered by each participant. Items of interest requested by the researcher were any personal narratives, poems, or song lyrics they have composed which describe the experience of service dog ownership, as well as any personal artifacts such as personal tokens or photographs that contribute to the broader understanding of the experience of service dog ownership. Only two couples elected to share any personal items, which were limited to photographs of important stages during the process of receiving a service dog. In analyzing these data sources, the

researcher asked clarifying questions to determine the meaning each item held for participants. Notes on participant responses to these questions were maintained alongside the photographs provided. These forms of data were used to help inform the development of themes during data analysis. The researcher also used this time to develop rapport with the couple, engage in participant observation, and gain a deeper level of immersion in the context and culture of the participants.

The researcher then conducted personal interviews with each couple. Interviews ranged in length from approximately 40 to 90 minutes. During each interview, couples were asked a series of broad, open-ended questions with follow-up questions to deepen the understanding of the experience. After the interviews, the researcher provided each couple with compensation for their participation and asked permission to follow-up with the couple after completion of the data analysis process. For interviews conducted via web-based video or where special accommodations were made due to disability, compensation was mailed to participants immediately upon completion of the interview process.

After the data analysis portion of the study, the researcher invited each study participant to read the report produced by the researcher and provide commentary on its contents. This step served as a form of “member checking” and enhanced the validity of study findings by providing participants the opportunity to clarify or reject the researcher’s interpretations of themes, resulting in a deeper, more accurate understanding of the couple experience (Creswell & Miller, 2000; Dahl & Boss, 2005).

Data collection and storage. All interviews were recorded using two separate digital audio recorders. Audio from each couple interview was then transcribed verbatim.

During the transcribing process, in order to protect participant anonymity and confidentiality, couple numbers and participant pseudonyms were utilized in place of personal information. Original audio recordings from each interview site were then transferred to digital storage format and maintained in a locked cabinet accessible only to the researcher. Audio recordings were permanently deleted or destroyed immediately after the interview transcripts were created. Typed transcripts of interviews were also transferred to a digital storage format and maintained in a locked cabinet, accessible only to the researcher. Print copies of transcripts, when not in use, were maintained in a locked cabinet accessible only to each researcher.

Instruments

Prior to each couple interview, the researcher spent time developing rapport with participants, engaging in participant observation, and collecting information on additional data sources that participants wished to share. Additional participant data sources were limited to photographs. For each photograph, the researcher inquired about the item's meaning by asking, "What meaning does this item hold for you?" or "Why is it important for you to keep this item close to you?" For these additional data sources, the researcher, with the participant's permission, retained copies of photographs. The researcher also made field notes describing each item and recording the participant's verbal responses to questions about each item. Participants' verbal responses to questions, as well as text from written data forms, were used to support the development of themes during the coding process.

For the formal interview process, the technique of funneling suggested by Smith and Osborn (2003) was utilized in the presentation of questions. The interview began

with broad questions, followed by more specific follow-up questions designed to elicit additional information or to clarify participant statements. Since the research question related specifically to the impact of the service dog on the couple relationship, the interview questions utilized during the interview process were designed to reflect the chronological stages of acquiring a service dog, specifically the couple's experiences prior to, during, and after the process of the veteran partnering with a PTSD service dog. Thus, the interview schedule was designed as follows:

1. Relationship prior to the service dog.

- Can you give me a brief history of the PTSD, from the time you first noticed symptoms up until the official diagnosis?
- How did the PTSD affect your everyday life?
- How did you feel about the diagnosis of PTSD when it occurred?
- Can you describe in your own words what the PTSD was like for each of you?
- In what ways, if any, did the presence of the PTSD change your view of your relationship?
- If you had to summarize in a few words what the PTSD meant to you during this time, what would you say?
- What other forms of treatment, if any, did you try for the PTSD prior to getting a service dog?

2. Acquiring the service dog.

- How did you first learn about service dogs that could help with PTSD symptoms?

- How did you, as a couple, decide to have a service dog join you?
- What factors influenced your decision to get a service dog?
- What were the challenges, if any, in making the decision to get a service dog?
- As a couple, what were your hopes/expectations, if any, prior to actually getting the service dog?
- Who would you say was more enthusiastic about the idea of getting a service dog?
- Once the decision was made, but prior to actually getting the dog, what changes, if any, did you notice in your relationship or your interactions with one another?
- Can you briefly describe the experience of being partnered with the service dog for the first time?
- What were some experiences that were surprising or unexpected for each of you, if any, during the process of getting the service dog?
- What experiences, if any, did you find disappointing about the process of getting a service dog?
- How would you summarize your interactions with one another during the process of actually getting the service dog?

3. Relationship after the service dog.

- In what ways, if any, has the presence of the service dog changed the severity and/or presence of your PTSD symptoms?

- If you have noticed changes in your relationship since having the service dog in the home, what are the most significant changes you have noticed?
- What do you recall about the first time, if ever, that you noticed that the service dog was making a difference in your relationship with one another?
- Can you tell me about a recent time, if there is one, where you noticed your service dog was making a difference in your relationship?
- If you had to summarize what having a service dog means to you as a couple, what would you say?
- What would you say about the future of your relationship now that the service dog is present?

Following discussion of the questions above, each couple was asked to generate an additional question that would be useful for the researcher to ask future interviewees. The couples were then invited to answer their own generated question. Questions generated by participants were then included in the interview schedule used for all subsequent interviews. At the conclusion of the final interview, the participant-generated questions were sent to each couple via e-mail so those in the beginning stages of the study had an opportunity to comment on questions generated by participants during the latter stages of the study.

Per the recommendations of Dahl and Boss (2005), throughout the course of the study the researcher maintained a journal “detailing experiences, emotions, insights, and questions resulting from the data collection process” (p. 73). This activity aided in the continual process of bracketing the researcher’s biases, was useful in recording questions that arose throughout the data collection process, and was used to record preliminary

themes and important observations derived from the interviews. Additionally, the researcher maintained a detailed log documenting all aspects of the research necessary to replicate procedures.

Data Analysis

Analysis of the data was guided by the process of Interpretive Phenomenological Analysis (IPA), discussed by Smith and Osborn (2003). According to the authors, the goal of IPA is “to explore in detail how participants are making sense of their personal and social world” by engagement in and interpretation of “an individual’s personal perception or account of an object or event” (Smith & Osborn, 2003, p. 53). According to the authors, IPA involves a double hermeneutical process in that participants are attempting to make sense of their experience, while the researcher is simultaneously attempting to understand and interpret the participants’ descriptions of their experience.

To begin this process, the researcher read through each transcript repeatedly in order to gain a general sense of understanding about the message being conveyed. During subsequent readings in this initial step, the researcher began to make initial notations next to significant statements in relation to the research question. These notations included summary statements, associations, and preliminary interpretations. Next, the researcher returned to the beginning of each transcript and transformed these notations into theme titles that captured the fundamental nature of the researcher’s notation and of the participant description from which it was derived.

After this process was completed for all transcripts in the data set, the researcher listed the emerging themes and began to identify those that appeared to represent a similar idea or process. While developing these clusters of themes, the researcher actively

compared them to the initial notations and supporting transcript extracts, continually checking to ensure the clusters represented the participants' actual statements and ideas. After similar themes were grouped together into clusters, the researcher compiled an orderly list of the themes within each cluster and applied a name to the thematic cluster that served to summarize and encompass the categorized themes or capture the essence of the cluster.

These final theme clusters were then presented in the form of a narrative account that described the overall essence of the participants' experiences, using excerpts from the data set to support each thematic cluster. Finally, participants in the study were provided with a copy of the narrative account and invited to make additional comments, revise, or reject the broad themes developed from the data. This form of member-checking enhanced the validity of the study and participant comments were considered and noted in the final draft.

Chapter 4

Results

Each interview targeted three discrete chronological stages in each couple's experience of their relationship (i.e., relationship prior to the service dog, relationship during service dog acquisition, and relationship after partnering with the service dog). Because of this, different themes emerged from the participants' descriptions of each stage. The data were organized to reflect each discrete stage's distinct themes while also maintaining a linear thematic thread throughout all stages. A description of the themes, including representative quotes identified by participant pseudonyms, follows.

Relationship Prior to the Service Dog

Two superordinate themes emerged from the couples' descriptions of their relationship prior to getting a service dog: "Perceived loss of self" and "Living with the enemy."

Perceived loss of self. Many couples articulated that upon the combat veteran's return from deployment and the subsequent onset of PTSD symptoms, the partner with PTSD seemed, in many ways, to experience a loss of his former self or former way of being. When asked to summarize what the PTSD meant for each partner, one spouse responded:

"He was a totally different person before, you know. He was laughing, outgoing, uh, always talking to people, you know? Even if he didn't know people, he was always talking to somebody, starting conversation, I mean, totally different. And then, it was the opposite of everything that I knew. So...I don't know, it just takes, I don't know, a lot of

getting used to. Because you kind of know, okay, that person is never gonna come back – is never gonna be the same.” (Jean)

Those with PTSD also described an acute and troubling awareness of the loss of a former way of being. In many cases, this partner expressed feelings of confusion surrounding his own actions and a sense of behaving as someone other than himself. One participant (Clay) described this perceived loss of self by stating, *“Yeah, I was physically there, but not mentally there.”* Many also articulated a sense of grief over the loss of functioning and sense of personal agency that had been lost as a result of PTSD.

“Uh, it meant that I knew something was wrong. It meant that I didn’t think I had control of everything, my own faculties. And just by me, ‘cause I was an old Army drill sergeant and I’d tell you strike and gung-ho and I, I just couldn’t get things right, couldn’t get ‘em, couldn’t get ‘em going the way that I thought they were going. And just knowing that I had the PTSD, after I found out, that uh, that disturbed me.” (Simon)

Couples also described experiencing the loss of the relationship that had existed prior to the onset of the PTSD. Several spouses suggested that the presence of the PTSD meant beginning a new relationship altogether.

“...you’re not getting the same person. You’re having to restart your relationship all over again. (Jen)

The perceived loss of self, for most participants, also meant drastic changes in desires and interests, such as dramatic reductions in previously enjoyable activities outside the home. Couples described how their world became smaller as the pursuit of these activities was replaced with social withdrawal and isolation.

I was withdrawn, I didn't want to be around people and, I don't know uh, I wasn't real pleasant, you know. And uh, I didn't know, you know, what was wrong. I didn't know why I was acting the way I was acting. (Jerry)

"We just don't, didn't go anywhere." (Jen)

"It's, you start noticing that you don't like doing the things you liked to do before. It's like you, you kind of isolate yourself. And you forget about everybody else. It's...it's just you. It's...you kind of just put yourself around a corner somewhere and it's, and that's it." (Clay)

"Most of the time [he] was like, what do you call it? Quiet. By himself. (Holly)

"Certain things you would do or certain places you'd go, you just stopped doing and, you know, it was kind of unexplainable." (Mike)

This tendency to isolate was also present in relationships. Most participants described how the partner with PTSD maintained an emotional distance from his spouse, as well as from other family members.

"He was very short-tempered, and he was...disconnected from the family. He uh...kind of observed like he was an outsider, not participating in...you know, the kids and that kind of thing." (Michelle)

"...it's like there was no connection between me and the family. It's kind of like there was that broken connection. I don't know...it's like I was just pushing them away." (Clay)

"She handled all the bills and...handled the children because to me, it was just, uh...just not important, you know." (Matthew)

Several participants described this loss of connection in terms of PTSD taking away the ability to experience and demonstrate feelings of love.

“PTSD takes away your ability to love. That’s one of the monsters of PTSD. Uh, it, it takes away your ability to communicate with the ones you do love.” (Simon)

“It was...it was really hard to...to love anything at that point.” (Matthew)

Another participant (Dustin) summed up the relational effects that resulted from his PTSD by stating, *“It’s ruined every relationship I’ve ever had.”*

Feelings of depression were present for nearly all participants with PTSD. One participant described his PTSD by stating, *“...it just eats away at you. It’s like flesh-eating or, or mind-eating” (Clay)*. Several participants discussed contemplating suicide as a result of the loss of functioning and connection to others that resulted from PTSD.

“I’m not gonna lie, you know, I thought about killing myself a dozen times, you know, at least. I thought, you know, I didn’t think I was ever gonna be able to function again. And if I couldn’t function then I really had no place here, you know what I mean?” (Jerry)

“Um...I stopped going out. Really hypervigilant. Um...so...suicidal. You know, I pretty much had the full realm of everything.” (Matthew)

Living with the enemy. Accompanying the perceived loss of self, several spouses described how the PTSD seemed to create an alternate identity or personality within the male partner, one more prone to destructive, frightening behaviors.

“I don’t like that it had taken away...the guy that I grew up with. I’ve known Matthew since I was fifteen years old. And it had turned him into somebody else that I...that I was a little bit...scared of, honestly.” (Michelle)

Some described this alternate personality in physical terms, as an entity capable of inflicting physical injury or harm, or as a dangerous object, such as an explosive device.

“...it wasn’t until 2010 that it hit me in the face and I realized I had it...I beat up a guy at a bar pretty bad” (Matthew)

“...even sounds will trigger it, smells will trigger him to go off.” (Maggie)

Many of the participants with PTSD described a sense of losing control or of this alternate personality taking control of their life. Often, this was accompanied by denial of a more pervasive problem, coupled with ongoing attempts to understand bizarre feelings and behaviors.

“Well I guess, a lot of it was denial, I guess, that anything existed. Um, I just remember it was, you didn’t understand what was going on. A big part of that was understanding exactly what was happening. You couldn’t explain things that were happening.” (Mike)

“Well, I didn’t, I didn’t even know I had PTSD. I was...I was operating on uh...on empty for most of the time.” (Dustin)

“...I didn’t want to think there was anything wrong. I really didn’t.” (Clay)

In some cases, bizarre behaviors existed with a lack of self-awareness on the part of the male partner.

“...he couldn’t see what he was doing and what he was saying or how he was reacting to certain things. And it might be something that would totally hurt my feelings or whatever, and if I called him out on it, it made it even worse.” (Jill)

“Michelle would tell me that uh...that I get agitated and I wouldn’t see it. Um...I just wouldn’t see all the signs of anything, you know.” (Matthew)

For many couples in the study, the PTSD symptoms and their effects on individual and couple functioning led to negative characterizations of the relationship. Approximately half of the couples interviewed independently described the relationship prior to the PTSD service dog as being “hell” or a “nightmare.”

“It was pretty bad, I thought, you know. I mean, I look back on it and, you know, I think I put her through hell to be honest, you know.” (Jerry)

“Well, I mean, nightmare is probably the best thing I can think. I mean, I would go to work just to get away from him. And uh, you know, even though my heart told me that he needed me, but I couldn’t stand to be around him because, you know, it was just...I couldn’t deal with him.” (Jill)

Symptoms of hyperarousal affected both partners and the relationship in a negative way, according to nearly all participants. Most reported a troubling presence of anger and aggression, both at home and in the community that, for some, resulted in contact with police and subsequent criminal charges.

“For me, uh, fits of rage. He’d go from zero to ninety just like that.” (Jill)

“It was a lot of yelling, screaming, just...something I normally didn’t do on a daily basis. It was, it was just like, out of the ordinary. And then I would take and bring it home. It was like, it just continued. It was a day in-day out thing and people just started noticing it and they’d be like, you’ve changed, this is not you.” (Clay)

“When we lived [abroad], I noticed a lot of anger and frustration...If I disagreed with him, I wouldn’t argue due to what I called, ‘he didn’t fight fair’.” (Sarah)

“...you come home and you’re just like, [deep breath] because you don’t know what’s gonna happen. You start to cook dinner and the next thing you know he’s throwing...stuff all over the place or smashing things or, you just don’t know.” (Maggie)

Sleep disturbances were also reported to be a particularly distressing aspect of the PTSD. Every participant in the study described being negatively affected by lack of sleep or the presence of night terrors.

“I don’t think she knew, I don’t think she knew what it was. But she knew I was fighting in my sleep and, and uh, to wake up in my sleep, a couple times in my sleep, I would hit her.” (Simon)

“Nightmares and lack of sleep were the only bad effects that really bothered me most of my life.” (Ron)

“At the end of the bed, he would be doing radio calls. He would be, “come in,” um, whatever. He was calling in. Um, if you were gonna wake him up, you touched and jumped because you didn’t know if he was gonna swing...because it would just, I don’t know just, you know, what he’s dreaming about at the time.” (Jen)

In at least one case, these symptoms were so severe that, for the spouse, the risk of serious physical injury was present.

“When he has his night terrors, he’s in combat and, on more than one occasion...on more than one occasion where [...] he woke up and he had my arm back and then my, his arm around my neck trying to kill me.” (Maggie)

Because of these symptoms, many spouses in the study reported living in a state of fear and even experiencing their own acute trauma reactions.

“I was frightened. Frightened for him and frightened for myself and the kids.”

(Michelle)

“...for all the years we were together, I never knew if I was gonna wake up alive, I mean it was very traumatic for me. Issues with anger and night terrors and the, him going off the handle. I didn't know from one day to the next if, you know, today would be my last day.” (Maggie)

“I mean, his driving was horrendous, I mean, there were many times that he'd be like, I dunno, I made it where I got. You know, and, it was, I was scared, really.” (Jill)

“Sometimes I thought that I had symptoms like it. Like, okay, I don't really want to go out to a store and I'm like, why not, you know? Why am I thinking that way? Why do I get anxious? You know, it's like, is it rubbing off on me? You know, kind of weird. But sometimes I felt that way. Because it's your whole life, I mean, 24/7.” (Jean)

Most participants found that attempts to combat the PTSD symptoms through traditional talk therapies and psychotropic medications were marginally successful. Nearly all couples described a sense of frustration at being “bounced around” by treatment providers, as well as a discomfort with heavy dependence on medications to control symptoms.

“They had me drugged up like you wouldn't believe. I've been through multiple PTSD programs and, you know, they work for a little while and then, you know, shit just went south again, you know what I mean?” (Jerry)

“You know, the last couple of counselors I've seen, you know, to date have said, kinda put it all together and said, you know what, in the last seven or so years it sounds like to me you've just been bounced around and just done talk therapy and you never

really hit the issues. You've never dialed in on anything. You've just, just yapped. You've never uh...done anything, you know, pinpointed on anything. And I said, yeah, that's kind of how I feel about it." (Mike)

"...at the time I was on what, 21, 22 different types of meds? I wanted to kind of get away from, I mean, I was on, I mean, I was gaining weight at a rapid rate because a lot of medications for PTSD made, I mean, really effects your weight." (Clay)

Many participants also reported attempting to combat PTSD symptoms by self-medicating with alcohol, prescription drugs, or other substances.

"...he'd come home...he'd be drunk before I even got home. He'd buy cases of beer...every two days. I mean, it would be nothing. Plus, he was taking high doses of medication – morphine, Dilaudid, um...He'd be on, he'd be on high doses of, he'd self-medicate with, I mean, he had some really, the stuff that, the nurses said that if it was anybody else, they'd be dead with the medications he was taking." (Maggie)

"I'd only get a couple hours of sleep a night and approximately every third day, drink 'til I passed out to get sleep." (Ron)

"One of the uh, a lot of guys who have PTSD uh, they drink heavily or drug heavily, whore around heavily, hea-vi-ly uh, yeah. So that's one of the issues and, like I said, I drank like a fish. I mean, I would come home...bombed." (Simon)

The combination of issues associated with PTSD meant that relationship satisfaction for nearly all participants drastically declined. Several participants described how what was once a fulfilling relationship devolved to the point where couples felt more like roommates than romantic partners.

"...I was just paying rent to stay here, really." (Maggie)

“Mm, I mean, I think we were just cohabitating.” (Jill)

For most couples, partners described reluctantly resigning themselves to a new reality with the PTSD and seeking to cope with changes to life and the relationship that were brought on by the symptoms.

“As time progressed and I realized that, you know, this wasn’t something that, you know, there was going to be some magic potion they gave him that was gonna make it go away, and that it was something that he was gonna deal with for the rest of his life and that, I had signed up to be his wife for that length of time, so I was gonna deal with it too.” (Michelle)

For participants, this resignation did not mean giving up on finding symptom relief from the PTSD. In each couple, at least one partner maintained an active stance toward researching possible new remedies.

“I started doing my homework. I started looking up what they had diagnosed him with and trying to understand it...I tried learning as much as I could and what I could do to help.” (Michelle)

Relationship During Service Dog Acquisition

The participants’ active stance toward combating PTSD symptoms led them to consider the use of a service dog specially trained to address PTSD symptoms. Nearly every couple in the study described how this process required a great deal of personal research and investment, negotiation of lengthy application and screening processes, and typically a long wait for a service dog, all with no guarantee of positive outcomes. As such, two superordinate themes emerged during this phase of couples’ experiences of their relationship: “To hope or not to hope” and “Running the gauntlet.”

To hope or not to hope. When asked about their hopes or expectations prior to acquiring a service dog, participants described a cautious optimism regarding whether they would be successful in actually acquiring a service dog and how effective the service dog would be, if acquired. Among the hopes and expectations discussed by couples, a common theme was a general hope that the service dog would allow participants to get their “life back.”

“The doctor said I could get my life back with a service dog. She said I’ll never be 100%, but she said that she thought that with a service dog, that I could probably be 80% of the person I used to be.” (Jerry)

“I think that was probably the biggest one is, is getting some of that back. I think just being able to, to get some of my life back. I, I think that was my expectation, just some of my life, you know.” (Clay)

Many of the couples also expressed a hope that the service dog would allow the veteran to reduce his reliance on medications to manage PTSD symptoms.

“Well, the military had spent, God, almost 12 months um...working their medical magic, so to speak. They didn’t come up with any magic potion and they had him on unbelievable amounts of medications and my thought process was, if this is something...non-prescription that would help, I was in.” (Michelle)

Many couples also discussed hoping the service dog would be a catalyst for more positive social engagement outside the home.

“I was hoping that we could go to a store together again. Go shopping again. Get out of the house more, you know. That’s what I was hoping for.” (Jean)

“Hope was for a better interaction with society and a better tolerance for being around others.” (Ron)

While hope and optimism were present, many participants reported experiencing doubts and concerns during the acquisition stage. Participants discussed how their hopes were tempered by doubts about being able to establish a working bond with the service dog, the service dog’s ability to facilitate desired outcomes, and their vulnerability to disappointment in the event the service dog did not facilitate symptom relief.

“Um...one of the biggest decisions was uh, number one, would the dog respond to me because, uh...he knows a great deal of commands. The problem is that I have a cognitive disorder and I can’t always remember the commands.” (Matthew)

“...we also thought when we got home, is he really gonna sync? I mean, you know, he synced [at the training facility], but is he really gonna sync here?” (Maggie)

“I had no hope, no expectation. Everything that I had been through, you know, I was like, you know, what’s this dog gonna do, you know, really, you know? [...] I’ll be brutally honest with you, I didn’t expect anything. I didn’t, you know, I didn’t expect miracles, you know? Um...or none of that. I didn’t have any expectations...and uh...you know, because uh...what if it didn’t work, you know?” (Jerry)

Some participants described feeling as though they had exhausted all other viable options in combating PTSD symptoms, and that a service dog was the “last resort” for the individual and the relationship.

“I had to see if it would work, ‘cause nothing else seemed to be working. This was a lot like the last resort for me.” (Clay)

“I knew there was something good in the relationship. And if this dog wasn’t, this was my last resort. Um...if it didn’t work, we’d probably wouldn’t, we’d probably look at divorce proceedings, to be honest.” (Maggie)

Running the gauntlet. Many of the couples interviewed described how the lengthy and demanding process of being matched with a service dog fueled discouragement and pessimism. Most couples recalled being shocked by long waiting lists for service dogs.

“...we were expecting it would be at least another year or...15 months or something like that before we could even hope.” (Michelle)

“The only disappointing thing was, that I can remember, was the waiting. [...] And it was just, you know, just that part of it was uh, you know...and it wasn’t bad. It was just, you know, I was ready, you know. Okay, let’s do this! But, you had to, you know, the dogs aren’t ready, the dogs aren’t ready.” (Jerry)

Most participants also described discomfort with lengthy, invasive application processes, as well as the amount of training required to learn to handle a service dog.

“Going through the whole process. It was a hard, long process of uh, you know, the interviews and uh, the home inspections and stuff. And uh, some of the questions that they asked was very to the point. [...] And the process was just a long process and the school was a long process.” (Simon)

“The process was difficult. There were just so many hoops to go through.” (Maggie)

While some service dog training organizations operate based on corporate and private donations and therefore, are able to place service animals at little or no charge,

others must charge clients directly, at least in part, for the cost of the animal. For some couples, the high costs associated with acquiring a service dog, as well as maintaining the grooming and health of the animal after acquisition, were also reported to be a significant concern.

“Yeah, they said it was up to twenty-thousand dollars. I don’t have that kind of money!” (Dustin)

“Things we have to do for the dog is different from having a normal dog and the cost was...astronomical. [...] I didn’t know how I was gonna pay it. Number two, I didn’t know how we were gonna get the money to keep the dog.” (Maggie)

“You have a five-year contract with them, and it’s a long contract, and it’s a detailed contract. Uh, right down to her nails cannot be clipped, they have to be ground. So you pay extra for grinding.” (Jen)

Relationship After Partnering with a Service Dog

The bulk of the collected data related to couples’ experiences of their relationship after having acquired a service dog. Two superordinate themes emerged from the couples’ descriptions of their experiences during this stage: “Pawsitive reinforcements” and “Turning the tide.”

Pawsitive reinforcements. In military terminology, ‘reinforcements’ typically refers to the arrival of additional personnel or supplies to aid in the successful execution of a specific mission. In psychological terms, ‘reinforcement’ can refer to a stimulus that serves to strengthen or weaken a specific behavior.

Most participants described how, from the moment the veteran was partnered with the dog, the couple sensed an immediate momentum shift in the battle against symptoms.

“It was like a kid having ice cream. We have pictures of him meeting him in the airport. [...] I mean, I was um..., ecstatic ‘cause it was such a good feeling. [...] It was uh...it was a special day. It was very moving to see. I could see change in Dustin instantly.” (Maggie)

“...I can’t adequately describe what happened when I first took the leash of a service dog. I sensed it as a real and enjoyable turning point.” (Ron)

“I’ll be brutally honest with you, um...me and Faith just clicked. It was pretty, it was pretty wild.” (Jerry)

Every couple in the study also noted how a strong therapeutic bond quickly developed between the veteran and his service dog. From an early stage, the service dog and handler team began to develop what participants described as a unique, shared language.

“He’s learned Matthew’s language, is the best way I can describe it.” (Michelle)

“Uh...it’s like if we’re out in town and she’ll start walking around me, I know she’s looking over my shoulder. [...] Um...so, and she knows if I’m hurting, so, so I mean it’s...so we know each other pretty well.” (Clay)

This bond, coupled with the constant companionship offered by the service dog, allowed the dog to sense and address the handler’s acute needs, sometimes even before the handler recognized his needs. For the veteran fighting PTSD symptoms, the service dog equated to what one participant described as a “battle buddy.”

“It’s kind of what I titled it, sort of. It was, it was a term that we used when we were in Iraq and Afghanistan was you never go anywhere without your ‘battle buddy.’ Um...you always had somebody with you. So...having her with me, I always had

somebody who was always looking out for me and I was always looking out for somebody else. So, the experience was always shared. So, for someone that's suffering from PTSD, that's, you never wanna be in a situation by yourself.” (Mike)

Spouses of veterans with PTSD also reported experiencing a sense of personal relief and comfort with the arrival of the service dog. Because of the dog's ability to identify and respond to PTSD symptoms in unique and effective ways, several spouses reported feeling as though the service dog was also their “partner” in providing care for the veteran, actively helping to reduce the burden of this task for the spouse.

“I used to feel like I had to be as vigilant as Matthew watching over Matthew, and I kind of feel like Woody is a partner in that now. I can, I can sleep a little bit more at night knowing that, if something goes on in the night and I'm too sound asleep to wake, Woody will.” (Michelle)

“I honestly feel that the dog is working for me, not for Dustin [laughing], 'cause I...he just makes it a better environment that I can come home and not deal with all those issues.” (Maggie)

“I mean, Faith is calming him down. I mean, that's a good thing because sometimes I'm not able to do it, you know? So, she's really a big help.” (Jean)

The majority of spouses also noted a greater peace of mind and a sense of safety with the service dog present in the home. These spouses described how the constant presence of the service dog with the veteran freed them to focus on other tasks or allowed them to engage in activities alone without a sense of worry for their partner's well-being.

“It's like regaining some freedom that I lost. Um, you know, I know Matthew is...he's housebound. He cannot drive any vehicles any more. And uh, of course he

doesn't always want to go to the grocery store with me, or something like that, you know. But uh, I know that I can make a short trip like that and have Woody with Matthew and be gone thirty or forty-five minutes and it's not a big deal. So, it's given me some of the old life back that we used to have together. We're still working on it and building on it."

(Michelle)

"Um...well, just knowing that she's a source of comfort for him, um, you know, gives me a lot of peace knowing that um, you know, I think I'd told you in the past, you know like, thunderstorms and that kind of stuff would set him off. Um, but knowing that, you know, she's there if maybe I can't be there for, you know, that amount of time or, you know, that he'll be okay 'til I can get to him or, you know, whatever be the case." (Jill)

"...She occupied him. And if I needed to go somewhere, I didn't have to take him with me. You know, 'cause he despises the grocery store. But, you know, so, or I didn't have to leave one of the kids home." (Jen)

One participant described the service dog's mitigation of her caregiver burden as a "breath of fresh air."

"I was ecstatic, to be honest, um...because his issues were not on me. I had...it was, it was like a breath of fresh air because, twenty-four/seven I used to, he was constantly in my face, um, and I don't know from one minute to the next what's going to trip, trip him up. And...when Crockett came, his attention changed from me to the dog. And that was really... I could breathe. Honestly, I would say I could breathe again..."

(Maggie)

However, not every aspect of introducing a service dog into the home was easily negotiated. With the arrival of the service dog, some spouses reported difficulties

adjusting to shifting roles and expectations as the working relationship developed between the service dog and handler.

“Um, I think there was a little bit of uh, frustration with...with the adjustments. I think that you know...that initially when Woody only knew the commands he had been taught his whole life and Matthew couldn't remember them and I would try to prompt Matthew which, you know, I was trying to help, but, um...it turns out it was better for me to leave it alone and let them figure out their own way to communicate with one another. So, it was a little bit frustrating for me because I knew what he was supposed to say or what, you know what I'm saying. But, like I said, I've just watched that grow and Woody and Matthew have their own language.” (Michelle)

Most service dog trainers are explicit about the fact that a service dog is not a pet and therefore, must maintain a primary bond with the veteran. Enforcing a boundary between the service dog and other family members to allow this working bond to develop also proved difficult for many participants, particularly in homes where children were present.

“Um, the two boys were still at the house and um, I had to get them to understand they could not even look at the dog for two to three weeks. They had to turn their back on him and stuff like that and I had to do everything for him to imprint in his head, 'hey, he's my master.' So that was pretty hard on the kids and Michelle and all that, and uh. It's gotten much better.” (Matthew)

“That's, that's another thing, I'm supposed to be the dominant one and she's only supposed to be bonding towards me. [...] She's supposed to just bond with me and me only. And the family's supposed to keep kinda back. That went out the door. [...] My

granddaughter, she, she comes in and she thinks that the uh, that the dog is hers. And my granddaughter, [...] they play like little kids, these two. So uh, that theory went out the door.” (Simon)

Participants also described some difficulty in adjusting to the dog being with the veteran around the clock and the level of coordination and planning sometimes necessary to facilitate this.

“Um, ‘cause it’s almost like having a fourth kid, you know, having to count in that, you know, she goes with us everywhere and, you know, sometimes we’re in his car, sometimes we’re in mine but it’s like, you know, do we have her food, do we have, you know [laughing]. [...] Potty breaks, you know...has she eaten today? Has she gone to the bathroom today? Um, you know so, I would say, you know, that you don’t always think about when you’re having this dog with you twenty-four/seven that, you know, they’re just like a kid, so.” (Jill)

Many participants also reported access issues in restaurants, airplanes, doctor’s offices, and other public places as a notable drawback that, on occasion, resulted in stressful interactions with others in the community.

Turning the tide. The drawbacks of service dog ownership notwithstanding, there was a consensus among all participants that the benefits of having a service dog far outweighed the challenges or disadvantages. With all couples interviewed, the service dog was credited with being the catalyst for a reduction in PTSD symptom severity, along with a simultaneous increase in overall functioning. When asked about changes each couple had experienced in terms of PTSD symptom severity, a few participants reported as much as a 50% to 60% improvement.

Reductions in hyperarousal symptoms were one of the most commonly reported symptomatic shifts among participants. For example, nearly all participants described reductions in the frequency and severity of anger outbursts by the veteran with PTSD.

“Yeah, he has more patience now.” (Jen)

“Things have really, really improved in the anger department. It’s been helpful.”

(Maggie)

“[I’m] much calmer and friendlier in stores. I just don’t get angry anymore.”

(Ron)

Several couples also noted how their service dog has been known to act as a relational thermostat, helping to reduce negative consequences of anger during disagreements by physically interrupting the arguments before they become destructive or dangerous.

“If we start to have an argument or something, or I start to raise my voice, sometimes I don’t realize it. Woody lets me know. You know, so, I just go away from it until I can come back and talk about the issue.” (Matthew)

“With Faith, you can’t argue. You can’t have an argument in the house with Faith there. ‘Cause she’s not gonna, you know, she’s not gonna let you fight. And she’s not gonna let you get angry, you know? And, to be honest with you, she was bouncing from back and forth, you know? And it’s funny. And then, before you know it, it’s like, why are we even, you know, what we were arguing about is stupid, you know?” (Jerry)

“Yeah, he really...[Crockett] wasn’t trained for that but he knew instantly that when [Dustin] would have triggers and he’d get angry, and if I’m involved he...yeah, he,

[Crockett] steps in right away. And that is helpful because that means [Dustin] doesn't escalate." (Maggie)

Several participants also described how their service dog was able to sense the onset of feelings of anxiety, sometimes before the veteran was even aware of the feelings, and would act to provide an alternative focus to the environmental trigger.

"I can tell you what, Faith can pick up on...Faith knows stuff before I do. She can just pick, I mean, I don't know how she does it, but, she knows when I start to get anxious, she knows I'm gonna get anxious and she's there and she's rubbing on me and, you know, she's distracting me so I'm not getting anxious." (Jerry)

"Another thing about it I've observed is that, when he, when Matthew is becoming agitated or having an anxiety attack or something like that, um, Woody senses it and will respond to, I mean he'll hear a certain tone of voice that I recognize because I'm his wife, you know, but average Joe wouldn't recognize, but Woody recognizes it, and immediately goes to daddy and, you know, tries to comfort him in some way or, sometimes I wonder if the dog isn't actually trying to simply distract him. You know, like, 'hey, something's upsetting you. Let's get the heck out of here'." (Michelle)

Several couples also described how the service dog would intervene to inhibit aggressive driving, a common symptom reported by participants.

"Yeah like, she'll be in the backseat and then I'll be driving and Jean'll be in the passenger seat and, and, you know I still get a little of that road rage, you know, so uh, and then Faith, right away from the backseat, she puts her head right on my shoulder and starts nudging and, and, and rubbing her face against my face, you know, and I just, then

I'm like, I forget why I'm pissed off, you know. I mean, it's amazing. I mean, I don't know how to describe it." (Jerry)

Participants also described how their service dog was able to interrupt episodes where past traumas were re-experienced, either through intrusive thoughts and memories, dissociative episodes, or most commonly through nightmares. Participants noted that the service dog helped to re-ground the veteran in reality and facilitate a sense of safety and comfort. Couples also described secondary benefits for the spouse who, as a result, was insulated from potentially dangerous episodes.

"Um, you know even bad weather nights when I'm having a bad dream, she's there, you know. She, she picks up on everything, and she'll jump up there. She knows when I'm having, you know, a bad nightmare. She knows when my anxiety or pain level is high. She'll jump up there and get right in between the two of us, you know?" (Mike)

"Uh, if I'm having a bad dream, a nightmare, it got to a point where she paws me in my face, she just paws me in my face, you know. She wakes me up. [...] Scares the crap out of me but, but you know, she does it, you know. I mean, she wakes me up." (Clay)

"If I don't stop doing what I was doing, he pounces on my face to wake me up [laughing]. Not enjoyable. He's done that a few times. He's like WAKE-UP!" (Dustin)

In one extreme case, a spouse felt as though the dog's ability to interrupt her husband's extreme night terrors, dissociative episodes, and associated physical violence may have made a life-saving difference. When asked to describe the most significant change in the relationship, this participant stated:

"I mean, I really thought I was gonna lose my life on many occasions. I don't feel that anymore. [...] I don't fear I'd lose my life anymore." (Maggie)

Another participant described how his service dog, trained to interrupt compulsive behaviors, would intervene to prevent him from physically harming himself and would help re-orient him to the present moment.

“I got scratch marks all over my arm. Well, you can’t see ‘em right now because...they’re all healed. I used to sit there and watch TV and just... But ever since he came, he comes up and he knocks my arm or, that’s, that’s what they taught him to do, and uh, gets me to do something else.” (Dustin)

Several participants also described how their service dog was able to sense and respond to negative moods, helping them manage depressive episodes.

“Uh, if I’m just having a bad day, you know, she just, she’ll lay on my feet. She, she just knows, you know?” (Clay)

“You know, she won’t let, you know, if I’m depressed...she knows it. And, and, and, you know, she’s over there with her head on my lap, nudging me, you know. I mean, she, she...she’s a big help. She really, really is.” (Jerry)

“...people think I’m lying when I say it, but I think she senses when I’m down sometimes. And we, we just enjoy each other.” (Simon)

For some participants, this ability was cited as a potentially life-saving intervention. When asked to summarize what having a service dog means to them, several participants described feeling as though the presence of the service dog protected them from suicide.

“Um...well, to be perfectly honest with you, I probably wouldn’t be here.” (Matthew)

“Um...I wasn’t thinking about suicide anymore.” (Jerry)

Most couples in the study also noted shifts in the male partner's ability to offer affection and show emotion in relation to the service dog, forms of expression that had been absent in other relationships.

"...love that he couldn't show me or the kids, he could show this dog. So, it was pretty amazing the bond they had right from the beginning." (Jill)

"I don't know, it's just, it was easier to bond and connect I guess, through her than it was with anybody else, suffering from PTSD and [Traumatic Brain Injury] and physical injuries, for whatever reason. Um, I was able to express myself and, she was able to express herself and, it kind of grew from there on." (Mike)

This increased capacity for expressions of love and affection toward the dog came with mixed emotions for most spouses in the study. When asked about their feelings toward the veteran's relationship with his service dog, more than half of spouses reported initially experiencing some feelings of jealousy or resentment.

"Yes! [laughing] There actually was [jealousy], yes. Because I thought that he paid attention to Faith 24/7 and I didn't get any anymore. So yes, definitely." (Jean)

"Mm...I mean, I could see that he could give her love and stuff and, I mean, I probably even pointed it out to him, you know. I'm like, "you talk nicer to that dog than you do to me [laughing]." (Jill)

"Sometimes I think he um, notices Spirit more than me." (Holly)

Participants went on to describe though, how improvements in emotional expression toward the service dog led to greater emotional expression between partners, repairs in the couple relationship, and increased emotional expression with other family members.

“Faith gave me my marriage back. I mean, ultimately, I think, you know, she really did. You know, I mean, once I started functioning again, you know that gave me the ability to uh...to make amends, you know, and work on my marriage – try to make it right.” (Jerry)

“He’s able to express love more openly, so...” (Jill)

“Yeah normally, normally I wouldn’t [hug my son]. That’s just, I would just move away, you know, it’s...you know, it’s, I mean, there are just certain things that...it has changed. And it’s just hard to believe it takes a dog.” (Clay)

Several of the veterans noted how these changes allowed them to feel increasingly confident in their ability to fulfill their roles in relation to loved ones.

“I’ll just tell you this: people that knew me two years ago, uh, they, then they see me now...they say I’m totally different. [...] I mean, I still got my days like anybody else that’s been through what I’ve been through but uh, I think overall, you know...um...overall I’ve, I’m doing a hell of a lot better and, and, because of that I think my relationship is back where it needs to be. Uh, I’ll be honest with you, if we didn’t go the service dog route and I think if we decided against it, I think we’d be divorced right now.” (Jerry)

“Yeah. Yeah, they’re all confident in my abilities as well. They don’t doubt that I’ll be able to go somewhere. They’re not like, ‘mom, let’s go to the...wherever.’ And then the next sentence is not, ‘well, can dad go?’ It’s, well they already know, Dad can go, sort of, when they ask it. [...] I mean it’s, it helps me kind of, sort of, in my confidence or self-esteem, sort of way it’s better that my kids are kind of on board and they see that

difference, and understand the difference, sort of. Um, 'cause I don't like being the third tire in the, you know, or the flat tire in, you know, on board." (Mike)

With the presence of the service dog, every participant also noted increased confidence to engage in activities they would otherwise avoid. Because of this, couples described feelings of freedom, or a sense of "returning to life" because of the service dog's presence.

"Yeah, I'm not afraid to try things with Faith. When Faith's not around, I won't do, I still won't do it, you know, won't go anywhere without her. But, when she's with me, I'm like, okay, let's do it, you know? I mean, I have that much faith in her." (Jerry)

"I got excited as I saw Matthew trying to do things that a year and a half before he would have told me, 'nope, I'm not, you know, I'm not messing with that, I'm not doing that' or whatever. Um...kinda just getting him back into life." (Michelle)

"Yeah, I mean, she's like, she gives me that desire to get back involved in things that I enjoy to do or want to do, you know." (Mike)

With this increase in confidence, participants noted that one of the first and most significant changes experienced in their relationship was the ability to engage in activities as a couple outside the home.

"And we actually get to go to Wal-Mart and stuff, you know, get to go out, yeah, which we didn't do before. We always tried to go like, when we knew, okay, very late at night when there are not a lot of people or very early in the morning, you know? You just do things different. You just don't just go out shopping, you know? And you don't go to a restaurant. But now we do." (Jean)

“And he actually goes to loud events now. He’ll go to the ballgame or [his daughter’s] volleyball practices and games.” (Jen)

Nearly all the couples interviewed described how the service dog helped facilitate positive social interactions during these activities. For some, this meant that the service dog encouraged positive interactions with others.

“I’ve no desire to talk to strangers. With the service dog, people come up to me and start talking. I have poor hearing but if I can understand them, I patiently talk to them about the service dog. Initially I didn’t like it much, but I’ve got used to it now.” (Ron)

“Just watching Matthew interact with other people and it not being, I mean, he did 26 years in the Army, and it not being a, it’s not a soldier talking to our neighbors anymore. It’s Matthew, the neighbor instead. And that’s been meaningful to me.” (Michelle)

“And one of the differences, particularly when I first got her and I first started going out with her, I was still kind of recluse and kind of, I wouldn’t talk to people much, but because of Spirit and the people stopping me and want to talk about the dog and everything, and I was so happy about having the dog, I was explaining things uh, to people that I normally wouldn’t talk to.” (Simon)

For others, the service dog helped the veteran maintain a sense of calm in social situations by acting as a buffer, inhibiting undesired interactions with strangers.

“And the dog will circle him and then sit either behind him or in front of him so that no one can get to him, no one can stand behind him, which has helped. Because he doesn’t want to be around crowds. He doesn’t want to be around people. But Crockett

keeps those people at a distance because he will circle wide enough for people to stay away from him.” (Maggie)

For many of the couples interviewed, renewed engagement in social activities aided by the service dog ended years of isolation in the home. Couples described planning or engaging in activities they would not have considered before the service dog’s presence.

“We went out, for the first time we went out to eat and Crockett was with, and Crockett sleeps, sits on his leg and feet. And that was the first time ever we sat through a restaurant and actually finished a meal. That’s what, that’s what I remember. We just never, in all the years we’ve been married, never been able to do it. It’s just always been...terrible. A terrible experience.” (Maggie)

“We actually talked about going on a vacation for the first time in what...six or seven years? Going somewhere together, you know? And uh, we wouldn’t, we wouldn’t be doing that if we didn’t have Faith.” (Jerry)

For many of the study participants, the service dog’s arrival was also associated with the veteran reducing the use of medications to manage symptoms. In addition, self-medicating behaviors such as excessive use of drugs and alcohol were also reduced or eliminated.

“I’ve been able to lower my medication levels. Still have too much difficulty sleeping if I try lowering too much.” (Ron)

“He doesn’t drink anymore. Once in a while but he, you never, you don’t drink like you did. Before you’d drink two cases of beer in one night.” (Maggie)

“And I don’t drink, I don’t drink liquor anymore. I’ll drink, I’ll drink...a beer or two or three in a months time. Uh, had to get that to stop. That was a bad thing. That was a bad thing.” (Simon)

It is worth noting that some veterans discussed concerns regarding their own well-being and progress in managing symptoms if the service dog was not able to perform its tasks due to illness, injury, retirement, or death.

“If, God forbid, anything happened to Faith, I think I would just go back into a shell.” (Jerry)

Despite these concerns, nearly every couple described the service dog’s arrival in the home as a positive event for the couple and was credited as a significant factor in most couples experiencing hope for continued improvements in their relationship.

“[Having a service dog has] given uh, new life. It’s a life-changing event. It really has made some...It never solved any problems, per say. You’ll never cure PTSD or...but it has made an impact on how we relate to each other.” (Maggie)

“I know...all I can say is, is I know the longer Faith is around, the better our relationship is gonna get.” (Jerry)

Chapter 5

Discussion

Summary of Results

Relationship prior to the service dog. To varying degrees, every couple in the study described a distressed relationship prior to the arrival of the PTSD service dog, to the point that more than half referred to this stage in their relationship as being either “hell” or “a nightmare.” For veterans, a loss of individual functioning, interpersonal connectedness, and personal agency culminated in a sense of loss of a former self or former way of being. This loss, coupled with the continued intrusion of symptoms, frustrated hopes for a fulfilling future for most veterans, leaving several to consider suicide as a viable alternative to continuing to live in distress. While they did seek treatments for symptoms, most participants described a frustrating lack of efficacy with mental health services, including being “bounced around” by service providers, and relying on myriad medications which helped maintain only minimal levels of functioning, and usually created undesirable side effects. Self-medication was common among veterans interviewed, especially the use or abuse of drugs and alcohol, which in many cases further exacerbated symptoms.

Many of the symptoms experienced by the veterans, especially emotional withdrawal, social isolation, and loss of interest in enjoyable activities, were also experienced by the spouse and had a detrimental effect on the relationship. For the spouse, there was a disquieting awareness that the person she had married was not the same person who had returned from combat. As such, there was a reluctant resignation to a new relationship with what many described as an altogether different person. This new

relationship, in most cases, was characterized by increased hostility and aggression, making the risk of violence or presence of actual violence in the relationship a common theme among interviewees. Many spouses described a sense of constant worry and reported experiencing their own traumatic reactions in witnessing or experiencing PTSD symptoms in their partner. Together with emotional numbing and distancing between partners and a lack of positive, bonding couple experiences, it is not surprising that many couples described relating to one another as roommates rather than as partners, and that several noted a looming potential for relationship failure.

Relationship during service dog acquisition. When asked about each couple's hopes or expectations prior to acquiring a service dog, participant responses revealed a cautious optimism as to whether they would be successful in actually acquiring a service dog and how effective the dog would be in helping to mitigate symptoms. Participants discussed a variety of hopes and expectations, namely a desire to "get life back," a desire for less reliance on medication, and the hope for more social engagement in the community. For many, these hopes were tempered by uncertainty, concern, and even unwillingness to allow themselves to hope, thereby becoming vulnerable to disappointment. The result was a palpable tension between the strong desire for relief from PTSD symptoms versus the seemingly distant possibility that, if acquired, a service dog might provide this relief. For many couples, the lengthy, demanding, and sometimes expensive process of being matched with a service dog fueled discouragement and pessimism. Despite these obstacles, couples in the study generally agreed that the possibility of experiencing relief from PTSD symptoms was well worth the necessary effort and investment required to continue pursuing a PTSD service dog.

Relationship after partnering with a service dog. Being matched with a PTSD service dog was described by several participants as a “life-changing experience” or a “miracle.” Many described noticing an immediate shift in emotion and affect from the moment the veteran was matched with a service dog. All the veterans noted how a strong bond quickly developed between them and their service dog, fostering a sense of companionship and safety, or what one participant described as having a “battle buddy.” With the service dog present, veterans reported a reduction in the frequency and severity of anger outbursts, reduced anxiety, fewer incidents of road rage, improved mood, reduced reliance on medication, reduction or elimination of suicidal ideations, and significantly improved sleep. For spouses, these improvements meant that the burdens they experienced as a caregiver were also significantly reduced. Spouses reported sleeping better at night, reductions in their own anxiety about the well-being of their partner, a more peaceful and relaxing home environment, and regaining some personal freedom and independence that had been lost.

Positive effects for the relationship were also abundant. Several couples described how their service dog would intervene to mediate disagreements, interrupting arguments before they became destructive. Couples also described how the veteran’s capacity for emotional expression improved in relation to the dog and subsequently spread to the couple relationship, enabling the veteran, as one spouse described, to “express love more openly.” Another commonly noted shift was that couples described laughing together and sharing in “fun” experiences, some for the first time in years. Many veterans noted feeling more confident in their ability to fulfill their role as a husband and father, effectively beginning to reclaim a previously known self. The presence of the service dog

also provided confidence to engage in activities as a couple that had been previously shared and enjoyed. For many couples, simply going to a grocery store, eating at a restaurant, or planning a vacation together was a momentous occasion, as many had not done so for years. During these outings, the service dog was credited with helping to facilitate positive social contacts, either by acting as a catalyst for engagement with curious strangers, or by serving as a buffer against undesired contacts. With the service dog helping to create a bigger world and new opportunities, many couples described feeling as though they were “getting life back” or “returning to life.”

Not every aspect of service dog ownership was easy, however. Some spouses described difficulty adjusting to shifting roles as the service dog assumed caregiving duties. More than half of the spouses in the study noted some initial feelings of jealousy or resentment of the veteran’s bond with the service dog, though these feelings seemed to wane with time. Many couples also expressed concerns about the logistics of daily care, feeding, and required grooming of the dog. And finally, a few veterans also expressed doubt about their ability to maintain therapeutic gains in the event of the retirement or death of their service dog. These concerns notwithstanding, many of the couples interviewed credited their service dog with having a significant, positive impact on their relationship with one another and, in some cases, even saving the marriage.

Parallels with Existing Literature

There are no known studies to date that have specifically examined the impact of PTSD service dogs on a couple’s experience of their relationship when one partner is a combat veteran with PTSD. The findings of this study are consistent, however, with much of the existing literature related to the effects of PTSD on couple and family

relationships, as well as literature assessing the systemic impacts of other types of service dogs for couples and families.

Impacts of PTSD on marriage and family life. In the current study, couples' descriptions of their relationship experiences prior to being partnered with a PTSD service dog are similar to participant accounts reported in Ray and Vanstone's (2009) qualitative study of ten peacekeepers deployed to Somalia, Rwanda, or the former Yugoslavia. Veterans interviewed in the study discussed emotional numbing, withdrawal from family relationships, increases in anxiety, hypervigilance, issues of domestic violence, confusion about uncharacteristic behaviors, role strain, and heightened risk of divorce, among other complaints. The authors derived two major themes from the interviews: (1) for the PTSD sufferer, emotional numbing can have a detrimental effect on relationships with family members, causing further emotional withdrawal, and (2) emotional withdrawal from the social support of family members can frustrate efforts to heal from trauma.

Descriptions of relationship distress in the current study were also consistent with other prior studies examining the impact of PTSD on relationships. For example, Jakupcak et al. (2007) noted that combat veterans from Iraq and Afghanistan who were diagnosed with PTSD were more prone to anger and hostility and more likely to exhibit physical aggression. Nelson Goff et al. (2007) found that PTSD symptom severity for the veteran, especially loss of intimacy, dissociation, and sleep disturbances, was inversely related to measures of marital satisfaction for both veterans and their female partners. Participants' distress over the inability to express emotion or to show love to others was also described in Cook et al. (2004) and Meron Ruscio et al. (2002). The authors found

that, among the symptom clusters of PTSD, emotional numbing symptoms were the strongest predictor of negative perceptions of relationship quality.

Similar to the current study, systemic effects of trauma symptoms were also found by Dirkzwager, Bramsen, Adér, and van der Ploeg (2005) who reported sleep disturbances, perceived negative social support, and diminished marital satisfaction on the part of spouses of peacekeepers with PTSD. Calhoun et al. (2002) noted higher levels of depression, anxiety, hostility, and increased levels of caregiver burden among partners of combat veterans with PTSD. Arzi, Solomon, and Dekel (2000) found that spouses of war veterans diagnosed with PTSD and traumatic brain injuries exhibited significantly higher levels of distress and caregiver burden relative to spouses of veterans without diagnoses.

Couple Adaptation to Traumatic Stress Model (CATS). These studies point to a systemic view of traumatic stress where the symptom cluster of a trauma survivor has the potential of creating secondary traumatic stress reactions in intimate partners. Nelson Goff and Smith (2005) developed the Couple Adaptation to Traumatic Stress Model (CATS) to explain this process, proposing a bi-directional feedback loop of traumatic stress within a couple relationship. According to the CATS model, the symptoms of secondary traumatic stress that can develop in a partner may in turn exacerbate the trauma symptoms of the primary trauma survivor. This model is unique in that it takes into consideration the individual trauma experiences of both partners, the predisposing factors and resources available to the couple, as well as the interpersonal and relational effects within the couple system.

According to the model, the individual level of functioning for both the primary and secondary partners refers to the presence, severity, and duration of trauma symptoms, which can include emotional, behavioral, cognitive, and biological symptoms. Predisposing factors and resources for each individual may refer to things such as age and previous exposure to trauma, as well as coping skills and presence of support. Both of these then influence, and are influenced by, couple functioning which incorporates issues related to attachment, relationship satisfaction, stability, adaptability, intimacy, communication, roles, and mutual support. The model suggests that the couple's ability to adapt to stress can be moderated by any of these three areas, as they are all interrelated and interdependent (Nelson Goff & Smith, 2005).

This model may help to explain the improvements in couple, family, and social relationships that have been anecdotally noted among veterans utilizing service dogs for PTSD. Assuming the presence of a PTSD service dog can reduce the trauma symptoms of the primary trauma survivor, thereby improving individual functioning, the CATS model would suggest that both the secondary partner and the larger relational system of which that veteran is a member will experience compensatory improvements.

Systemic effects of service dogs. Similar to the current study, such improvements have been noted among couples and families utilizing service dogs for other forms of disability. For example, Valentine et al. (1993) found that 60% of individuals utilizing service dogs for mobility impairments reported improvements in interpersonal relationships with family members. Among families of children with Autism Spectrum Disorder, when service dogs are utilized to inhibit impulsive "bolting," reduce self-injurious behaviors, aid in sensory integration tasks, and interrupt disruptive behaviors,

family members have reported an increased sense of safety in the home, reductions in anxiety, improved sleep for parents, increases in family mobility, positive community engagement, and a more pleasant atmosphere in the home (Burrows et al., 2008; Enders-Slegers, 2012; Smyth & Slevin, 2010). Allen and Blascovich (1996b) noted that, for individuals with disabilities requiring the use of a wheelchair, the presence of a service dog was generally met with enthusiasm from both participants and family members, and was associated with improvements in relationship maintenance, and in some cases, couple reconciliation after separation. Even among families with epileptic children who owned pet dogs that exhibited alerting behaviors for impending seizures, scores on quality of life measures were significantly higher relative to families without a dog (Kirton et al., 2004).

Similar to findings of the current study, these studies collectively suggest that improved overall individual functioning, increases in independence, improved psychological well-being, and enhanced safety can be attributed to the presence of a service dog. As noted in Sachs-Ericsson et al. (2002), these individual improvements are further associated with systemic benefits in the form of more positive family relationships, increased positive engagement with the community, reduced anxiety, improved sleep, and a more peaceful home environment, cumulative outcomes that effectively reduce the caregiving burden of spouses and other family members, and help to create opportunities for more enjoyable experiences.

Reductions in caregiver burden noted by study participants, and supported by existing literature, is an especially noteworthy finding of the current study. The need to design interventions to reduce caregiver burden for spouses and other family members

has been identified as an area of significant clinical concern in the mental health community (Arzi et al., 2000; Calhoun et al., 2002; Carroll et al., 1985; Cook et al., 2004; Dirkzwager, Bramsen, Adér, & van der Ploeg, 2005; Eaton et al., 2008; Jordan et al., 1992; Manguno-Mire et al., 2007; Monson et al., 2009; Nelson Goff & Smith, 2005; Riggs et al., 1998). However, there have been few viable interventions proposed that have demonstrated significant efficacy in addressing this issue. Though quantitative analysis would be required to measure the relief experienced by caregivers of combat veterans with PTSD who receive a service dog, anecdotally, the current study suggests a significant improvement.

Prior research concerning possible negative implications for service dog utilization was also supported by the study. The majority of spouses in the study did, in fact, report initial feelings of jealousy and resentment toward the service dog following placement in the home, as suggested by Walsh (2009). The couple relationship, in some cases, appeared to suffer due to the strong bond between service dog and handler, an effect noted by Clark Cline (2010). This effect seemed to diminish with time, however, as the male partner's overall emotional expression skills improved and he was able to more effectively communicate with his spouse and other family members. While acknowledging these early difficulties, spouses generally tended to accentuate their partner's eventual improvements in emotional expression and intimacy within the couple relationship.

Capitalizing. A possible mechanism for systemic improvements resulting from a service dog may be found in research related to capitalizing, or deriving benefits from positive events, first discussed by Langston (1994). The author found that “expressive

responses” to positive events, such as marking the event in some fashion (e.g., celebrating or rewarding oneself) or seeking social contact with others in order to share the event, enhanced the event’s beneficial impacts on individual affect. Building on this finding, Reis et al. (2010) noted that sharing a positive experience with another person and receiving an enthusiastic response from that person not only increases the perceived value of the event, but also promotes the development of trust, feelings of affinity, and an increased willingness to self-disclose with that person. Similarly, Gable, Reis, Impett, and Asher (2004) noted that in intimate relationships when one’s partner tends to respond to capitalization attempts enthusiastically, positive effects are noted in intimacy and overall marital satisfaction.

This literature is an important consideration in light of the current study’s participants reporting laughing together and enjoying shared, positive experiences (some for the first time in years) after receiving a PTSD service dog. To the degree that being partnered with a PTSD service dog is perceived by veterans to be a positive event, and assuming an active and enthusiastic response by the spouse with whom the event is shared, capitalizing on the event is likely to be enhanced. Since intimacy and marital satisfaction are shown to increase with capitalization, and assuming that intimacy and communication in intimate partnerships are inextricably linked to perceived social support (Reis, 1984), perceived social support for both partners is also likely to be enhanced as a result of successful capitalization. It is likely, and participant responses would support, that just as PTSD may initiate a destructive feedback loop within the couple relationship, the arrival of a service dog specially trained to mitigate symptoms and improve individual functioning may be the catalyst for a beneficial feedback loop

within the relationship where communication, intimacy, and social support are enhanced in increasing measure.

Reductions in medication use. Kronish, Edmondson, Li, and Cohen (2012) found that a PTSD diagnosis was associated with lack of compliance with recommended medication treatments, resulting in increased risk for poor overall health. The authors found that PTSD patients were more likely to report forgetting to take medications, or choosing to skip certain medications. In light of this, the service dog's effectiveness in reducing reliance on medication, as highlighted by participants, is an especially important finding.

With reduced reliance on psychotropic medications, concern about compliance with treatment recommendations is also reduced. Reductions in medication use also have the benefit of reducing undesirable side-effects, also a factor in compliance issues. Furthermore, since PTSD service dogs can be trained to cue their handler to take medications, the potential exists for improved compliance with any medications that continue to be utilized.

Reduced reliance on medications among veterans may also lead to long-term economic benefits. While the initial cost of a PTSD service dog may be high, the long-term cost for chronic reliance on psychotropic medications may be similarly costly. If veterans utilizing a PTSD service dog are able to experience improvements in symptoms, thereby reducing (or in some cases eliminating) reliance on psychotropic medications to manage PTSD symptoms, the long-term costs associated with treatment could be greatly reduced without a loss of therapeutic benefit for the veteran. Further research regarding

economic outcomes is needed to quantify the cost-benefit ratio associated with the use of PTSD service dogs.

Clinical Considerations

There are several implications for clinicians who might work with couples presenting with a distressed relationship related to the presence of PTSD symptoms. First, while further research is needed, the results of this study suggest that PTSD service dogs may provide an important buffer against the deleterious effects of PTSD on couple relationships. Therapists working with such couples may suggest that clients consider a PTSD service dog as an intervention for enhancing individual functioning and overall relationship satisfaction.

For those couples with a PTSD service dog, therapists should recognize that the animal plays an integral role in the functioning of the couple or family system and should find ways to incorporate the animal into the treatment milieu, perhaps by utilizing the animal during sessions to promote a sense of safety, inhibit anxious reactions to stimulating content, and facilitate constructive communication between partners. In addition, considering the literature on capitalizing, therapists should encourage couples with a PTSD service dog to discuss and reflect on positive experiences they have shared with the service dog, as this is likely to enhance capitalization of those events, promote couple bonding, and increase social support, which has been shown to mitigate PTSD symptoms over time.

Public Policy Implications

Currently, the VA cites a lack of empirical evidence regarding the efficacy of service dogs for PTSD. While the VA funds service dogs for more apparent wounds such

as loss of vision, hearing, or mobility, the VA does not yet recognize service dogs for the “invisible wounds” of war, such as PTSD. Because of this policy, veterans who believe they may benefit from a PTSD service dog must utilize their own financial resources to procure one. Further, organizations that train PTSD service dogs often must rely on private or corporate donations to maintain operations and cover the costs of training the animals.

Given the outcomes of this study, which provide qualitative support for the benefits of PTSD service dogs on couple relationship functioning, further qualitative and quantitative research regarding outcomes related to the use of PTSD service dogs is warranted. The VA should be proactive in partnering with organizations that are currently seeking to conduct such research. Funding of such research should remain a top priority for the VA and for Congress given the continued epidemic levels of mental health problems and suicide among veterans.

Furthermore, there is a need for broader public awareness and consideration for existing PTSD service dogs, including education on access laws in businesses, as well as do’s and don’ts when encountering service dogs in public. A campaign to increase awareness of these issues may aid in reducing distressing incidents of access denial reported by participants.

Recommendations for Future Research

While studies are currently underway to remedy the deficit in research related to PTSD service dogs, there remains a dearth of quantitative research regarding individual and systemic outcomes. In light of the current study, additional qualitative and quantitative inquiries into the systemic effects of PTSD service dogs are warranted,

particularly on couple relationships and family cohesiveness. Specifically, research measuring relationship satisfaction, intimacy, and other couple relationship factors using reliable measures and a larger sample size would be helpful in quantifying relationship changes discussed by participants in the current study.

While it was not within the focus and scope of the current study, nearly every participant also described positive changes in relationships with children, parents, extended relatives, or friends. The impact of a PTSD service dog on the valence of these relationships and the effect of these relationship changes on the course of PTSD also warrant study.

The majority of participants of the current study were rather homogenous in ethnicity, gender, and socioeconomic status. Research examining potential variations in outcomes based on ethnic background, gender of handler, socioeconomic status, and other considerations would be useful in enhancing the understanding and proper utilization of service dogs as a viable intervention in the treatment of veterans with PTSD.

As noted previously, the long-term economic effects of PTSD service dog utilization would be useful to explore. More specifically, economic outcomes resulting from the use of PTSD service dogs should be compared to more traditional methods of treating PTSD among combat veterans, such as psychotropic medications, individual counseling, and group counseling. If use of a PTSD service dog enables veterans with PTSD to reduce long-term reliance on psychotropic medications to manage symptoms, there may be long-term economic benefits that would negate the up-front costs of a PTSD service dog.

Limitations

There are several limitations of the current study. First, the small sample size of the study limits generalizability to the broader population. As mentioned previously, the study sample was also rather homogenous in terms of ethnicity, gender, and socioeconomic status, further complicating generalizability. Second, study participants were contacted with the assistance of several organizations that train PTSD service dogs. Despite specifically requesting these organizations refer clients with a “typical” experience of service dog partnership, it is possible these organizations may have opted to refer only those clients with positive experiences of partnering with a PTSD service dog, excluding from consideration clients who may have had a less favorable experience. Because of this, the study may not reflect the “typical” experience of all couples that have a PTSD service dog in the home. Third, because participants were informed of the study by these training organizations, some participants may have felt compelled to represent the interests of those organizations in their responses, rather than offering a more unadulterated description of their experiences. Because of this, it is possible that participants may have offered an idealized account of their experiences, magnifying positive outcomes and minimizing negative experiences. However, the emotional expressiveness common of participants during interviews suggests the accounts described are genuine.

Conclusions

This study contributes to the understanding of utilizing PTSD service dogs as an intervention for combat veterans suffering from PTSD. While further research is needed in order to confirm the observations of this study and to quantify levels of improvement,

the results of this study tentatively suggest that PTSD service dogs should be considered a viable treatment adjunct for cases of chronic PTSD in which couples and families are also affected. With the knowledge that social support acts as a buffer to PTSD, and is associated with better outcomes for PTSD over time, and since it appears that a PTSD service dog may act as a catalyst for creating a positive feedback loop of social support within a couple relationship, due consideration should be given to this method of intervention among therapeutic and research communities.

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Appendix A: Tables

Table 1:

Participant Demographic Information

Couple Number	Couple Pseudonyms	Service Dog Pseudonym	Years Couple in Relationship	Years Since PTSD Diagnosis	Years from PTSD Diagnosis to Service Dog Partnership	Months with Service Dog in Home
1	Matthew Michelle	Woody	10	4	3	10
2	Jerry Jean	Faith	25	5	3	28
3	Dustin Maggie	Crockett	11	18	17	6
4	Mike Jill	Guinness	18	8	4	36
5	Simon Holly	Spirit	42	16	14	25
6	Clay Jen	Ruthie	18	4	3	18
7	Ron Sarah	Murphy	22	2	<1	18

Appendix B: Recruitment Letter



Department of Human Development
7054 Haycock Road, Ste 202 (0362)
Falls Church, VA 22043-2311
(703) 538-3787 Fax: (703) 538-8465
www.nvc.vt.edu/mft

Greetings,

Under the direction of faculty at Virginia Tech's Department of Human Development, located in Falls Church, VA, I am in the process of running a study examining the experiences of veterans diagnosed with PTSD who are utilizing service dogs to help mitigate symptoms. Once completed, the study will be submitted for publication in the hopes of providing much-needed additional research in the PTSD service dog field. My hope is that this study will also provide grounding and direction for ongoing research. For the purposes of the current study, I am specifically interested in interviewing those veterans utilizing a PTSD service dog who have been married or in long-term relationships both before, and after being partnered with a PTSD service dog.

The purpose of this letter is to request your assistance with recruitment of study participants. As a reputable service dog training organization, you may have had personal contact with individuals who would be well suited for this study.

It would be of great assistance if you would be willing to contact any clients who may meet the inclusion criteria of the study and have them contact me at one of the methods provided below. The time commitment involved for participants is minimal, approximately 1½ hours at most. Compensation will be offered in the form of a \$15 gift certificate to a pet supply store.

Thank you first and foremost for your dedication to the training of these valuable animals and also for your willingness to provide assistance in what will hopefully prove to be a groundbreaking study in the field. For more information, you are more than welcome to contact me at one of the methods below.

Phone: (703) 258-2799

E-mail: ServiceDogStudy@Gmail.com

Respectfully,

David C. Steele
Graduate Student
Virginia Polytechnic Institute and State University

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Inclusion criteria for the current study:

- The study includes ten couples (total of 20 people) with a *typical* experience of being matched with a PTSD service dog.
- At least one partner is a combat veteran who has been previously diagnosed with PTSD as a result of his/her combat experiences.
- The couple must have been married and/or in a committed relationship to one another from the time of the initial PTSD diagnosis to present.
- The service dog matched with the combat veteran is able to perform tasks specific to his/her PTSD symptoms (though the service dog may also assist with mobility impairments).
- The service dog matched with the combat veteran must have been present in the home for a period no less than six months.

Requirements:

- Couples who meet the inclusion criteria will be asked to participate in one in-person interview, conducted at a mutually agreeable location that is comfortable for the participants. If a couple is unable or unwilling to meet in person, the interview may alternatively be conducted via web-based video platform such as Skype.
- Special accommodations can be made for those with vision or hearing impairments.
- In addition to the interview, each couple may be contacted when data analysis is completed in order to provide their feedback on the study results.

If any of your past client's meet these inclusion criteria, and would be available to be interviewed, please forward them the recruitment flyer (located inside the self-addressed envelopes provided with this packet). This flyer contains information about the study and instructions for making contact with me. In addition, if you are able to contact any prospective participants by phone or e-mail to advise them of this study, that would be very helpful. Thank you for your assistance.

Appendix C: Screening Instrument

Screening Instrument: (Identify if caller is the veteran or his/her spouse)

SCREENING QUESTIONS	YES	NO
1. Are you (your partner) a combat veteran?		
2. Have you (your partner) been formally diagnosed with PTSD as a result of your (their) experiences in combat?		
3. Have you and your partner been married/in committed relationship with one another from the time of the original PTSD diagnosis until now?		
4. Are you currently living together in the same home?		
5. Do you have a service dog that is able to perform specific tasks to help with your (your partner's) PTSD symptoms?		
6. Have you had your service dog for a minimum of six months?		
7. Relative to other service dog owners that you know, would you describe your experience with your service dog as being fairly typical?		

Caller Name: _____ Partner Name: _____

Name of Service Dog: _____

Home phone #: (____) _____ Cell #: (____) _____

E-mail (optional): _____

Preferred Contact (check one): Home phone: Cell phone: E-mail:

Best time to contact: Morning: Afternoon: Evening: Other: _____

Interview Site and Address:

Date for Interview:

Referral Source: _____

Appendix D: Informed Consent Form

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY Informed Consent for Participants in Research Projects Involving Human Subjects

Title of Project: Service Dogs for Wounded Warriors with PTSD: Examining the Couple Relational Experience.

Primary Investigator: Andrea Wittenborn, Ph.D.
Secondary Investigator: David C. Steele

I. Purpose of Research

The purpose of this study is to examine the relational experiences of couples when one partner is a combat veteran who has been utilizing a service dog to help manage symptoms of PTSD for at least six months.

II. Procedures

The researcher will spend a total of approximately 1½ - 2 hours with you at the interview site. During this time, you will first be asked to share any personal items, as you feel comfortable doing so, that might help to tell the story of your experience of having a service dog in the home. These may include personal narratives, journal entries, poems, song lyrics, photographs, or albums. The researcher may ask you some additional questions about these items. The researcher will then conduct a more formal interview, asking you to respond to a series of questions. At the conclusion of the interview, you will be asked to come up with an additional question that you feel would be important to ask other couples in the study. The interview is expected to last approximately 45-60 minutes. The entire interview will be audio recorded and transcribed, though your real name and any personal information will be left out of the transcription. When the study is nearing completion, you will be presented with a copy of the preliminary results and asked to provide your comments and observations on the researcher's interpretations. Your participation in this study is completely voluntary. If you wish to discontinue your participation in this study at any time, you may do so without facing any adverse consequences.

III. Risks

Risks of participating in this study are minimal. There are some possible psychological effects that may occur for you and/or your partner, such as experiencing some emotional discomfort or distress while participating in the interview process.

IV. Benefits

Participation in the study may help you and your partner gain insight into your experiences as a couple and possibly feel more connected. In addition, the results of this study will contribute to our knowledge of the benefits and challenges of service dog ownership and its effects on couples and families.

V. Extent of Anonymity and Confidentiality

Strict confidentiality of information will be preserved. Prior to beginning, you will be asked to select a false name for you and your service animal. This name will be used in place of your real name during transcribing. You will also be assigned a couple number that will identify you in place of your names. Any personally identifying information that is collected will be securely stored, separate from audio recordings and transcriptions.

Appendix E: Demographic Questionnaire



Study Demographic Questionnaire:

1. In what year were you born? _____
2. What is your gender? Male Female
3. What is your racial/ethnic background?
 - American Indian/Native American
 - Asian
 - Black/African American
 - Hispanic/Latino
 - White/Caucasian
 - Pacific Islander
 - Other
4. What is the highest level of education you have completed?
 - Grade School
 - Some high school
 - High school diploma
 - Two-year college degree / A.A / A.S.
 - Four-year college degree / B.A. / B.S.
 - Masters or Doctorate
5. In years, how long have you been married/in committed relationship? _____(years)
6. What was the approximate date of your/your partner's PTSD diagnosis? ____ / ____ / ____
7. In years, approximately how much time passed between the date of the PTSD diagnosis and the date that you/your partner was matched with a service dog? _____(years)
8. In months, approximately how long have you/your partner had a service dog? _____(months)
9. Are you currently participating in any other form of mental health treatment, including individual psychotherapy, group therapy, or use of medication? Please check all that apply:
 - Individual counseling/psychotherapy
 - Medication
 - Group therapy
10. Are you and your partner currently participating in any form of couple's therapy?
 - Yes
 - No

Appendix F: Interview Schedule

INTERVIEW SCHEDULE:

- Relationship prior to the service dog.
 - Can you give me a brief history of the PTSD, from the time you first noticed symptoms up until the official diagnosis?
 - How did the PTSD affect your everyday life?
 - How did you feel about the diagnosis of PTSD when it occurred?
 - Can you describe in your own words what the PTSD was like for each of you?
 - In what ways, if any, did the presence of the PTSD change your view of your relationship?
 - If you had to summarize in a few words what the PTSD meant to you during this time, what would you say?
 - What other forms of treatment, if any, did you try for the PTSD prior to getting a service dog?
- Partnering with the service dog.
 - How did you first learn about service dogs that could help with PTSD symptoms?
 - How did you, as a couple, decide to have a service dog join you?
 - What factors influenced your decision to get a service dog?
 - What were the challenges, if any, in making the decision to get a service dog?
 - As a couple, what were your hopes/expectations, if any, prior to actually getting the service dog?
 - Who would you say was more enthusiastic about the idea of getting a service dog?
 - Once the decision was made, but prior to actually getting the dog, what changes, if any, did you notice in your relationship or your interactions with one another?
 - Can you briefly describe the experience of being partnered with the service dog for the first time?
 - What were some experiences that were surprising or unexpected for each of you, if any, during the process of getting the service dog?
 - What experiences, if any, did you find disappointing about the process of getting a service dog?
 - How would you summarize your interactions with one another during the process of actually getting the service dog?
- Relationship after the service dog.
 - In what ways, if any, has the presence of the service dog changed the severity and/or presence of your PTSD symptoms?
 - If you have noticed changes in your relationship since having the service dog in the home, what are the most significant changes you have noticed?
 - What do you recall about the first time, if ever, that you noticed that the service dog was making a difference in your relationship with one another?
 - Can you tell me about a recent time, if there is one, where you noticed your service dog was making a difference in your relationship?
 - If you had to summarize what having a service dog means to you as a couple, what would you say?
 - What would you say about the future of your relationship now that the service dog is present?

Appendix G: IRB Approval Letter



Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, VA 24060
540/231-4606 Fax 540/231-0959
email irb@vt.edu
website <http://www.irb.vt.edu>

MEMORANDUM

DATE: April 11, 2013
TO: Andrea K Wittenborn, David Christian Steele
FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)
PROTOCOL TITLE: Service Dogs for Wounded Warriors with PTSD: Examining the Couple Relational Experience
IRB NUMBER: 13-379

Effective April 11, 2013, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the New Application request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: **Expedited, under 45 CFR 46.110 category(ies) 6,7**
Protocol Approval Date: **April 11, 2013**
Protocol Expiration Date: **April 10, 2014**
Continuing Review Due Date*: **March 27, 2014**

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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