

Military Veterans and Service Dogs: A Qualitative Inquiry Using Interpretive Phenomenological Analysis

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ABSTRACT There are over 18.8 million veterans of the United States of America's Armed Forces. After military service veterans may find it difficult transitioning back to civilian life. Veterans reintegrating may experience physical and psychological challenges related to their military service. For many, a successful role change takes considerable time and determination. In order to ease their transition, veterans are using the assistance of service dogs to aid in symptom management and assist with positive reintegration into civilian life. Service dogs are highly trained animals that help individuals perform life tasks to assist with physical and psychological challenges. The purpose of this qualitative study was to give voice to the experiential viewpoints of veterans who utilize service dogs. Guided by the theoretically informed method of interpretation—interpretive phenomenological analysis (IPA)—the researchers uncovered the veterans' perspectives, which provided meaningful insight into their lives with a service dog. Semi-structured interviews were conducted with veterans ($n = 21$) who utilized a service dog. The interviews lasted approximately one hour and were video or audio recorded. The most salient themes that emerged from the interviews were grouped into four superordinate themes: Procurement, psychosocial functioning, value, and detriments. Results suggest that service dogs improved veterans' physical and psychological health, provided a coping resource and a form of social support, and supported sustaining their independence. Veterans' right to privacy and the public's lack of knowledge and understanding of legal accommodation requirements via the Americans with Disabilities Act (ADA) were perceptible. Implications for policy, practice, and research, are discussed.

Keywords: mental health, PTSD, service dogs, veterans



In the United States, there are an estimated 18.8 million veterans of the United States Armed Forces (US Census, 2015). Readjusting to civilian life when transitioning from service and military life can be challenging. Successful reintegration can take considerable time and effort on behalf of the veteran, and he/she may experience difficulties reconnecting within the family unit, with friends, and in their community during this process. Furthermore, veterans may also be faced with medical challenges when transitioning as a private citizen. Many veterans return from their military service with visible military service-connected medical conditions such as loss of limb(s) and burns, as well as invisible psychological and neurological brain injuries such as posttraumatic stress disorder (PTSD) and traumatic brain injury (TBI), respectively, that they did not have prior to joining the military.

There is little debate that these medical conditions affect a substantial number of returning service members (Creamer, Wade, Fletcher, & Forbes, 2011). For the treatment of PTSD, for example, approximately 60% of veterans continue to meet the criteria for PTSD despite receiving empirically validated interventions (Krause-Parello, Levy, Holman, & Kolassa, 2016; Monson et al., 2006; Schottenbauer, Glass, Arnkoff, Tendick, & Gray, 2008; Smith et al., 2008). Moreover, PTSD and its sequelae are associated with elevated risks of suicide, depression, substance use, and homelessness (Begić & Jokić-Begić, 2001; Carlson, Garvert, Macia, Ruzek, & Burling, 2013; Leeies, Pagura, Sareen, & Bolton, 2010; Stander et al., 2014; Wisco et al., 2014).

For many veterans, it takes time and determination to accomplish a successful change in roles from service member to civilian and can become even more challenging having a visible or invisible wound. In order to ease their transition into the private sector and combat the untoward symptoms and effects of having service-connected medical conditions, many veterans are using alternate and adjunctive interventions such as animal-assisted intervention (AAI). Service dogs are being used as an intervention by veterans, despite the lack of rigorous empirical evidence of its effectiveness. Highly trained service dogs have been suggested to help mitigate the physical and psychological challenges veterans face (Krause-Parello, Sarni, & Padden, 2016). It has also been suggested that, as a species, the dog's non-judgmental demeanor and the reciprocity of the human-canine relationship has potential to assist veterans during times of uncertainty (Krause-Parello et al., 2016). However, it is important to understand what a service dog is. According to the American with Disabilities Act (ADA, 2010), a service dog is defined as "any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability." Service dogs are skillfully trained to provide assistance to people with visible and invisible disabilities. Some tasks can include providing assistance with mobility, balance, and medical alerts, including signaling for low blood pressure or an impending seizure, and can help calm a person with PTSD during an anxiety attack through deep pressure therapy, which involves the dog placing his/her front paws on the person's shoulders or thighs.

A limited number of studies examine the relationship between AAI and stress in veterans. Studies have shown potential benefits of dogs on physiological and psychological stress in veterans. For example, a decrease in psychological distress associated with PTSD was reported in veterans who lived with a companion dog (Stern et al., 2013); and a reduction in stress responses after an AAI, as measured by levels of physiological biomarkers (e.g., cortisol and heart rate), was found in hospitalized veterans (Krause-Parello et al., 2016). Scientific evidence supporting the efficacy of service dogs for the veteran population remains scant.

More information is needed to understand the efficacy of service dogs for veterans in order to support AAls as a sound and rigorous practice. Personal significance regarding the impact that these highly trained dogs provide to veterans can only be told by the veterans. However, this patient-centered perspective is lacking in the literature. Therefore, to explore the experiential voice of veterans with service dogs, this study interviewed veterans who utilize service dogs.

Theoretical Framework

The study was guided by a theoretically informed method of interpretation—interpretive phenomenological analysis (IPA; Larkin, Watts, & Clifton, 2006; Pringle, Drummond, Mc Lafferty, & Hendry, 2011; Smith, Flowers, & Larkin, 2009). This qualitative approach has theoretic foundations deep-rooted in phenomenology and hermeneutics, and with fundamental viewpoints from Edmund Husserl (Husserl & Lauer, 1956), Martin Heidegger (Heidegger & Grene, 1976), and Maurice Merleau-Ponty (Merleau-Ponty, 1956). IPA is also rooted in health psychology (Smith, 2011) and is a technique frequently used in qualitative research (Brocki & Wearden, 2006). This method of interpretation allows researchers to explore the subjective personal experiences of a given phenomenon and is often conducted on small samples of respondents for whom the research would be specifically relevant—typically, the sample has similar characteristics and in this case veterans who utilize service dogs.

Purpose

The purpose of this study was to give voice to the experiential viewpoints of veterans who utilized service dogs. Led by a nurse researcher, the authors employed qualitative inquiry, a routine practice in clinical settings, to gain firsthand information from patients on what they need to maximize their health and wellbeing (Munhall, 2012). The researcher's aim was to glean veteran-centered information on service dogs to better assist healthcare and service providers in veteran-centered care and treatment plans. No existing qualitative inquiries were found in the literature that gave veterans an active voice to share their viewpoints on having a service dog. Therefore, this research fills a gap in knowledge regarding the lived experience of being a veteran with a service dog.

Methods

Participants

Upon receiving approval from The Colorado Multiple Institutional Review Board (COMIRB# 14-2041), participants were recruited and consented on a voluntary basis. Recruitment efforts consisted of distribution of study flyers in the community, social media, and word of mouth. Purposive sampling was used to identify veterans who utilize service dogs and to ascertain their willingness to participate and communicate their experiences in a reflective manner, as suggested by Bernard, 2002. Inclusion criteria were veterans who were between 18 and 89 years of age with a service dog. The final sample of ($n = 21$) consisted of male ($n = 14$) and female ($n = 7$) veterans whose ages ranged from 26 to 63 ($M = 44.61$; $SD = 12.12$). The participant's length of years served in the military ranged from 2.5 to 30.5 ($M = 10.21$; $SD = 8.21$); the approximate years since their discharge from the military ranged from 0 to 40 ($M = 15.36$; $SD = 13.88$). The age in years of participants' service dog ranged from 0.25 to 9 ($M = 3.73$; $SD = 2.50$), and length of ownership in years ranged from 0.10 to 8 ($M = 2.03$; $SD = 2.18$). Additional characteristics of the sample are in Table 1.

Table 1. Background details of the participants.

Variable	n	%
<i>Gender</i>		
Male	14	66.7
Female	7	33.3
<i>Race</i>		
White	18	85.7
Black or African American	1	4.8
Hispanic/Latino/a	1	4.8
Asian or Pacific Islander	—	—
Native American or Alaskan Native	—	—
Multicultural	1	4.8
Other	—	—
<i>Marital Status</i>		
Married or domestic partnership	9	42.9
Single, never married	2	9.5
Divorced	9	42.9
Separated	—	—
Widowed	1	4.8
<i>Education</i>		
High school	2	9.5
Some college	8	38.1
Associate's degree	2	9.5
Bachelor's degree	6	28.6
Trade/technical/vocational training	—	—
Other	3	14.3
<i>Living Arrangements*</i>		
Alone	10	47.6
Spouse	9	42.9
Significant other	1	4.8
Parent(s)	1	4.8
Other family member(s)	2	9.5
Friend(s)	—	—
Other	3	14.3
<i>Housing Type</i>		
Rent	10	47.6
Own a residence	9	42.9
Residing at a friend/family's home	—	—
Homeless	1	4.8
Other	1	4.8
<i>Military Branch*</i>		
Air Force	4	19.0
Army	13	61.9
Navy	5	23.8
Marine Corps	—	—
Coast Guard	—	—
National Guard	1	4.8
<i>Military Component*</i>		
Active Duty	17	81.0
Guard	2	9.5
Reserve	5	23.8
<i>Military Entry</i>		
Enlisted	20	95.2
Officer	1	4.8
Other	—	—
<i>Engaged in Direct Combat</i>		
No	9	42.9
Yes	12	57.1
<i>Previous Dog Ownership</i>		
No	1	4.8
Yes	20	95.2

*Participant(s) responded to more than one choice.

Interviews

Qualitative semi-structured interviews were conducted by members of the research team experienced in interviewing techniques. The interviews lasted approximately one hour and were recorded. Interviews took place at a private designated setting on site at the university's campus or in the community.

Veterans with service dogs were asked the following semi-structured interview questions to foster their experiential voice: (1) Please tell us about who you are, and some things you would like us to know about you? (2) What did you have to do to obtain your service dog? (3) Who requested the service dog for you? (4) Where would a person go to learn about getting a service dog? (5) Why did you get a service dog? (6) How has the service dog impacted your life? (7) Specifically, in what ways has the service dog impacted your life? and (8) We have been discussing the relationship between you and your service dog, is there anything else you feel is important for others to know about service dogs? These questions were used to facilitate an initial dialogue exploring broad constructs related to their service dogs, and narrowed to more specific topics as they materialized when researchers asked follow-up questions when appropriate to expand on the participants' viewpoints; this allowed for flexibility during the interview, while facilitating rapport with the participants to produce richer data. Veterans were provided tokens as a form of gratitude for their participation in the study, which included a \$50 gift card from a national retail pet store chain, a tennis ball, and treats for their service dog.

Data Analysis

Interviews were analyzed using interpretive phenomenological analysis (IPA), utilizing the veteran's own perspective on service dogs to learn about their experience. This research method applies a "lived in" approach to understand the subjective experiences of others (Todres & Galvin, 2008). The interviews were recorded and transcribed verbatim, and the analysis was guided by recommended IPA procedures (Smith et al., 2009).

During the initial step of the IPA process, a member of the research team read and re-read the transcripts to become familiar with the content to gain an overall sense of meaning; in step two, the language was explored and evaluated for semantic content; step three consisted of developing emerging themes by systematically coding each transcript; step four involved clustering and labeling themes, and creating a thematic summary table for each participant; step five involved repeating steps one through five for all cases (i.e., participant transcripts). Following the IPA process described above, an "independent audit" was conducted by another research team member who analyzed the data independently to verify themes. As described by Elliott, Fischer, & Rennie (1999), the audit included reviewing the themes against the individual interview transcripts. The researchers jointly created an overall table of codes and themes that reflected all cases. Emerging themes were identified using reoccurring factors associated with having a service dog. Themes generated were recoded for analysis using ATLAS.ti qualitative software program. The Statistical Package for the Social Sciences (SPSS-24; Armonk, NY, USA) was used to analyze the demographic and characteristic data.

Results

The most salient themes that emerged from the interviews were grouped into four superordinate themes, with some including sub-themes. The themes with interpretive commentary are provided below.

Procurement

The act of procurement refers to the action of acquiring military equipment and supplies. In the military context, dogs are procured for service to the veteran. For these participants, acquiring a service dog was a prevalent topic brought up by many. The veterans discussed the various channels they utilized to obtain a service dog and what factors were commonly involved with the process. Ultimately, there were particular factors that influenced a veteran's decision on how best to obtain their service dog and how best to utilize resources available to them, if any existed. One factor expressed frequently in the procurement process was the seemingly high cost associated with having a fully trained service dog from a service dog training organization versus other sources, such as a non-profit organization that individually trains dogs for veterans' service-connected conditions. Veterans revealed that service dogs for certain medical conditions are a reimbursable medical expense (e.g., vision and hearing impairments, and mobility). However, veterans who had service dogs for invisible wounds such as PTSD discussed that their dogs were not covered under their medical coverage, even if their therapist suggested that the dogs could be helpful in reducing their symptoms:

The cost can be, from my understanding, can be pretty high into the tens of thousands of dollars. I was given the opportunity to train my dog here [nonprofit organization] with minimal cost of joining, so I chose to do that.

In addition to the high cost, lengthy wait times were also incurred by being placed on wait-list for a service dog. The wait times ranged from one to two years to acquire a fully trained service dog, due to an abundance of applications service dog organizations receive and a lack of resources to meet these demands:

I mean, they were telling me anywhere from a year and a half to two years on a ... just on a waiting list. And then once they found a dog for me, or once they were able to get a dog, then I would have to go down there and train with them for two weeks. But that doesn't necessarily mean that me and that dog would bond.

However, despite these barriers, some veterans persevered by finding other options and additional resources to procure a service dog. They either decided to utilize their own companion dogs and train them with the help of a non-profit organization or looked to breeders, rescues, and shelters, with the specificity of training a dog for service. Moreover, veterans spoke about how training their own dog versus obtaining a fully trained dog was perceived to have greater benefits to the relationship and bonding between the veteran and the dog:

You don't have to give your dog to somebody else to train and like however long it takes for them to do it. You're in with it the whole entire time, and you're bonding with your dog the entire time.

An underlying positive and joyous outcome of procuring a service dog was the presence of the human–animal bond. The veterans' bond with their dog was an essential component and an important aspect for successfully training their dogs for service. Training a dog for service is an ongoing process and an everyday task that not only provided the veterans with a sense of purpose and responsibility to the dog but also gave them a reason to get out of bed in the morning. Conversely, an underlying negative issue of procuring a service dog expressed was a sense of frustration that revolved around the fact that for many, the overall process to get a service dog was difficult. For those who advocated a need for a service dog on their own

behalf, there was an immediacy to obtain one because they felt their lives were largely impacted negatively, as noted below:

I thought he [service dog] could help. I was diagnosed with PTSD and social anxiety disorder as well so I didn't go anywhere. I stayed home and I went to work.

Service dogs appeared for some as a catalyst to ameliorate reclusive behavior, with the hope to become more engaged in society and go out in public. As the research progressed, we uncovered the further psychosocial advantages and disadvantages of having a service dog.

Psychosocial Functioning

Veterans' psychological and/or social functional status was affected before obtaining their service dog. Veterans expressed having many difficulties that were associated with isolation, anxiety, depression, PTSD, TBI, and other mental and physical conditions:

Well, the isolation, the anxiety and hypervigilance around people, not trusting people and places and situations has basically paralyzed my life, so to speak.

I'll start getting more anxious. I might have some intrusive thoughts coming in there. It just snowballs. I'll start sweating generally. My pulse is up. My blood pressure is up. My breathing is up. It just goes from there, and I will not sleep. I won't sleep. I might go two or three days without sleeping.

Furthermore, some veterans engaged in maladaptive coping strategies such as excessive alcohol consumption in an effort to ameliorate psychological and emotional distress. Unfortunately, this behavior also seemed to contribute to negative consequences:

I had some friends there that were willing to help me out, but I started drinking. I had a good job. A really good job. I got laid off before I'd been there a year. Started drinking even more. Within three months was completely homeless, living on the streets with two kids. Nowhere to go.

For those with PTSD, a prevalent sentiment expressed was being isolated and disengaged from society before they obtained their service dog. PTSD-related symptomatology and memories of war compelled some veterans to remain housebound and avoid public environments. Veterans' reclusiveness again appeared by limiting them from actively engaging in social environments. A high probability of perceived social interactions in public environments contributed to the veteran not venturing outside of their comfort zone:

Last year I tried to go to the Fair and I just completely freaked out, just too many people, I couldn't keep track of what was going on, I felt like I was back in the markets in Iraq.

You create your life around the PTSD because you don't want a lot of attention so you don't go to movies, you don't go to restaurants, you don't like to go to big events, you don't like a lot of attention.

The most deleterious consequence uncovered was that some participants stated they had engaged in suicidal ideation, attempts, and other self-harming behavior, before obtaining their service dog. Veterans expressed that before their service dog was in their life these maladaptive behaviors seemed to be the only viable solution for poor daily functioning and a loss of hope:

I slept 18 to 23 hours a day. Was on too many medications and too many surgeries. Just too much of everything and not enough of the right stuff. I probably tried to commit suicide a good two hundred times. I'd practice with my 9 mil and stick it in my mouth. Without a bullet in it I would practice pulling the trigger.

I broke down mentally and ended up in the mental hospital and stuff like that. I actually tried a few times to end my life.

The interviews uncovered that a service dog helped with the psychosocial functioning by reducing symptoms and created a human–animal bond that reconnected and supported veterans in civilian life. The bond between the veterans and their service dogs for some keep them alive, tethered, and engaged in society.

Value

There were subcategories identified under this superordinate theme: emotional, therapeutic, and familial value.

Emotional Value: Veterans for the most part, largely benefitted from the value of having a service dog. A factor noted by the researchers was that for those who suffered from social isolation and PTSD-related symptoms such as anxiety, the service dog seemed to provide relief in reducing problems related to these factors:

I'm not isolated as much as I used to be, which is really important, because that just goes in-hand. It helps reduce the anxiety, the anger, all that stuff because I'm actually getting out and he's [service dog] forcing me to do that.

She [service dog] helps me with the symptoms of PTSD.

Service dogs provided a sense of relief, potentially indicating that the service dogs served as a protective mechanism against suicidal ideation. One veteran described pain, fatigue, and desperation, and that without their dog they would have taken their own life:

[without the service dog] I would have killed myself. Absolutely. I was in so much pain, so much fatigue. I was on well over 36 medications. I was due for more surgeries. I was just tired of it. Tired of it. The TBI, not being able to remember anything. It was just miserable.

The majority of the participants cited that their service dog gave them something to live for and helped them to regain control over their lives; thus, being a prominent factor of importance to them:

The biggest thing is, he [service dog] gave me a reason to live more than anything in the world, he gave me something to take care of, he gave me something to love and he shows me unconditional love and because of that it brought me out of a deep depression, gave me a reason to live and to love again and to be a whole person. If it wasn't for him I honestly believe I would have killed myself ...

Overwhelmingly, service dogs seem to largely impact veterans' lives and are a source of positive emotional value. The life-saving bond between the veteran and service dog was truly indescribable.

Therapeutic Value: Service dogs were also used as a type of protection against maladaptive coping behaviors such as substance use, including excess alcohol consumption:

[without the service dog] I know that substance abuse would be a major part of it ... I'd probably be that ranch hand in some back part of some ranch ... with enough alcohol to last a winter ... I would not be engaged in society at all.

Before I got her [service dog] I actually was drinking a lot, and alcoholism runs in my family, but since I have gotten her I actually quit drinking. So it's made it easier for me to be able to focus more and be healthy for myself.

Reducing or ceasing psychotropic medications needed for anxiety and/or depression was also described as a positive diversion. Many veterans attributed the use of their service dog was a factor that aided in being able to reduce the amount of medications needed to function; some were even able to quit completely:

Before I had a service dog, I needed to take anti-anxiety medications, I was on anti-depressants, I was taking two or three different meds to go to sleep. And now the only thing I'm on is {medication name}, in order to help me get to sleep at night. You know, and so many of the other veterans that I know, you know, that have dogs for PTSD, you know, they are able to, to go down to, to minimal, if any, medications. Which makes me able to live life better because I'm no longer snowed.

There is a seeming calming and therapeutic effect that veterans experience in the presence of a service dog. Veterans described how having their dog made it easier for them to fall asleep and get restful sleep knowing that they had a loyal friend lying next to them. Some veterans discussed the protective value of the dog, while others discussed the calming effects:

If I have a really bad episode, he'll [service dog] get really close to me and he'll just kind of let me pet him or he'll even jump in my lap and just kind of lick me and tell me it'll be okay, you know? When we're out in public and I have one he'll get me out of the situation, he'll pull to where I can go get calmed down and be okay.

She [service dog] will wake me up from nightmares, so that way it doesn't get to the point where I start thrashing in my sleep and I don't get violent in my sleep.

The therapeutic value of service dogs included the dog waking them up from night terrors by licking their face, or refocusing their attention during times of stress and anxiety-provoking situations, thus, providing a calming effect.

Familial Value: Service dogs, like many companion dogs, seem to positively influence the familial structure as a whole beyond the veteran. Veterans reintegrating can have challenges re-connecting with family members. Based on these interviews, the service dogs seem to act as a social family facilitator or catalyst for engagement with others:

I think service dogs for the most part are good for everybody in the family.

I wouldn't have as close of a relationship with my family as I do [without the service dog].

Service dogs improved social family structure. The dogs are described as a social lubricant improving family structure by having a central connection through the dog.

Detriments

Veterans discussed stigmas associated with having a service dog, particularly the public ignorance, skepticism about disability law and service dogs, and high cost associated with trained service dogs. Veterans expressed the need for the public to be better educated on service dog laws and access, and more public awareness regarding the use of service dogs. It was not uncommon for members of the public to create obstacles for the veteran and their dog. Among these obstacles were asking veterans what their service dogs do for them and “can I pet your dog?” even though the dogs had on service vests that clearly stated, “working dog do not pet.” Privacy issues, lack of understanding of legal accommodation requirements via the ADA, Fair Housing Act, and simply accessing public transportation were burdensome for the veterans when they went out in public with their service dogs. For example, respondents expressed their right to privacy often seemed to be invaded by civilians, and some members of the public lacked social etiquette which caused the veterans negative or untoward public interactions:

I've had a couple of disagreements with people who are mad at me because I don't want to divulge my physical or my mental illnesses, you know? I've even stood there and, you know, they're like, “Oh, why do you have a service dog, what is your issue that which would have a service dog for?”

As far as public access is concerned, you should only ask two questions. One, is it a service dog? Two, is he trained for a task to help you?

There is clearly a lack of knowledge on the public's part in regard to the importance of service dogs for veterans when in public. For example, as described by one veteran, “if you see someone in a wheelchair you do not go up to them and ask them why they are in the wheelchair or if you can pet their wheelchair.” It seems as though when veterans with service dogs go into public they need to be on guard and ready to defend their privacy—which is sad and can only exacerbate symptoms such as anxiety and stress.

Public Ignorance About Disability: Unfortunately, there is a clear lack of knowledge and misinformation regarding service dogs on the part of the public, and insincerity if veterans had invisible wounds, but this seemed to be particular to stigmas associated with PTSD:

So I don't put a PTSD dog sign on her. It's just ... you don't understand. I'm not a freak in society. I just have a part of me that never turned off from the military. And she [service dog] helps with that.

Financial and Time Encumbrance: Veterans experienced obstacles in accessing needed interventions (i.e., service dog) due to the high cost and long wait times associated with them.

It's all out of my pocket. The waiting period right now for what I need is like two to three years just to get a dog. That's not good enough.

Veterans do not have the physical time or the emotional time to wait for a fully trained service dog from a service dog organization. Veterans are resourceful, perhaps due to their military training, and many are capable of training their own dog for service, with the help of an experienced dog trainer. Conversely, despite the high expense of service dogs, the cost may be minimal when compared with the potential health cost savings to society as a whole:

The mere expense of \$10,000–\$20,000–\$30,000–\$40,000 is overwhelmingly low cost when you think of the benefits to society as a whole and to our country as a whole. Properly trained dogs do have a cost, but I believe that the cost is actually minimal compared to the savings, the overall savings in veterans' care.

There could be changes in public health policy to help offset the cost of service dogs for veterans, namely service dogs becoming a reimbursable medical expense for invisible wounds (e.g., PTSD). In addition, due to the clear lack of public knowledge and understanding of service dogs, a public awareness campaign on service dogs should be considered to ease the burden on veterans when they are out in public.

Discussion

The findings from this study provide a richer picture of the lived-in experiences of veterans who use service dogs, elucidating four superordinate themes. There are many factors that contribute to the accessibility and procurement of a service dog. Particularly, the cost and wait times associated with a service dog were found to be significant factors. The information provided regarding the availability, cost, and barriers associated with acquiring a service dog is consistent with the findings of a review of the literature (Krause-Parello et al., 2016).

When the veterans recounted service dog accessibility and procurement experiences, it was evident they felt this was a major obstacle fraught with frustration. Others in the field acknowledge these are barriers that are substantial factors associated with the process of obtaining a service dog, and therefore propose programs that would seek to train shelter dogs for service (Stern et al., 2013). In this case, the potential supply of available dogs would more than meet these demands. In this suggested course of action, veterans would train their own dog while guided by appropriated instruction from qualified trainers (Krause-Parello et al., 2016). This line of thinking coincides with the finding that veterans in the study felt that training their own service dogs provided greater benefits between veteran and dog. This is consistent with other literature that suggests that service dog training for veterans may yield promising results (Yount, Olmert, & Lee, 2012).

Yount, Ritchie, Laurent, Chumley, and Olmert (2013) found that, in a training program where veterans trained their own service dogs, the interaction between the veteran and the dog contributed positively to the veterans in the program. The benefits were improved emotional regulation, better sleep, and decreased depression and startle responses, and an increase in assertiveness and improved family dynamics. Also found were a decrease in stress and fewer war stories that resulted in more "in the moment" thinking for veterans who had PTSD and TBI. These benefits echo remarks from the veterans participating in the current study, that training their own dog provided the benefit of bonding between the veteran and dog that might not otherwise form if they received a fully trained dog from an organization. In addition to companionship, dogs can serve as important attachment figures for veterans (Zilcha-Mano, Mikulincer, & Shaver, 2011), and subsequently the strength of the psychological bond between that of the owner and dog emulates the same bond shared between humans (Dotson & Hyatt, 2008; Veevers, 1985).

Qualitative and quantitative research suggest psychological and physiologic benefits from human–animal interactions (e.g., reduction in stress and/or depressive symptoms) (Barker, Knisely, McCain, & Best, 2005; Krause-Parello & Gulick, 2015; Owen, Finton, Gibbons, & DeLeon, 2016; Souter & Miller, 2007). Stress can negatively impact psychosocial functioning and be compounded by the challenges veterans encounter when reintegrating into civilian life.

The majority of the veterans in the study faced difficulties connected to their service, which predominantly related to PTSD symptoms, depression, anxiety, and physical traumas, such as TBI; many of these conditions were co-occurring.

Roughly 60% of veterans meet the criteria for PTSD, despite receiving empirically supported interventions (Krause-Parello et al., 2016; Monson et al., 2006; Schottenbauer et al., 2008; Smith et al., 2008). The consequences of PTSD may elevate a veteran's risk of suicide, depression, substance use, and homelessness (Begić & Jokić-Begić, 2001; Carlson et al., 2013; Leeies et al., 2010; Stander, Thomsen, & Highfill-McRoy, 2014; Wisco et al., 2014). Sadly, these outcomes were also supported by the veterans' experiences in this study.

While this seemed to be a common occurrence in this marginalized population and the consequences created were dire, the veterans asserted that their symptoms vastly improved through the use of their service dog. As a result, the veterans were able to reconnect in their social relationships and reengage in society. The veterans overwhelmingly described that their service dogs were an invaluable asset and can be described as a means for them to fully participate in their own lives; many held sentiments related to the belief that the service dog "saved their lives."

Improved psychosocial functioning greatly contributed to the veterans' overall health and wellbeing. While many stated this was an overall feeling, some veterans professed that they were able to reap more tangible results, such as reducing the number of visits to healthcare providers, and were able to cease or dramatically reduce medications needed to manage their anxiety and depression. This is supported in the literature in that pet ownership has been linked to human health savings estimated at \$3.86 billion, for example in Australia, due to a decrease in doctor visits (Headey, Grabka, Kelley, Reddy, & Tseng, 2002). This was also echoed by the veterans in this study, who credited their service dogs in saving overall healthcare dollars. Given the implications associated with these findings, there is a need for service dogs to become more accessible and less cost prohibitive. This not only positively impacts the veteran, but may also prove to lower relatable healthcare costs.

Despite improved health for veterans, public knowledge and education concerning the rights of veterans with service dogs is something that still needs to be addressed. Veterans were frustrated that their rights are oftentimes violated as per the ADA and/or the dog's ability to work is interfered with (e.g., by others petting or distracting the dog). In addition, this seems to be compounded by a lack of understanding concerning mental disorders, such as PTSD. This can be especially difficult due to the fact that military culture emphasizes strength in both physical and mental attributes (Greene-Shortridge, Britt, & Castro, 2007); in turn, this may contribute to fears of ostracism or negative judgements that may prevent veterans from seeking the help they may need (Krause-Parello et al., 2016). Therefore, public awareness is desperately needed regarding the stigmatization of veterans living with PTSD and other invisible wounds, so they are treated fairly in society.

Limitations

The researchers were experienced in qualitative interviewing and this expertise helped facilitate the progression of the interviews and establish rapport with the participants; thus, the appropriate methods were utilized. However, there is an inherent risk of possible subjective interpretation of the data in identifying codes and reoccurring themes, as well as techniques utilized to facilitate the interviews. While a valid concern, the researchers made every attempt to follow substantiated protocols for data analysis (described in the methods

sections) associated with IPA. The researchers acknowledge the sample size is small; however, according to Brocki and Wearden (2006), when using IPA in health research samples sizes vary and it is at the discretion of the researchers to determine when the analysis has achieved the goals of the research. Therefore, due to the saturation of content, the researchers are confident the sample size was sufficient to elucidate relevant findings and tell a compelling story; this was evidenced by the fact that the sample as a whole yielded similar experiences. The researchers hope to build on, and expand upon, the exploratory nature of this study to examine larger and more diverse veteran populations for future study.

Conclusion

In conclusion, the study provided a platform for the veterans to engage in open and honest dialogue in sharing their experiences regarding their service dogs. The experiential viewpoints of the participants were heard, and through the interpretative aspects of IPA we were able to describe, and now better understand, their world (Larkin et al., 2006). Veterans' contributions to this research have an impact regarding the education of the public about the positive attributes gained from the use of service dogs. In this study, service dogs improved veterans' physical and psychological health, provided a coping resource and a form of social support, and supported veterans in sustaining independence; helping them reintegrate and be engaged in society.

Nightingale (1969) noticed and discussed in her book, *Notes on Nursing*, that “a small pet animal is often an excellent companion for the sick, for long chronic cases especially” (p. 103). Despite this observation, almost fifty years ago, there still remains a lack of solid empirical evidence supporting animals as an adjunct to traditional evidence-based interventions. For veterans who like animals, a service dog may be an alternative option in conjunction with, or in lieu of, traditional therapies. The results of this study provide compelling information from the veterans' perspective regarding the lived experience of having a service dog. Charged with this information, health researchers can close the gap in knowledge and develop clinical trials on the efficacy of service dogs based on the veterans' perspective.

It is anticipated that the results from this study will encourage healthcare and service providers to consider the potential use of service dogs for veterans and provide appropriate referrals as needed. Moreover, this research has individual and systemic level impacts. On the individual level, veterans who participated in the project were able to have a voice and be heard. Some of the dialogue between the veterans and the researchers who conducted the interviews uncovered topics that for some were joyous (bonding with dog and family) and for others sad (e.g., depression and suicidal impulses). On a systemic level, the results of this study can be used to educate the public, including policy makers at the local, state, and federal levels, to advocate for service dogs as a reimbursable medical expense for veterans with invisible wounds. During the process of analysis, the researchers unearthed that more support is needed regarding the efficacy of service dogs. Therefore, it is suggested that human–animal interaction (HAI) researchers conduct rigorous research on the effectiveness of service dogs used by military veterans.

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Conflicts of Interest

The authors state there are no conflicts of interest

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