

## The effectiveness of service dogs as an intervention for post traumatic stress disorder

A review of the scientific literature reveals a firm and growing evidence base that service dogs are a very effective intervention for veterans with PTSD, with all studies showing that they confer a range of benefits on functioning and mental health. This is in addition to a large amount of anecdotal evidence which dates back to a program established by Rick Yount in the US, in 2008 <sup>(14)</sup>

A summary of the literature is below, followed by abstracts and references where available in a table. The table has been colour coded – yellow means it is a study with participants assigned with service dogs, leaving reviews unshaded.

In total, 220 participants with service dogs have been evaluated, with more than this in studies currently underway. In addition, Dietz et al <sup>(2)</sup>, showed statistically significant improvements in various indicators of mental health, but not a reduction in PTSD symptoms in their group study. The 153 participants have not been included in this total, but arguably they could be added to the n = 220. This study is shaded blue in the table.

### Early work – small studies of uncertain pedigree and literature reviews

In 2011, Israeli researchers Liat Hamama et al (2011) <sup>(1)</sup> evaluated dog-assisted therapy with nine traumatised teenagers, finding a rapid decline in PTSD symptoms in the intervention group.

In 2012, Texas researchers Tracy Dietz and colleagues <sup>(2)</sup> documented significant decreases in trauma symptoms among 153 children who had been sexually abused. The program involved therapy dogs [need a precise definition, but the dogs had received some training] in group settings. The reductions in PTSD symptoms that they found were not statistically significant but they found significant decreases in dissociation symptoms as well as a range of others.

In 2013, Murrow <sup>(3)</sup> wrote a Doctoral thesis about a study of nine traumatised children, reporting improvements in social and emotional competencies.

Yount et al <sup>(4)</sup> published an article in 2013, based on two case studies that typify the results that the Warrior Canine Connection program find. Robyn Newton (2014) <sup>(5)</sup> produced a Masters thesis with results based on interview data which indicated reduced fear of public spaces and less use of psychotropic medications in six war veterans with service dogs.

In 2015, Dell and Poole <sup>(6)</sup> wrote up a case study of a therapy dog intervention with a Canadian prisoner describing positive results and six principles that service providers should continue.

These early studies are of uncertain pedigree (pardon the pun!) however, according to O’Haire (2015) the Hamama, Dietz and Murrow studies included both dog-focused activities such as training as well as talking to the dog about personal traumatic experiences, indicating that their dogs were not simply pets.

Also in 2015, Maggie O’Haire et al <sup>(7)</sup> from the veterinary school of Purdue University reviewed the literature on the effectiveness of animal-assisted intervention for trauma, including PTSD. They found 10 studies suitable for inclusion, which included some on horses rather than dogs, mostly involving child

abuse survivors and veterans. They concluded that results have been predominantly positive, showing short-term improvements in depression, PTSD symptoms, and anxiety.

The following year Cheryl Krause-Parello et al (2016)<sup>(6)</sup> from the University of Colorado made a literature review of studies up to late 2015 with reported demonstrated benefits of service dogs for veterans with PTSD. They identified only six suitable studies to include in their review and even then only one cited using service dogs per se. It seems their review was focussed on defining the issues of importance in the study of service dog.

Miranda Van Hooff<sup>(9)</sup> and her team at the University of Adelaide added results from an Australian trial, with seven fully trained assistance dogs, and universally positive effects of the Operation K9 program after six months. Results are as yet unpublished, but preliminary findings are very encouraging.

Kloep et al<sup>(10)</sup> added more positive evidence on effectiveness in 2017, with a small study of 12 people with military associated PTSD, finding statistically significant and clinically significant improvements in symptoms and functioning.

### **More robust studies including clinical trials and work with service dogs**

Up to this point the evidence is firmly positive (only one study reporting no decrease in PTSD symptoms – though they did find other benefits<sup>(2)</sup>) but it is based on small scale studies with varying methodologies using uncertain types of dog interventions, or unpublished results. The strength of the empirical evidence improved in 2017 and 2018 however, as the area of study matured, the provision of service dogs matured and more methodologically sound studies focussed on service dogs provided robust evidence of positive effects.

Researchers at Kaiser Permanente Northwest (KPNW) in the U.S. (Bobbi Jo Yarborough and colleagues) collaborated with five organisations that train dogs for veterans with PTSD to carry out two studies. The first was a feasibility study [which I interpret as one to get the methodology straight],<sup>(11)</sup> results published in 2017, that showed sizeable positive effects on various scales of mental health and wellbeing for 22 veterans with service dogs. The team followed up with a second study to identify benefits and challenges of this type of intervention. This was a qualitative study (n = 41), that used interviews with veterans with service dogs to reveal many benefits on functioning. Some challenges were also noted, with some participants struggling with the demands of training, or adjusting to life with a service dog<sup>(12)</sup>.

Meanwhile, the Purdue team (O'Haire and Rodriguez, 2018)<sup>(13)</sup> demonstrated the effectiveness of service dogs for military members and veterans with PTSD. Their sample size included 75 people with a service dog and revealed significant differences with medium to large effect sizes among those with service dogs compared with those on the waitlist.

Krause-Parello & Morales (2018)<sup>(17)</sup> demonstrated further qualitative data this year on 21 veterans who used a service dog. 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.

### **Further results expected**

A Canadian team published preliminary results from their study of 15 veterans with PTSD (Vincent et al. 2017)<sup>(14)</sup> indicating positive results and Saunders et al also published a paper laying out the design of their multisite randomized clinical trial<sup>(15)</sup>. Results from these two studies are pending.

Also pending are results from two large scale randomised trials that will provide convincing evidence one way or the other<sup>(17, 18)</sup>. A paper by Rick Yount in 2012<sup>(16)</sup> also indicated that the Warrior Canine Connection research team at the National Intrepid Center of Excellence in Maryland plans to systematically investigate the physiological, psychological, and behavioral benefits of their well established program. [I'm not certain if this work is covered by references 14 to 18 but I don't think so].

## Literature search findings

| No. | No. of participants              | Citation or abstract  |
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| 1   | n = 9                            | <p><b>A preliminary study of group intervention along with basic canine training among traumatized teenagers: A 3-month longitudinal study</b></p> <p>Hamama L, Hamama-Raz Y, Dagan K, Greenfeld H, Rubinstein C, &amp; Ben-Ezra M. Children and Youth Services Review 33(10):1975-1980 · October 2011<br/>DOI: 10.1016/j.chilyouth.2011.05.021</p> <p>The current study aimed to reduce the psychological distress of teenage girls who were exposed to traumatic event (physical or sexual abused), through using dogs-assisted therapy.</p> <p>Two sets of designs conducted:</p> <p>1) longitudinal design which aims to answer the question: does dog assisted therapy will reduce psychological distress (namely depressive symptoms, post-traumatic symptoms), improve self confidence and subjective well being among these teenage girls?</p> <p>2) Cross-sectional design that aims to compare the treatment group (dogs-assisted therapy) with comparison group at baseline and after the last session. The groups (intervention vs. matching) were compared on socio-demographic variables (only for time 1), subjective well-being, coping with stressful life events, PTSD symptoms, and depressive symptoms at base line (time 1) and at the end of the intervention (time 2).</p> <p>Findings from the longitudinal perspective have shown a rapid decline at the level of PTSD symptoms in the intervention group, along with significant reduction in the proportion of participants with elevated risk for PTSD.</p> <p>The main significant findings from the cross-sectional design were: lower level of subjective well-being, higher level of PTSD symptoms and depressive symptoms among the intervention group compared to the matching group at base line. However, these differences became non-significant at the end of the intervention. Various explanations for these findings are discussed.</p> |
| 2   | n = 153<br><br>(group treatment) | <p><b>Evaluating animal-assisted therapy in group treatment for child sexual abuse.</b></p> <p>Dietz T. J., Davis D., Pennings J. (2012). J. Child Sex. Abus. 21, 665-683.<br/>10.1080/10538712.2012.726700.</p> <p>This study evaluates and compares the effectiveness of three group interventions on trauma symptoms for children who have been sexually abused. All of the groups followed the same treatment protocol, with two of them incorporating variations of animal-assisted therapy.</p> <p>A total of 153 children ages 7 to 17 who were in group therapy at a Child Advocacy Center participated in the study. Results indicate that children in the groups that included therapy dogs showed significant decreases in trauma symptoms including anxiety, depression, anger, post-traumatic stress disorder, dissociation, and sexual concerns.</p> <p>In addition, results show that children who participated in the group with therapeutic stories showed significantly more change than the other groups. Implications and suggestions for further research are discussed.<br/>PMID:23194140 DOI:<a href="https://doi.org/10.1080/10538712.2012.726700">10.1080/10538712.2012.726700</a></p>   |

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| 3 | n = 9 | <p><b>A Quantitative Exploration into the Effects of the Human and Animal Connection.</b></p> <p>Murrow B. L. (2013). 3597045 Ph.D., Pacifica Graduate Institute.</p>   |
| 4 | n = 2 | <p><b>The Role of Service Dog Training in the Treatment of Combat-Related PTSD</b></p> <p>Rick Yount, MS, LSW; Elspeth Cameron Ritchie, MD, MPH; Matthew St. Laurent, MS, OTR; Perry Chumley, DVM, MPH; Meg Daley Olmert<br/>         Psychiatric Annals. 2013;43(6):292-295<br/> <a href="https://doi.org/10.3928/00485713-20130605-11">https://doi.org/10.3928/00485713-20130605-11</a> Posted June 14, 2013</p> <p>The article describes a number of benefits seen during clinical experience and proposes a possible mechanism for the benefits of service dog placements – oxytocin, the bonding hormone. It presents two case studies that illustrate the typical benefits that Warrior Canine Connection staff see.</p>  |
| 5 | n = 6 | <p><b>Exploring the Experiences of Living With Psychiatric Service Dogs for Veterans with Posttraumatic Stress Disorder</b></p> <p>Newton R. (2014). Masters thesis 1557029 M.A., Adler School of Professional Psychology.</p> <p>This study aimed to identify common themes in order to gain an understanding of the positive and negative experiences of veterans in North America who have been diagnosed with posttraumatic stress disorder (PTSD) and have been using a psychiatric service dog (PSD) as a part of their treatment.</p> <p>Six participants (5 male and 1 female) with a diagnosis of PTSD and dogs assigned, undertook a 30- to 60-minute telephone interview in which they responded to a series of open-ended questions. The researcher analyzed the data using thematic analysis and found 5 themes and 12 subthemes.</p> <p>The main themes identified include (a) symptom reduction, (b) increased connection to others, (c) training experiences, (d) negative aspects of owning the dog, and (e) hope for more recognition of PSDs.</p> <p>O’Haire’s review said the study involved trained dogs, and demonstrated reductions in depression symptoms, fear of public spaces, medication use, and nightmares, with increased outreach.</p>  |
| 6 | n = 1 | <p><b>Taking a PAWS to Reflect on How the Work of a Therapy Dog Supports a Trauma-Informed Approach to Prisoner Health.</b></p> <p>Dell CA1, Poole N.<br/>         J Forensic Nurs. 2015 Jul-Sep;11(3):167-73. doi: 10.1097/JFN.0000000000000074.</p> <p>Trauma is a key contributor among Canada's inmate population. Therapy dogs can assist in supporting individuals with mental health, addiction, and trauma concerns.</p> <p>This case report presents the work of a St. John Ambulance therapy dog in a trauma-informed approach to prisoner health. The Substance Abuse and Mental Health Services Administration articulates six evidence-based trauma principles for service providers: safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender issues.</p> <p>These principles are used as a lens to examine what the therapy dog appears to offer instinctively and effortlessly in its interactions with prisoners.</p> <p>Illustrative examples are provided. Video Abstract available for additional insights from the authors (see Supplemental Digital Content 1, <a href="http://links.lww.com/JFN/A16">http://links.lww.com/JFN/A16</a>).<br/>         PMID:26133517 PMID:PM4636386 <b>Free PMC Article</b></p> |

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| 7 |       | <p><b>Animal-Assisted Intervention for trauma: a systematic literature review.</b></p> <p>O'Haire ME, Guérin NA, Kirkham AC. 2015 Aug 7;6:1121. doi: 10.3389/fpsyg.2015.01121. eCollection 2015.</p> <p>There has been a recent growth in the empirical study of this practice, known as Animal-Assisted Intervention (AAI). We conducted a systematic review of the empirical literature on AAI for trauma, including posttraumatic stress disorder (PTSD).</p> <p>Ten studies qualified for inclusion, including six peer-reviewed journal articles and four unpublished theses. Participants were predominantly survivors of child abuse, in addition to military veterans. The presentation of AAI was highly variable across the studies. The most common animal species were dogs and horses.</p> <p>The most prevalent outcomes were reduced depression, PTSD symptoms, and anxiety.</p> <p>There was a low level of methodological rigor in most studies, indicating the preliminary nature of this area of investigation. We conclude that AAI may provide promise as a complementary treatment option for trauma, but that further research is essential to establish feasibility, efficacy, and manualizable protocols.<br/> PMID:26300817 PMID:PMC4528099 DOI: <a href="https://doi.org/10.3389/fpsyg.2015.01121">10.3389/fpsyg.2015.01121</a> <a href="#">Free PMC Article</a></p>   |
| 8 |       | <p><b>Military veterans and canine assistance for post-traumatic stress disorder: A narrative review of the literature.</b></p> <p>Krause-Parello CA, Sarni S, Padden E. 2016 Dec;47:43-50. doi: 10.1016/j.nedt.2016.04.020. Epub 2016 May 11.</p> <p>A narrative literature review was conducted to examine the current state of the science on canine assistance for veterans diagnosed with PTSD in order to synthesize current empirical knowledge on the subject. Articles were retrieved among the small body of recent literature using computerized database searches. Inclusion criteria included peer-reviewed journal publications published through October 1st, 2015.</p> <p>Only originally published articles that examined the outcomes of canine assistance on veterans with PTSD were examined. Additionally, each included article was specific to veterans, dogs, and, PTSD in combination rather than article that discuss the concepts separately. Exclusion criteria included symposia and conference material, dissertations, media articles, and no mention of canines as a treatment modality. 563 articles were retrieved; 6 met the criteria. When evaluating data, information and themes were extracted into an Excel table; this table was employed in the synthesis of information into manuscript form.</p> <p>The following themes were explored within the selected publications: What is Canine Assistance; Why Use Canine Assistance for PTSD in Veterans; Concerns; and Future Directions. The literature endorsed canine assistance for PTSD in veterans as a promising modality. Authors also raised concerns about lack of protocols, cost and availability barriers, and animal welfare calling for additional, rigorous research to advance its use as a treatment for veterans with PTSD.</p> |
| 9 | n = 7 | <p><b>Evaluating the effectiveness of a specialty assistance dog program (Operation K9) as an adjunct treatment for veterans with PTSD</b></p> <p>Miranda Van Hooff, Dr Amelia Searle, Dr Ellie Lawrence-wood, Ms Elizabeth Saccone, Dr Blair Grace, Suzanne Hanna, Professor Alexander McFarlane, Ann Spader, Sophie Slattery, Lindy Hennekam. Presentation 2016.</p> <p>Seven fully trained and accredited Assistance Dogs used in the Australian Operation K9 program. After six months, consistent benefits demonstrated across a range of indicators of functioning and wellbeing including self rated PTSD symptoms.</p>  |

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| 10 | n = 12 | <p><b>Examining the effects of a novel training program and use of psychiatric service dogs for military-related PTSD and associated symptoms.</b></p> <p>Kloep ML, Hunter RH.&amp; Kertz, SJ.<br/>American Journal of Orthopsychiatry, Vol 87(4), 2017, 425-433<br/><a href="http://dx.doi.org/10.1037/ort0000254">http://dx.doi.org/10.1037/ort0000254</a></p> <p>This study explored an intensive 3-week training program and use of psychiatric service dogs for military-related posttraumatic stress disorder (PTSD) and associated symptoms. The sample included 2 separate cohorts of military veterans (n = 7 and n = 5) with prior diagnoses of PTSD.</p> <p>Participants completed self-report measures assessing PTSD, depression, perception of social support, anger, and overall quality of life 1 month prior to the training (baseline), at arrival to the training site, and 6-month follow-up.</p> <p>Results indicated that, for this sample, there was a statistically significant decrease in PTSD and depression symptoms from pre- to posttreatment, as well as 6-month follow-up. For most participants decreases were both clinically significant and reliable changes. Further, participants reported significant reductions in anger and improvement in perceived social support and quality of life.</p> <p>Limitations of the study include a lack of control group, a limitation of most naturalistic studies, as well as small sample size.</p> <p>Despite this, the findings indicate that utilizing psychiatric service dogs, coupled with an intensive trauma resilience training program for veterans with ongoing symptoms, is feasible as a complementary treatment for PTSD that could yield beneficial results in terms of symptom amelioration and improvement to overall quality of life.</p> |
| 11 | n = 22 | <p><b>An Observational Study of Service Dogs for Veterans With Posttraumatic Stress Disorder</b></p> <p>Yarborough, B. J. H., Owen-Smith, A., Stumbo, S. P., Yarborough, M. T., Perrin, N.A. &amp; Green, C. A. (2017). Psychiatric Services in Advance (doi: 10.1176/appi.ps.201500383) Copy obtained from main author.</p> <p>Objectives: This study examined needs related to posttraumatic stress disorder (PTSD), assistance by service dogs, and feasibility of data collection among veterans receiving service dogs.</p> <p>Methods: Questionnaires assessed PTSD-related needs and services performed or expected to be performed by service dogs among 78 veterans who had or were on a wait list for a service dog (average age, 42; women, 31%). Analyses compared pre-post characteristics among 22 veterans who received a service dog as part of the study (91% follow-up; average follow-up 53.3762.57 months).</p> <p>Results: Veterans reported that the most important services performed were licking or nudging veterans to help them “stay present,” preventing panic, and putting space between veterans and strangers. High follow-up rates and improvements in outcomes with moderate to large effect sizes among recipients of study-provided dogs suggest further study is warranted.</p> <p>Conclusions: Service dogs may be feasible supports for veterans with PTSD; randomized clinical trials are needed to assess effectiveness.</p>   |
| 12 | n = 41 | <p><b>Benefits and challenges of using service dogs for veterans with posttraumatic stress disorder.</b></p> <p>Yarborough, B. J. H., Stumbo, S. P., Yarborough, M. T., Owen-Smith, A., &amp; Green, C. A. (2018). Psychiatric Rehabilitation Journal, 41(2), 118-124.<br/><a href="http://dx.doi.org/10.1037/prj0000294">http://dx.doi.org/10.1037/prj0000294</a>. Copy obtained from main author.</p> <p>Objective: Veterans with posttraumatic stress disorder (PTSD) are increasingly seeking service dogs to help them manage trauma-related symptoms, yet literature describing service dog use in this population is scant</p> <p>The goal of this study was to document the benefits and challenges experienced by veterans</p>   |



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|    |        | <p>with service dogs trained to assist with PTSD-related needs.</p> <p>Method: Participants were veterans (N = 41) with service dogs, and their caregivers (n = 8), recruited through community-based service dog training agencies. We conducted in-depth interviews and observed training sessions as part of a larger study, and used thematic analysis to characterize data.</p> <p>Results: Veterans reported that service dogs reduced hypervigilance by alerting and creating boundaries, and disrupted nightmares, improving sleep quality and duration.</p> <p>Dogs also helped veterans turn their attention away from invasive trauma-related thoughts.</p> <p>Additional reported benefits included improved emotional connections with others, increased community participation and physical activity, and reduced suicidal impulses and medication use.</p> <p>Demands of training, adjustment to life with a service dog, and delayed benefits were challenging for many veterans and caregiver.</p> <p>Conclusions and Implications for Practice: Veterans report that service dogs help reduce PTSD symptoms and facilitate recovery and realization of meaningful goals. Service dogs may be a reasonable option for veterans who are reluctant to pursue or persist with traditional evidence-based treatments. Additional rigorous research on the effectiveness of service dogs for this population is warranted.</p>  |
| 13 | n = 75 | <p><b>Preliminary efficacy of service dogs as a complementary treatment for posttraumatic stress disorder in military members and veterans.</b></p> <p>O'Haire, Marguerite E.; Rodriguez, Kerri E.<br/>Journal of Consulting and Clinical Psychology, Vol 86(2), Feb 2018, 179-188<br/><a href="http://dx.doi.org/10.1037/ccp0000267">http://dx.doi.org/10.1037/ccp0000267</a> [On Integra website]</p> <p>Psychiatric service dogs are an emerging complementary treatment for military members and veterans with posttraumatic stress disorder (PTSD). Yet despite anecdotal accounts of their value, there is a lack of empirical research on their efficacy. The current proof-of-concept study assessed the effects of this practice.</p> <p>Method: A nonrandomized efficacy trial was conducted with 141 post-9/11 military members and veterans with PTSD to compare usual care alone (n = 66) with usual care plus a trained service dog (n = 75). The primary outcome was longitudinal change on The PTSD Checklist (PCL; Weathers, Litz, Herman, Huska, &amp; Keane, 1993), including data points from a cross-sectional assessment and a longitudinal record review. Secondary outcomes included cross-sectional differences in depression, quality of life, and social and work functioning.</p> <p>Results: Mixed-model analyses revealed clinically significant reductions in PTSD symptoms from baseline following the receipt of a service dog, but not while receiving usual care alone. Though clinically meaningful, average reductions were not below the diagnostic cutoff on the PCL.</p> <p>Regression analyses revealed significant differences with medium to large effect sizes among those with service dogs compared with those on the waitlist, including lower depression, higher quality of life, and higher social functioning. There were no differences in employment status, but there was lower absenteeism because of health among those who were employed.</p> <p>Conclusion: The addition of trained service dogs to usual care may confer clinically meaningful improvements in PTSD symptomology for military members and veterans with PTSD, though it does not appear to be associated with a loss of diagnosis.</p> <p>This proof-of-concept study suggests that the addition of trained psychiatric service dogs to usual care may improve PTSD symptomology, but not below the level of clinical diagnosis, and contribute to better quality of life and improved social functioning. In their current form, service dogs may confer benefits as a complementary or integrative treatment option among military members and veterans with PTSD.</p> |

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| 14 | n = 15 | <p><b>Effectiveness of Service Dogs for Veterans with PTSD: Preliminary Outcomes.</b></p> <p>Vincent C, Belleville G, Gagnon DH, Dumont F, Auger E, Lavoie V, Besemann M, Champagne N, Lessart G.<br/> Stud Health Technol Inform. 2017;242:130-136. PMID: 28873789</p> <p>Limited scientific evidence on the effectiveness of psychiatric service dogs used by Veterans with post-traumatic stress disorder (PTSD) is available. This study investigated their short-term effectiveness among 15 Canadian veterans who received a first psychiatric service dog. Preliminary results suggest potential beneficial effects at 3 months on the psychiatric symptoms.</p>   |
| 15 |        | <p><b>Design and challenges for a randomized, multi-site clinical trial comparing the use of service dogs and emotional support dogs in Veterans with post-traumatic stress disorder (PTSD).</b></p> <p>Saunders GH, Biswas K, Serpi T, McGovern S, Groer S, Stock EM, Magruder KM, Storzbach D, Skelton K, Abrams T, McCranie M, Richerson J, Dorn PA, Huang GD, Fallon MT.<br/> Contemp Clin Trials. 2017 Nov;62:105-113. doi: 10.1016/j.cct.2017.08.017. Epub 2017 Aug 26.</p> <p>Posttraumatic stress disorder (PTSD) is a leading cause of impairments in quality of life and functioning among Veterans. Service dogs have been promoted as an effective adjunctive intervention for PTSD, however published research is limited and design and implementation flaws in published studies limit validated conclusions.</p> <p>This paper describes the rationale for the study design, a detailed methodological description, and implementation challenges of a multisite randomized clinical trial examining the impact of service dogs on the on the functioning and quality of life of Veterans with PTSD. Trial design considerations prioritized participant and intervention (dog) safety, selection of an intervention comparison group that would optimize enrolment in all treatment arms, pragmatic methods to ensure healthy well-trained dogs, and the selection of outcomes for achieving scientific and clinical validity in a Veteran PTSD population.</p> <p>Since there is no blueprint for conducting a randomized clinical trial examining the impact of dogs on PTSD of this size and scope, it is our primary intent that the successful completion of this trial will set a benchmark for future trial design and scientific rigor, as well as guiding researchers aiming to better understand the role that dogs can have in the management of Veterans experiencing mental health conditions such as PTSD.</p> |
| 16 |        | <p><b>Service dog training program for treatment of posttraumatic stress in service members.</b></p> <p>Yount RA, Olmert MD, Lee MR.<br/> US Army Med Dep J. 2012 Apr-Jun;63-9. PMID: 22388685</p> <p>In July 2008, social worker and certified service dog trainer Rick Yount created the first Warrior dog-training program designed to be a safe, effective, nonpharmaceutical intervention to treat the symptoms of posttraumatic stress disorder (PTSD) and traumatic brain injury in Veterans and service members undergoing treatment at a large Veterans Administration residential treatment facility.</p> <p>In 2009, Yount was asked to establish the program at a prominent Department of Defense medical center. In October 2010, Yount was invited to create a service dog training program to support the research and treatment mission at the new National Intrepid Center of Excellence (NICoE), in Bethesda, Maryland.</p> <p>This program, now being offered through the nonprofit foundation Warrior Canine Connection, continues to produce anecdotal evidence that training service dogs reduces the PTSD symptoms of Warrior-trainers and that the presence of the dogs enhances the sense of wellness in the NICoE staff and the families of our Wounded Warriors.</p> <p>The Warrior Canine Connection research team plans to systematically investigate the physiological, psychological, and behavioral benefits of this program.</p>   |



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| 17 | n = 21 | <p><b>Military Veterans and Service Dogs: A qualitative inquiry using interpretive phenomenological analysis</b></p> <p>Krause-Parello and Morales (2018) Anthrozoos, Volume 31, 2018 Issue 1.<br/> <a href="https://doi.org/10.1080/08927936.2018.1406201">https://doi.org/10.1080/08927936.2018.1406201</a></p> <p>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 —the researchers uncovered the veterans’ perspectives, which provided meaningful insight into their lives with a service dog.</p> <p>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.</p> <p>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 the Americans with Disabilities Act were perceptible. Implications for policy, practice, and research, are discussed.</p> |
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## Current trials registered

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| <b>18</b> | <b>Can service dogs improve activity and quality of life in veterans with PTSD?</b><br><br>A three-year prospective randomized study is proposed which has two randomized arms. Arm one of the study will be Veterans (n=110) randomized to receiving a Service Dog, which has been trained for specific tasks to assist with the Veteran's disability. Arm two (n=110) of the study will be Veterans randomized to receive an Emotional Support Dog (a dog which provide emotional comfort). All Veterans, after confirmation of eligibility will be randomized to receive a Service Dog or Emotional Support Dog and will be observed a minimum of three months.<br><br>During this period, Veterans will be required to participate in a Dog Care Course to ensure they are aware of the demands dogs place on humans. Once dogs become available, Veterans will be paired with a Service Dog or Emotional Support Dog. Follow-up will begin at one week post pairing to track any dog behavior issues, and will continue after pairing for 18 months.<br><br>Primary outcomes to be examined include limitations on activity (as measured by the WHO- DAS 2.0), quality of life (measured by the VR-12). Secondary outcomes include PTSD symptoms (measured by the PCL), Suicidal ideation (Columbia-Suicide Severity Rating Scale); depression (PHQ-9) and Sleep (Pittsburgh Sleep Quality Index). In addition, health care utilization, anger management, employment and productivity will also be examined. This multi-site study will be conducted at three locations: Atlanta, Iowa City Portland.<br><b>Results due: April 2020</b> |
| <b>19</b> | <b>Quantifying the Efficacy and Role of Service Dogs for Military Veterans With PTSD</b><br><br>The long-term research goal is to evaluate the safety and efficacy of service dogs as a complementary intervention to enhance biopsychosocial functioning in special populations. The objective is to conduct a methodologically rigorous trial to quantify the therapeutic efficacy of service dogs on clinically-important outcomes for veterans with PTSD.<br><br>Clinical trial, n = 100. Based on preliminary findings and qualitative reports, the central hypothesis is that military veterans with PTSD who are provided service dogs will experience reduced PTSD symptoms related to socio-emotional functioning and arousal modulation.<br><br>The rationale for this research is that its successful completion will provide an evidence-based demonstration of the efficacy and role of an increasingly used yet poorly tested complementary intervention. The completion of this project is expected to establish an initial demonstration of the therapeutic efficacy of service dogs in this population, as well as possible mechanisms of action via specific biological pathways and human-canine interaction profiles.<br><b>Results due: January 2020</b>   |

## Other sources

Anecdotal evidence like this story in [TIME magazine](#) and this article from [NBC news](#) describe enormous improvements for veterans with PTSD and fast results.

### The U.S. National Center for PTSD website says:

Clinically, there is not enough research yet to know if dogs actually help treat PTSD and its symptoms. [Evidence-based therapies and medications](#) for PTSD are supported by research. We encourage you to learn more about these treatments because it is difficult to draw strong conclusions from the few studies on dogs and PTSD that have been done.

Research is underway to better understand if dogs can provide a disability service for persons with PTSD. VA has started a research study to determine if there are things a dog can do for a Veteran with PTSD that would qualify the animal as a Service Dog for PTSD. The study is expected to take several

years to complete. The National Center for PTSD is not involved in this study, but we will provide results when they become available.

Currently, VA does not provide service dogs for physical or mental health conditions, including PTSD. VA does provide veterinary care for service dogs that are deemed medically necessary for the rehabilitation or restorative care plan of Veterans with permanent physical impairments. If research supports the use of service dogs for PTSD, VA will provide veterinary care for such dogs.

### **Commentary from a medical ethicist in 2015:**

#### **Service Dogs for Veterans with Posttraumatic Stress Disorder**

Richard Weinmeyer, JD, MA, MPhil *AMA Journal of Ethics*. June 2015, Volume 17, Number 6 : 547-552.

The VA's reason for not covering service dogs for mental health disabilities is that the agency follows an evidence-based model and published studies or sound clinical evidence supporting the mental health benefits of service dogs is lacking. The testimonials of veterans with PTSD whose lives have been dramatically transformed thanks to the camaraderie and care of a service dog are powerful stories of health and healing. Yet these beneficial experiences, at present, have been supported by anecdotal rather than scientific evidence.

This lack of empirical evidence is not for lack of effort. The VA actually has been working to obtain scientific evidence of the benefits of service dogs for veterans suffering from mental health problems for several years. In 2009, swayed by the personal story of an Iraq war veteran whose service dog helped him overcome PTSD, Senator Al Franken of Minnesota looked into the potential benefits that service dogs can bring to psychologically injured veterans. When he found that research was scarce and that, for most veterans, service dogs were financially inaccessible without monetary support, Franken and Senator Johnny Isakson of Georgia introduced the Service Dogs for Veterans Act, calling for a "three-year study to assess the benefits, feasibility, and advisability of using service dogs for the treatment or rehabilitation of veterans with physical or mental injuries or disabilities, including post-traumatic stress disorder".

The implementation of the study, however, has been hampered by numerous setbacks. The research methodology originally included three service dog providers, but by 2012 two had stopped participating in the investigation. Moreover, the entire project was suspended from January to June 2012 after a child was bitten by one of the study dogs, and the study was suspended a second time that year after the VA found that one of the participating hospitals had violated its contract and jeopardized the dogs' health and safety.

After a comprehensive redesign of the entire study, a second iteration of it was launched at the end of 2014, with 220 pairs of veterans and service dogs participating in Atlanta, Iowa City, and Portland, Oregon.

All hope is not lost in the progress towards understanding the health impact of service dogs on veterans with PTSD. At the end of 2014, the preliminary results of a yearlong study of 75 such veterans conducted by Kaiser Permanente were disseminated to the public and communicated to lawmakers. The Pairing Assistance-Dogs with Soldiers (PAWS) study revealed that service dogs can "significantly reduce symptoms of post-traumatic [stress]...and depression in veterans". Veterans paired with service dogs reported lower symptoms of PTSD, lower symptoms of depression-related functioning, better interpersonal relationships, less substance abuse, and fewer psychiatric symptoms than veterans without dogs.

With this welcome, albeit early, indication of service dogs' health impact on veterans with PTSD, there is now a realistic possibility that the VA will consider changing its stance on the provision of financial resources to this population in need of more assistance. As the agency stated in its final rule determination, "if we ultimately determine that mental health dogs are appropriate treatment tools for mental health impairments, we will amend our regulations to authorize benefits for such dogs". For war veterans such as Lieutenant Tori Stitt, this type of support from the federal government—and recognition of the sacrifices they have made for the United States—cannot come soon enough.

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