

# The Influence of Psychiatric Assistance Dogs on Veteran Families



Leanne Nieforth, MS, PhD

Maggie O'Haire, PhD

# Agenda

## Learning Objectives:

- Participants will be able to explain potential benefits of assistance dogs to military families.
- Participants will be able to explain potential challenges of assistance dogs to military families.
- Participants will be able to apply research findings to develop evidence-based practice.

PART ONE: What is an assistance dog?

PART TWO: Caregivers & Families

# What is an Assistance Dog?

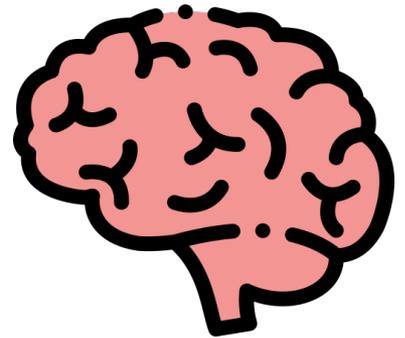
An assistance dog is trained to do specific tasks that mitigate specific symptoms of an individual's disability.



Mobility

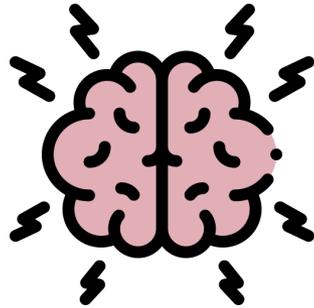


Medical Alert



Psychiatric

# Why an assistance dog for PTSD?



PTSD is difficult to treat

More than **23% of veterans** are diagnosed with PTSD upon returning from deployment

**50%** will seek treatment

**20-40%** will dropout of treatment

**60%** will retain a PTSD diagnosis

# Why an assistance dog for PTSD?



Flashbacks or Nightmares

Hypervigilance, Fear

Loss of interest, Inability to feel  
positive emotions



Nudging, pawing or licking

Watching the handler's back

Constant companion, source of  
love and joy

# Common PTSD Assistance Dog Tasks



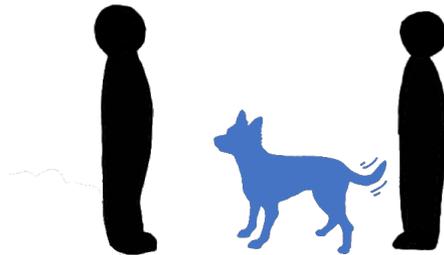
Interrupt/alert to  
anxiety



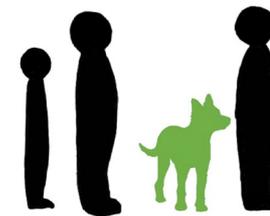
Calm/comfort from  
anxiety



Cover  
(watch back)



Make a friend



Block  
(make space)

# K9s For Warriors



# Agenda

## Learning Objectives:

- Participants will be able to explain potential benefits of assistance dogs to military families.
- Participants will be able to explain potential challenges of assistance dogs to military families.
- Participants will be able to apply research findings to develop evidence-based practice.

PART ONE: What is an assistance dog?

PART TWO: Caregivers & Families

# Why is this research important?

Families of veterans with posttraumatic stress disorder (PTSD) may experience **significant challenges** post deployment.



Mental & physical health concerns



Issues with family functioning

# Why is this research important?



Recent literature calls attention to the **importance of family focused interventions** for military families post deployment.



But, very **few studies have explored** the influence of psychiatric assistance dogs on military families.

# The influence of PTSD service dogs on resilience processes in military families



Nieforth, L.O., Craig, E.A., MacDermid Wadsworth, S., Behmer, V. & O'Haire, M.E. (2021). PTSD service dogs foster resilience among veterans and military families. *Current Psychology*. doi:10.1007/s12144-021-01990-3



# Research Objective

To investigate how service dogs for PTSD may **influence family dynamics and communication** in military families.



# Participants



**N=101**

individuals with **service dogs** were recruited from *K9s For Warriors*, a national, nonprofit service dog provider.



**n=67** veterans



**n=34** spouses

# Methods



**Measure:** online, open-ended survey completed 3-months after receiving a service dog

Data was analyzed using a **constant comparative content analysis:**

1. Experiences were grouped into categories
2. Definition of categories
3. Refinement of categories
4. Categories situated in established theory

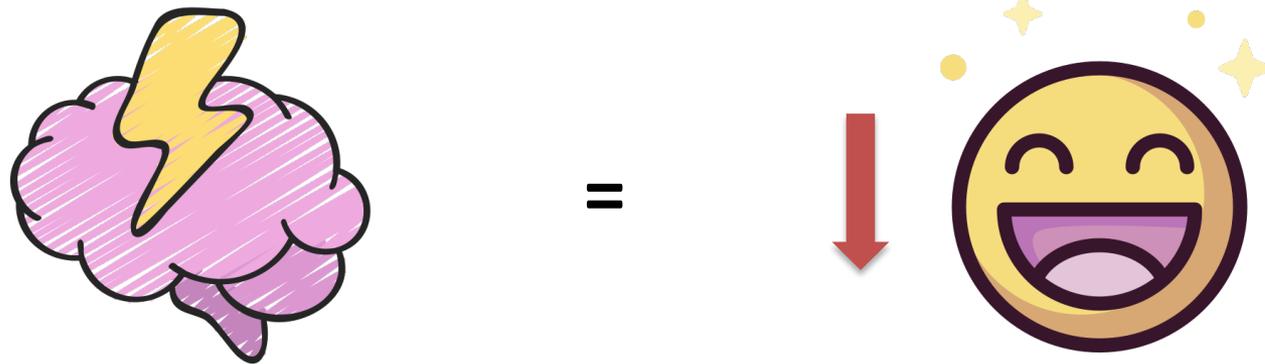
# Open-ended questions:

1. What is the most helpful aspect of having a service dog?
2. What are the drawbacks to having a service dog?
3. How has the service dog positively impacted your spouse or children?
4. How has the service dog negatively impacted your spouse or children?
5. Is there anything else you would like to share about your service dog?

# Theory of Resilience and Relational Load

“bridges communicative, perceptual, and physiological aspects of stress within the context of social relationships to explain personal/relational risk, resilience, and thriving”

Adverse external events and depleting internal resources can increase relational load on families and couples.



# Theory of Resilience and Relational Load

Through relational maintenance behaviors...

1. Relational adjustments can be made when internal and external stressors are encountered.
2. Communal orientation may emerge

Ultimately, relationship maintenance is all the processes that make deposits in the bank account of relational reserves, where couples and families see themselves as a team to reappraise and manage adverse events.





# Service dogs may help to build emotional reserves.

- Trained role of the service dog
  - Interrupts veteran PTSD experiences
  - Supports the veteran
  - Creates safety for the veteran

Veteran- “He gets in my lap to help with anxiety, and he interrupts me to bring awareness to myself and my surroundings.”

Spouse- “[service dog] nudges [veteran’s] leg when he feels him getting anxious or angry or having a mood change”

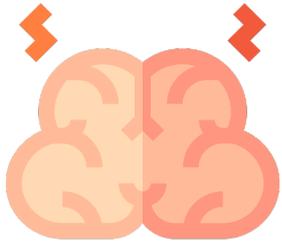


# Service dogs may help to build emotional reserves.

- Service dog influences veteran mental health
  - Veterans gained independence
  - Veterans received understanding
  - Veterans acquired purpose

Veteran- “[service dog] reminds me every day to continue to fight and not give in to the thoughts that drag me down, while helping me to accomplish the daily struggles I deal with.”

Spouse- “[service dog] gives him something other than his problems to focus on.”



# Service dogs may increase relational load.

- Associated labor
- Ambiguity of living with a service dog
- Veteran/child relationship disrupted
- Veteran/spouse intimacy disrupted
- Public stigma

Veteran- “Having a service dog is a lot of work. Feeding, grooming, vet appointments, and keeping my house allergy free and clean”

Spouse- “[veteran] doesn't spend the time he needs to train her [service dog] and then gets frustrated when she doesn't follow commands immediately. Also, the kids don't always remember [service dog] isn't a pet”



# Service dogs may facilitate relational maintenance.

- Service dogs beyond their trained role
  - Companions for the children
  - Intermediary between children and veterans
  - Alleviate spouses' stress related to veteran PTSD

Veteran- “Made me a calmer person and has helped me have a more collected mindset which helps when I am interacting with the kids.”

Spouse- “Added buffer from his behavior making him chill out more before easily blowing up like he used to.”



# Service dogs may facilitate relational maintenance.

- Service dogs as family
  - Enable & empower family time
  - Change the household environment
  - Make emotional re(connection) possible

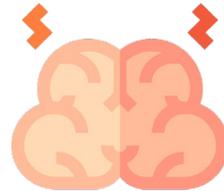
Veteran- “[service dog] is a great companion to all of us and our family wouldn’t feel complete without him with us.”

Spouse- “She is a great addition to our family.”

# Conclusions

## Findings:

Multiple communication processes occur between veterans, service dogs, and spouses and these processes influence the **resilience** of veteran families.



## Implications:



**Family-focused**  
approaches



# Quantifying the emotional experiences of partners of veterans with PTSD service dogs using ecological momentary assessment



Nieforth, L.O., Abdul Wahab, A.H., Sabbaghi, A.H., MacDermid Wadsworth, S., Foti, D. & O’Haire, M.E. (2022). Quantifying the emotional experiences of partners of veterans with PTSD service dogs using ecological momentary assessment. *Complementary Therapies in Clinical Practice*. doi: 10.1016/j.ctcp.2022.101590



# Research Objective

The purpose of the current study was to investigate the day-to-day experiences of **positive and negative emotions among partners** of veterans assigned PTSD service dogs.



# Participants



**N=87**

partners or spouses of veterans with PTSD who were recruited from *K9s For Warriors*, a national, nonprofit service dog provider.



**n=48** in **service dog** group

Average age: 37  
87% female  
85% have  
children



**n=39** in **usual care** group

Average age: 36  
90% female  
90% have  
children

# Methods



**Baseline:**  
**2-week study**  
**period**

3-months



**Follow up:**  
**2-week study**  
**period**

Ecological Momentary Assessment (EMA)

State affect and emotions were measured using a modified version of the *Discrete Emotions Questionnaire* and *Positive and Negative Affect Scale*.

**56** assessments per participant, **3780** total assessments

**84%** response rate at baseline, **86%** response rate at follow up

Data was analyzed using a *generalized linear mixed model* with an AR(1) structure to account for repeated measures.

# Results

	B	SE	t	p	Cohen's d
Positive Affect	1.23	0.43	2.84	0.006**	0.39
Calm	0.26	0.09	2.79	0.007**	0.12
Confident	0.43	0.10	4.53	<0.001***	0.39
Happy	0.25	0.11	2.29	0.026	0.33
Loving	0.06	0.10	0.62	0.539	0.21
Excited	0.20	0.12	1.74	0.088	0.54
Negative Affect	-0.08	0.27	-0.29	0.773	0.21

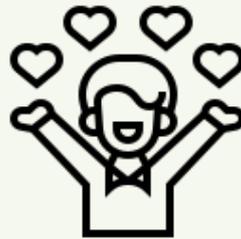
\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

# Compared to spouses of veterans without service dogs,

Spouses with **service dogs** report higher:



Calmness



Positive emotions



Confidence

Spouses with **service dogs** report no change:



Negative emotions

# Conclusions

## Findings:

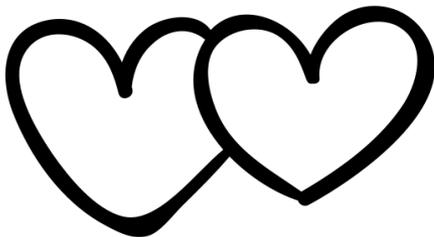


Positive emotions



Negative emotions

## Implications:



The influence of service dogs may **go beyond veterans** to influence their cohabitating partners.

# The influence of psychiatric service dogs for PTSD on military spouses



Nieforth, L.O., Miller, E., MacDermid Wadsworth, & O’Haire, M.E. (2022). The effects of a service dog on the wellbeing of veteran families. *European Journal of Psychotraumatology*. doi: 10.1080/20008198.2022.2062997



# Objective

The purpose of the current study was to evaluate the impact of veterans' PTSD service dogs on the **psychological and social wellbeing of spouses or partners.**

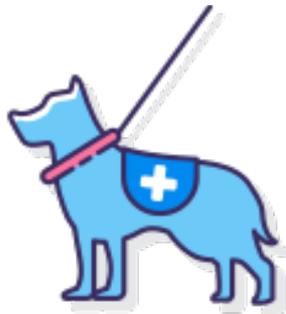


# Participants



**N=88**

partners or spouses of veterans with PTSD who were recruited from *K9s For Warriors*, a national, nonprofit service dog provider.



**n=48** in **service dog** group

**90%** Female

**88%** married

**89%** have children

**29%** BIPOC



**n=40** in **usual care** group

**88%** Female

**92%** Married

**85%** have children

**35%** BIPOC

\*BIPOC: black, indigenous or person of color

# Methods



Baseline

3-months



Follow Up

**Measures:** online, self-report, clinical survey measures

Data was analyzed using **linear regression** to examine differences in relation to group (**service dog** vs. **usual care**) at three months follow-up.

## Covariates included:

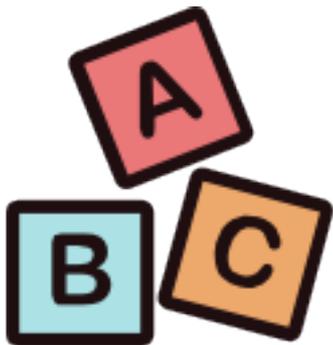
- Age
- Gender
- Socioeconomic status
- Education
- Race/ethnicity
- VA caregiver status
- Relationship status
- Pet ownership status
- Children
- Baseline score

# Survey measures included:



## **Spouse Wellbeing**

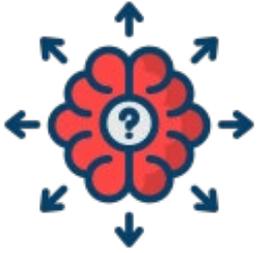
- Bradburn Scale of Psychological Wellbeing
- Activity Questionnaire
- Revised Caregiver Appraisal Scale
- ZARIT Caregiver Burden Scale
- Patient Reported Outcome Measures Information System
  - Anxiety
  - Depression
  - Companionship
  - Social Isolation



## **Child Wellbeing**

- Patient Reported Outcome Measures Information System
  - Psychological Stress
  - Pediatric Affect

# Compared to spouses of veterans in the **usual care group**,



**Caregiver burden** is significantly higher among partners of veterans with **service dogs**

$B = 4.52$   
 $p = 0.04$   
 $d = 0.38$



**Caregiver satisfaction** is significantly lower among partners of veterans with **service dogs**

$B = -1.09$   
 $p = 0.04$   
 $d = -0.46$



**Activity participation** is significantly higher among partners of veterans with **service dogs**

$B = 6.12$   
 $p = 0.01$   
 $d = 0.59$

# The presence of a service dog did not influence:

## **Revised Caregiver Appraisal Scale**

- Caregiver Impact ( $p = 0.07$ ,  $d = 0.24$ )

## **Patient Reported Outcome Measures Information System**

- Social Isolation ( $p = 0.32$ ,  $d = -0.30$ )
- Companionship ( $p = 0.65$ ,  $d = 0.31$ )
- Depression ( $p = 0.15$ ,  $d = -0.24$ )
- Anxiety ( $p = 0.92$ ,  $d = -0.04$ )

## **Bradburn Scale of Psychological Wellbeing**

- Positive Affect ( $p = 0.23$ ,  $d = 0.37$ )
- Negative Affect ( $p = 0.78$ ,  $d = -0.07$ )
- Affect Balance ( $p = 0.34$ ,  $d = 0.29$ )

# The presence of a service dog did not affect veteran children.



Pediatric Positive Affect ( $p= 0.87, d= -0.01$ )



Pediatric Psychological Stress ( $p= 0.65, d= -0.11$ )

# Conclusions

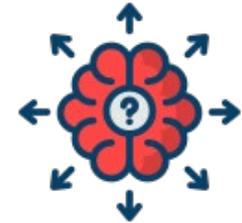
## Findings:



Lower Caregiver  
Satisfaction



Higher  
Participation in  
Activities



Higher  
Caregiver  
Burden

## Implications:

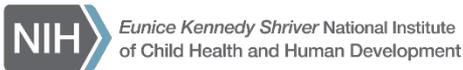


Family-focused  
Approaches



# THANK YOU

## TO OUR COLLABORATORS, LAB MEMBERS, AND FUNDERS



ORGANIZATION FOR HUMAN-ANIMAL  
INTERACTION RESEARCH & EDUCATION

[www.humananimalinteraction.org](http://www.humananimalinteraction.org)



NEWMAN'S OWN  
FOUNDATION



@ohairelab



[leannenieforth@arizona.edu](mailto:leannenieforth@arizona.edu)

[www.leannenieforth.com](http://www.leannenieforth.com)



# Any questions??