



WHITE PAPER

# Empirical Support for Therapy Animal Interventions

As the field of Animal-Assisted Interventions (AAI) rapidly grows in practice and public awareness, the body of empirical evidence supporting work with therapy animals has also become increasingly robust. The existing research on AAI is varied in its focus on populations and specific applications, but it all rests on the assumption that the human-animal bond is a powerful tool capable of impacting wellness.

**The human-animal bond is a mutually beneficial and dynamic relationship between people and animals that positively influences the health and well-being of both.** While many of us intuitively understand the benefits of positive interactions with animals in our lives, the groundbreaking evidence obtained by researchers who have scientifically investigated this topic can be used to bolster our work with therapy animals.



# Therapy Animals in Medical Settings

Medical treatment settings are one of the most common places our therapy animal teams visit, and there is extensive research to support these activities.

Interaction with therapy animals in medical settings has been correlated with the following effects:

- Decreased perceptions of pain<sup>4, 8, 11, 19, 24, 25</sup>
- Improved recovery rates<sup>1</sup>
- Decreased anxiety and stress<sup>4, 6, 11, 13, 22, 24, 25, 29</sup>
- Less fear and worry in patients<sup>11, 22, 45</sup>
- Improved biobehavioral markers of stress<sup>13, 20, 29, 37</sup>

These findings impact people across all age ranges. Many research projects<sup>4,5,6,7,8,11,20,23,29,41,45</sup> have specifically investigated the impact of therapy animals on children who are receiving medical treatment, and the findings of those studies were also promising. There has even been research to suggest that therapy animals not only make patients feel better but also positively impact caregivers by decreasing levels of emotional distress.<sup>24,25</sup>

Pet Partners teams are specifically trained so that they can bring these powerful interventions to medical facilities all over the world. Bolstered by our Standards of Practice, we operate in a manner that is highly conscious of zoonotic considerations and is aligned with recommendations from the Society of Healthcare Epidemiology of America (SHEA), the American Journal of Infection Control, the International Association of Human-Animal Interaction Organizations (IAHAIO), and the American Veterinary Medical Association (AVMA).



# Therapy Animals and Physical Wellness

Therapy animals have not only been found to assist people who are formally being treated for medical concerns but also to inspire physical wellness prior to the point of formal intervention. A 2010 study<sup>22</sup> investigated a walking program that matched sedentary adults with therapy animals. Participants in this study showed increases in physical activity over the course of the experiment, stating that their motivation for adherence was “the dogs need us to walk them.”

Key tenets of physical wellness can be modeled in all kinds of therapy animal programming. Our teams can be found visiting with young people, discussing their pets’ diets as a lead-in to conversation



about human nutrition. We also inspire physical wellness by participating in corporate wellness initiatives, encouraging employees to get moving throughout the workday. Therapy animals can even inspire patients to walk again after recovering from medical treatment<sup>1</sup>, aiding in the journey towards restored wellness. Throughout all these efforts, it is clear that we are sometimes able to better model the importance of our health when conversations about it are facilitated alongside interactions with therapy animals.

Are you ready to get moving for the sake of your physical wellness? If so, check out our Walk With Me™ initiative and consider incorporating Pet Partners teams into your wellness plan.

## Therapy Animals and Mental Wellness

Beyond assisting people who are addressing physical health concerns, AAI also supports mental wellness. While we can all share stories of how our pets have helped us feel better, research has given us precise language to describe just what our animals are doing to improve mental health.

AAI has been shown to do the following:

- Increase perceptions of social support<sup>28, 35</sup>
- Support people during times of crisis<sup>9, 17, 18</sup>
- Assist professionals in providing trauma recovery<sup>36,40</sup>
- Decrease levels of general anxiety<sup>14, 32, 47</sup>
- Alleviate symptoms of depression<sup>42</sup>
- Assist in formalized mental health treatment<sup>5, 10, 21, 26, 33, 46</sup>



Pet Partners is honored to be able to share the healing effects of pets to improve mental wellness for people in all walks of life. Whether bringing healing to people who are combatting major stressors, or simply encouraging a sense of wellness in the general population, our teams are ready to share the healing power of animals with anyone who may benefit from the intervention.

In 2019, Pet Partners launched our Animal-Assisted Crisis Response program, credentialing available to therapy animal teams so that they are trained and ready to provide emotional comfort and support in the aftermath of a crisis situation. Realizing that the nature of crisis calls for handlers to engage with people in some of their most vulnerable moments, all AACR teams have completed an educational course informed by some of the



field's top psychological first aid experts. While we hope for a time when fewer crises take place, we are proud to make AACR teams available to assist in supporting mental health in the immediate aftermath of crisis.

## Therapy Animals in Educational Contexts

We now know that therapy animals can help us feel better, but can they also help us learn? The findings from research on AAI in educational settings give us plenty of evidence to suggest the positive impacts of incorporating therapy animals in the classroom.

Research on AAI in learning environments has shown that therapy animals may help with the following aspects:

- Foster reading abilities, such as reading rate, accuracy, fluency, and comprehension<sup>44</sup>
- Enhance primary skills such as object recognition and categorization<sup>15,16</sup>
- Mitigate stress levels, especially surrounding events like final exams<sup>3, 38, 43</sup>
- Provide a source of motivation, stimulation, and focus in learning<sup>16</sup>

One of the ways in which Pet Partners teams work to bring these positive effects to young people is through our Read With Me™ initiative. Our teams visit libraries, universities, after-school programs, and a wide variety of other educational contexts—investing in the future of these populations while also working to instill an appreciation for the power of the human-animal bond.



# Therapy Animals and Older Adults

Many of our therapy animal teams spend a considerable amount of time with older adults in senior care environments. These interventions often have special meaning within this population, as there are challenges associated with pet ownership later in life, especially when a person lives in residential care.<sup>30</sup> Through therapy animal programming, seniors have access to the healing power of animals regardless of their pet ownership status.

Findings from studies focused on AAI with older adults point to therapy animals' abilities to do the following:

- Comfort people with dementia<sup>12, 31, 39, 48</sup>
- Promote socialization and engagement in older age<sup>12,39</sup>
- Decrease depression, anxiety, and irritability in seniors<sup>12, 27, 31, 39</sup>
- Encourage positive perceptions related to a person's health<sup>2</sup>

Therapy animal visits may be structured to fit the needs of a wide range of older adults. Some teams visit casually in residential facilities, while others specifically work with professionals to assist in goal-oriented interventions. No matter the nature of the visit, therapy animals have an impressive ability to inspire wellness long into the human lifetime.





# Looking Towards the Future

Research on AAI and therapy animal work has set a solid framework for us to better understand the healing power of animals. Throughout the existing data, there are many calls for ongoing research to further support this growing field.

Researchers call for the following:

- More research on AAI for specific disease treatment<sup>1</sup>
- Larger randomized studies with the inclusion of biobehavioral variables<sup>6</sup>
- Studies involving a variety of species serving as therapy animals
- Replication of existing high-quality studies<sup>35</sup>
- Increased methodological rigor<sup>35</sup>

Pet Partners is serious about our commitment to promoting AAI research. We not only assist scholars and practitioners by sharing participation invitations within our network of handlers, but we also financially support ongoing studies through our partnership with [HABRI](#). Additionally, we've created a [Researcher Checklist](#), and we invite investigators and handlers who are involved in studies to use this resource as a guide in ensuring that the best possible therapy animal interventions are being represented in empirical investigation. If you are a researcher interested in learning more about Pet Partners' involvement in these efforts, check out our [resources for AAI professionals](#).

Chastain Griffin T. Pet Partners. (2020) *Empirical Support for Therapy Animal Interventions*. [White paper]. Retrieved from <https://petpartners.org/learn/benefits-human-animal-bond/>

# References

1. Abate, S. V., Zucconi, M., & Boxer, B. A. (2011). Impact of canine-assisted ambulation on hospitalized chronic heart failure patients' ambulation outcomes and satisfaction: a pilot study. *Journal of Cardiovascular Nursing*, 26(3), 224-230.
2. Ambrosi, C., Zaiontz, C., Peragine, G., Sarchi, S., & Bona, F. (2019). Randomized controlled study on the effectiveness of animal-assisted therapy on depression, anxiety, and illness perception in institutionalized elderly. *Psychogeriatrics*, 19(1), 55-64.
3. Barker, S. B., Barker, R. T., McCain, N. L., & Schubert, C. M. (2016). A randomized cross-over exploratory study of the effect of visiting therapy dogs on college student stress before final exams. *Anthrozoös*, 29(1), 35-46.
4. Barker, S. B., Knisely, J. S., Schubert, C. M., Green, J. D., & Ameringer, S. (2015). The effect of an animal-assisted intervention on anxiety and pain in hospitalized children. *Anthrozoös*, 28(1), 101-112.
5. Barker, S. B., & Wolen, A. R. (2008). The benefits of human-companion animal interaction: A review. *Journal of Veterinary Medical Education*, 35(4), 487-495.
6. Branson, S. M., Boss, L., Padhye, N. S., Trötscher, T., & Ward, A. (2017). Effects of animal-assisted activities on biobehavioral stress responses in hospitalized children: A randomized controlled study. *Journal of Pediatric Nursing*, 36, 84-91.
7. Braun, C., Stangler, T., Narveson, J., & Pettingell, S. (2009). Animal-assisted therapy as a pain relief intervention for children. *Complementary Therapies in Clinical Practice*, 15(2), 105-109.
8. Calcaterra, V., Veggiotti, P., Palestini, C., De Giorgis, V., Raschetti, R., Tumminelli, M., ... , & Pelizzo, G. (2015). Post-operative benefits of animal-assisted therapy in pediatric surgery: a randomised study. *PloS One*, 10(6), e0125813.
9. Chandler, C. K. (2008). Animal assisted therapy with Hurricane Katrina survivors. *Based on a program presented at the ACA Annual Conference and Exhibition, Honolulu, HI. In VISTAS online. Retrieved from <https://www.counseling.org/resources/library/vistas/2008-V-Online-MSWord-files/Chandler.pdf>.*
10. Chu, C. I., Liu, C. Y., Sun, C. T., & Lin, J. (2009). The effect of animal-assisted activity on inpatients with schizophrenia. *Journal of Psychosocial Nursing and Mental Health Services*, 47(12), 42-48.
11. Chubak, J., Hawkes, R., Dudzik, C., Foose-Foster, J. M., Eaton, L., Johnson, R. H., & Macpherson, C. F. (2017). Pilot study of therapy dog visits for inpatient youth with cancer. *Journal of Pediatric Oncology Nursing*, 34(5), 331-341.
12. Churchill, M., Safaoui, J., McCabe, B. W., & Baun, M. M. (1999). Using a therapy dog to alleviate the agitation and desocialization of people with Alzheimer's disease. *Journal of Psychosocial Nursing and Mental Health Services*, 37(4), 16-22.

13. Cole, K. M., Gawlinski, A., Steers, N., & Kotlerman, J. (2007). Animal-assisted therapy in patients hospitalized with heart failure. *American Journal of Critical Care*, 16(6), 575-585.
14. Ein, N., Li, L., & Vickers, K. (2018). The effect of pet therapy on the physiological and subjective stress response: A meta-analysis. *Stress and Health*.
15. Gee, N. R., Church, M. T., & Altobelli, C. L. (2010). Preschoolers make fewer errors on an object categorization task in the presence of a dog. *Anthrozoös*, 23(3), 223-230.
16. Gee, N. R., Gould, J. K., Swanson, C. C., & Wagner, A. K. (2012). Preschoolers categorize animate objects better in the presence of a dog. *Anthrozoös*, 25(2), 187-198.
17. Graham, L. B. (2009). Dogs Bring Comfort in the Midst of a Natural Disaster. *Reflections: Narratives of Professional Helping*, 15(1), 76-84.
18. Greenbaum, S. D. (2006). Introduction to working with Animal Assisted Crisis Response animal handler teams. *International Journal of Emergency Mental Health*, 8(1), 49-63.
19. Harper, C. M., Dong, Y., Thornhill, T. S., Wright, J., Ready, J., Brick, G. W., & Dyer, G. (2015). Can therapy dogs improve pain and satisfaction after total joint arthroplasty? A randomized controlled trial. *Clinical Orthopaedics and Related Research®*, 473(1), 372-379.
20. Havener, L., Gentes, L., Thaler, B., Megel, M., Baun, M., Driscoll, F., ... & Agrawal, N. (2001). The effects of a companion animal on distress in children undergoing dental procedures. *Issues in Comprehensive Pediatric Nursing*, 24(2), 137-152.
21. Hoagwood, K. E., Acri, M., Morrissey, M., & Peth-Pierce, R. (2017). Animal-assisted therapies for youth with or at risk for mental health problems: A systematic review. *Applied Developmental Science*, 21(1), 1-13.
22. Johnson, R. A., & Meadows, R. L. (2010). Dog-walking: motivation for adherence to a walking program. *Clinical Nursing Research*, 19(4), 387-402.
23. Kaminski, M., Pellino, T., & Wish, J. (2002). Play and pets: The physical and emotional impact of child-life and pet therapy on hospitalized children. *Children's Health Care*, 31(4), 321-335.
24. Marcus, D. A., Bernstein, C. D., Constantin, J. M., Kunkel, F. A., Breuer, P., & Hanlon, R. B. (2012). Animal-assisted therapy at an outpatient pain management clinic. *Pain Medicine*, 13(1), 45-57.
25. Marcus, D. A., Bernstein, C. D., Constantin, J. M., Kunkel, F. A., Breuer, P., & Hanlon, R. B. (2013). Impact of animal-assisted therapy for outpatients with fibromyalgia. *Pain Medicine*, 14(1), 43-51.
26. Marr, C. A., French, L., Thompson, D., Drum, L., Greening, G., Mormon, J., Henderson, I., & Hughes, C. W. (2000). Animal-assisted therapy in psychiatric rehabilitation. *Anthrozoös*, 13(1), 43-47.



27. Marx, M. S., Cohen-Mansfield, J., Regier, N. G., Dakheel-Ali, M., Srihari, A., & Thein, K. (2010). The impact of different dog-related stimuli on engagement of persons with dementia. *American Journal of Alzheimer's Disease & Other Dementias*®, 25(1), 37-45.
28. Maujean, A., Pepping, C. A., & Kendall, E. (2015). A systematic review of randomized controlled trials of animal-assisted therapy on psychosocial outcomes. *Anthrozoös*, 28(1), 23-36.
29. McCullough, A., Ruehrdanz, A., Jenkins, M. A., Gilmer, M. J., Olson, J., Pawar, A., ... & Grossman, N. J. (2018). Measuring the Effects of an Animal-Assisted Intervention for Pediatric Oncology Patients and Their Parents: A Multisite Randomized Controlled Trial. *Journal of Pediatric Oncology Nursing*, 35(3), 159-177.
30. McNicholas, J. (2007). Pets and older people in residential care. *A report prepared for the Pet Food Manufacturers Association*.
31. Mossello, E., Ridolfi, A., Mello, A. M., Lorenzini, G., Mugnai, F., Piccini, C., ... & Marchionni, N. (2011). Animal-assisted activity and emotional status of patients with Alzheimer's disease in day care. *International Psychogeriatrics*, 23(6), 899-905.
32. Nagengast, S. L., Baun, M. M., Megel, M., & Leibowitz, J. M. (1997). The effects of the presence of a companion animal on physiological arousal and behavioral distress in children during a physical examination. *Journal of Pediatric Nursing*, 12(6), 323-330.
33. Nepps, P., Stewart, C. N., & Bruckno, S. R. (2014). Animal-assisted activity: Effects of a complementary intervention program on psychological and physiological variables. *Journal of Evidence-based Complementary & Alternative Medicine*, 19(3), 211-215.
34. O'Haire, M. E. (2013). Animal-assisted intervention for autism spectrum disorder: A systematic literature review. *Journal of Autism and Developmental Disorders*, 43(7), 1606-1622.
35. O'Haire, M. E. (2017). Research on animal-assisted intervention and autism spectrum disorder, 2012–2015. *Applied Developmental Science*, 21(3), 200-216.
36. O'Haire, M. E., Guérin, N. A., & Kirkham, A. C. (2015). Animal-assisted intervention for trauma: A systematic literature review. *Frontiers in Psychology*, 6, 1121.
37. Orlandi, M., Trangeled, K., Mambrini, A., Tagliani, M., Ferrarini, A., Zanetti, L., ... & Cantore, M. (2007). Pet therapy effects on oncological day hospital patients undergoing chemotherapy treatment. *Anticancer Research*, 27(6C), 4301-4303.
38. Reynolds, J. A., & Rabschutz, L. (2011). Studying for exams just got more relaxing—Animal-assisted activities at the University of Connecticut Library. *College & Undergraduate Libraries*, 18(4), 359-367.
39. Richeson, N. E. (2003). Effects of animal-assisted therapy on agitated behaviors and social interactions of older adults with dementia. *American Journal of Alzheimer's Disease & Other Dementias*®, 18(6), 353-358.
40. Stewart, L. A., Bruneau, L., & Elliott, A. (2016). The role of animal-assisted interventions in addressing trauma-informed care. *ACA Vistas, Spring*, 15.

41. Sobo, E. J., Eng, B., & Kassity-Krich, N. (2006). Canine visitation (pet) therapy: pilot data on decreases in child pain perception. *Journal of Holistic Nursing*, 24(1), 51-57.
42. Souter, M. A., & Miller, M. D. (2007). Do animal-assisted activities effectively treat depression? A meta-analysis. *Anthrozoös*, 20(2), 167-180.
43. Trammell, J. P. (2017). The effect of therapy dogs on exam stress and memory. *Anthrozoös*, 30(4), 607-621.
44. Treat, W. A. (2013). *Animal-assisted literacy instruction for students with identified learning disabilities: Examining the effects of incorporating a therapy dog into guided oral reading sessions* (Doctoral dissertation, UC Santa Cruz).
45. Tsai, C. C., Friedmann, E., & Thomas, S. A. (2010). *The effect of animal-assisted therapy on stress responses in hospitalized children*. *Anthrozoös*, 23(3), 245-258.
46. Villalta-Gil, V., Roca, M., Gonzalez, N., Domenec, E., Cuca, Escanilla, A., ... & Schi-Can group. (2009). Dog-assisted therapy in the treatment of chronic schizophrenia inpatients. *Anthrozoös*, 22(2), 149-159.
47. Ward-Griffin, E., Klaiber, P., Collins, H. K., Owens, R. L., Coren, S., & Chen, F. S. (2018). Petting away pre-exam stress: The effect of therapy dog sessions on student well-being. *Stress and Health*.
48. Yakimicki, M. L., Edwards, N. E., Richards, E., & Beck, A. M. (2018). Animal-assisted intervention and dementia: a systematic review. *Clinical nursing research*, 28(1), 9-29.



## Taylor Chastain Griffin, PhD

National Director of AAI Advancement, Pet Partners

## About the Author

**Dr. Taylor Chastain Griffin** is National Director of AAI Advancement for Pet Partners. In this role, she focuses on supporting research and professional development within the therapy animal arena. Having witnessed hundreds of interactions between her own therapy animals and the people with whom they've visited, Taylor is passionate about bolstering the intervention with empirical investigation. Taylor obtained her doctorate in research psychology in 2018, with her studies focusing on the human-animal bond as it is experienced in contexts of shared traumatic experiences. Through her undergraduate education in psychology and animal behavior to her graduate work to become a mental health counselor, Taylor has always strived to shape her educational and professional endeavors with the foundational goal of promoting AAI. Taylor is also a dog trainer and Pet Partners team evaluator and has been a registered handler with Pet Partners since 2015. Taylor has been secretary for the American Psychological Association's Section on Human Animal Interaction and serves as a mental health expert on the Georgia Veterinary Medical Association Resilience & Well-Being Committee. Taylor is based in Georgia, where she lives with her nine dogs and three cats.





345 118th Ave SE #100, Bellevue, WA 98005

[petpartners.org](http://petpartners.org)