

James Madison University

JMU Scholarly Commons

Educational Specialist, 2020-current

The Graduate School

5-6-2021

Canine-assisted therapy: Incorporating canines into the therapeutic experience

Melissa Kee

Follow this and additional works at: <https://commons.lib.jmu.edu/edspec202029>



Part of the [Counseling Commons](#), and the [Psychology Commons](#)

Recommended Citation

Kee, Melissa, "Canine-assisted therapy: Incorporating canines into the therapeutic experience" (2021).
Educational Specialist, 2020-current. 25.
<https://commons.lib.jmu.edu/edspec202029/25>

This Thesis is brought to you for free and open access by the The Graduate School at JMU Scholarly Commons. It has been accepted for inclusion in Educational Specialist, 2020-current by an authorized administrator of JMU Scholarly Commons. For more information, please contact dc_admin@jmu.edu.

Canine-Assisted Therapy: Incorporating Canines into the Therapeutic Experience

Melissa Hunt Kee

A Research Project Submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

In

Partial Fulfillment of the Requirements

for the degree of

Educational Specialist

Department of Graduate Psychology

May 2021

Faculty Committee :

Committee Chair : Renee Staton

Committee Readers : Amanda Evans

Lennis Echterling

This project is dedicated to...

My Mema and Papa - Thank you for the lifetime of love, support, acceptance, and understanding that you have given me. You have shown me what unconditional love is and have never doubted my potential. Without you, my dreams would still be beyond reach. Thank you for helping me to make my dreams a reality. I will always appreciate the many life lessons that you have taught me and the skills that you have helped me develop over the years, including patience, respect, responsibility for my actions, and helping others in need. These are not only qualities that will help me in my professional life but will also help me be the kind of person I want to be to others. There is no way to put into words the depth of love and gratitude I have for both of you, so I will simply say thank you and I am eternally grateful for the love that you have shared with me.

My loving husband, Nicholas Kee – Thank you for being my rock and my stability. I always knew through this process that you were there to support me, even through the sleepless nights and stressful deadlines. I appreciate your encouragement and your laughs that have always helped me relieve the anxieties of the world. I look forward to a lifetime of adventures with you by my side. Thank you for the beautiful family that we have created together. I know what a privilege it is to be excited to come home every day and feel a sense of belonging and joy, and I appreciate you for providing that space for me. I love you, forever.

My loyal dog, Happy Kee – Thank you for inspiring me to help others feel the connection and love that we share. Thank you for comforting me and providing me a sense of security that can't be replicated. You are the best unexpected blessing that I could ask for and I'm grateful that you jumped in Nick's car and made him bring you home. Thanks for watching me at the foot of the bed whenever I was doing classwork and not letting me get up for breaks alone. You have been the best classmate during the pandemic and I couldn't ask for a better dog.

Table of Contents

Dedication Page	ii
Table of Contents	iii
Abstract	iv
Introduction	1
Qualifications of Therapy Dogs	2
Animals and Human Biology	3
Possible Interventions	4
Limitations	6
Conclusion	8
References	10

Abstract

Canine-Assisted Therapy (CAT) is a therapeutic practice that has been growing in popularity in recent years but unfortunately has little research to show evidence of effectiveness. This article focuses specifically on the use of canines in therapeutic environments. Use of canines in a therapy setting may be a source of confusion due to the many assistance roles that canines can provide, including hearing dogs, mobility assistance dogs, and service dogs. This article provides clarity regarding CAT and includes recommendations for counselors considering the use of dogs in their therapeutic practice.

Introduction

Although equine therapy has increased in popularity over the past several years, little research has been conducted regarding incorporating other species of domestic animals into the therapeutic process. Boris Levinson, a child psychologist, was the first professional to recommend the incorporation of animals in the mental health care field. In his book “Pet-Oriented Child Psychotherapy” Levinson detailed treatment methods, described short-term studies, and highlighted the biological impact of animals in the therapeutic environment (Chandler, 2001). Levinson’s discoveries helped to spark interest in the health care benefits that animals have on humans who are experiencing distress and struggling with mental health diagnoses. , resulting in the development of animal-assisted interventions in the field.

The International Association of Human-Animal Interaction Organizations (IAHAIO) defines animal-assisted therapy (AAT) as “a goal oriented, planned, and structured therapeutic intervention directed and/ or delivered by health, education and human service professionals (International Association of Human-Animal Interaction Organizations, 2014).” In their definition, AAT clarifies that practitioners who use AAT must have specific training and/or supervision, working within their professional expectations. Intervention progress is measured and included in professional documentation. AAT is delivered and/or directed by a formally trained (with active licensure, degree or equivalent) professional with expertise within the scope of the professionals’ practice. AAT focuses on enhancing physical, cognitive, behavioral and/or socio-emotional functioning of the particular human client (International Association of Human-Animal Interaction Organizations, 2014).

This article focuses specifically on the use of canines in therapeutic environments which is described as canine-assisted therapy (CAT). Use of canines in a therapy setting may be a source of confusion due to the many assistance role that canines can provide, including hearing dogs, mobility assistance dogs, and service dogs. This article provides clarity regarding CAT in particular and includes recommendations for counselors considering the use of dogs in their therapeutic practice.

Qualifications for Therapy Dogs

Canines that are used for CAT must meet specific qualifications for providing services. Animals that are utilized in animal-assisted therapy must be at a minimum trained in socialization, touch desensitization, obedience training, and basic commands (Chandler, 2017). Proper training and up-to-date certifications are intended to ensure safety for the animal, owner, and the public. Canines that are privately owned must also undergo a temperament test which will provide insight into how a canine responds in stressful situations and determines whether they will be able to provide consistent and safe responses for clients in the therapeutic setting.

Therapy animals such as those used in CAT are often confused with service animals due to their training and professional nature, but there are significant differences in the two groups. Therapy animals are not provided with protections under federal law the way that service dogs are, which provides limitations with housing and travel for therapy animals (Registry, 2020). Service dogs provide more services for the individual such as helping them complete daily tasks or increase awareness of their surroundings. Therapy animals are not trained to provide this level of support but rather to help

individuals with coping with their psychiatric symptoms and provide support during therapy sessions.

Other programs such as animal visitation or emotional support animals do not require the levels of training that CAT or service animals do. Therapeutic visitation animals are typically household animals that are brought by their owners to hospitals or nursing homes to provide excitement and motivation to clients through their interactive experience rather than through goal-oriented treatment. Emotional support animals are animals that do not have to have any specific training but have a written recommendation by a health care provider to reside with an individual who has a mental health diagnosis. For instance, a psychiatrist may write a recommendation for an emotional support animal to reside with a client due to rental restrictions or to assist in waiving rental fees for low-income individuals who emotionally benefit from residing with an animal.

Animals and Human Biology

CAT has the potential to strengthen counseling interventions in part because of the impact that animals can have on human stress levels. The “biophilia effect” is a phenomenon that describes the comfort and healing that humans experience around animals who are calm and in a resting state. The presence of these animals reduces the human’s stress levels, increases the feeling of safety, and promotes a sense of calmness. This is likely adaptive due to the evolution of humans with animals in nature and the ways in which animals’ presence affected human’s survival, including how they were able to access food and warmth (Julius et al., 2013). Many studies have also provided evidence that being in the presence of animals can have positive effects on the human body’s functioning including decreasing blood pressure rates (Friedmann, et al., 1983)

and decreasing physiological arousal (Viau et al., 2010). Animals have also been shown to lower norepinephrine levels in humans which are linked to panic attacks, blood pressure, and hyperactivity (Cole, et al., 2007).

In addition to individuals enjoying the company of animals in the therapeutic environment, animals bring physical benefits to clients that assist them to alleviate physical anxiety symptoms. De Vries and Olf (2009) reported that up to 80% of individuals will experience a traumatic event during their lifetime and between 2-3% of the general population will receive a diagnosis of post-traumatic stress disorder (PTSD) (Goff et al., 2007). Evidence-based practices, such as trauma-focused CBT (TF-CBT) are proven to be effective for PTSD, but these treatments are shown to have a high drop-out rate (Imel, et al., 2013). Creating an atmosphere that invites the client to feel welcomed and motivated in the therapeutic environment is important to build a consistent treatment plan with an individual that has PTSD. Involving canines into the therapeutic atmosphere may help clients feel more at ease and more connected in the counseling setting.

Animal therapy in general also increases motivation to attend and participate in therapeutic services (Holcomb & Meacham, 1989; Macauley, 2006; Lang, et al., 2007). Clients may view a canine's companionship as unconditional positive regard and as a bridge for building trust which are key components to the therapeutic alliance between the client and the therapist.

Possible Interventions

Due to the high regard that U.S. society has for canines, CAT can be a positive addition to traditional talk therapy and medication regimens. While clinical interventions involving canine co-therapy are not widely utilized, studies have shown that clients view

CAT more favorably than trauma-focused cognitive behavioral therapy (TF-CBT) alone or TF-CBT combined with medication (Dravnsnik, et al., 2018). In addition, although the use of medication for therapy can be seen negatively due to side effects and dependence on medication over long periods of time, CAT may be a positive supplement for traditional modalities of therapy that can be easier for clients to accept and tolerate.

In addition, many incarcerated individuals also experience mental health problems including PTSD and substance abuse. PTSD for this population is significantly high, having the prevalence among prisoners from 4-21% (Goff et al., 2007). While considering the positive physical affects that canine animals have on human's physical health, as stated above, inmates can learn additional caretaking skills including patience, responsibility, reduced conflict, and positive self-concept (Britton & Button, 2005).

In school settings, children may also use their excitement for the canine as a reason for more often visiting the therapist which provides additional contact and relationship building between the client and therapist (Chandler, 2001). Animal-assisted interventions can be used in combination with traditional therapy resulting in increased flexibility for therapists and additional support in the therapeutic relationship for the client. In recent years animal assisted therapy has also been utilized in public settings including airports, schools, nursing homes, hospitals, and other public areas for individuals in high stress situations.

In prison-based animal programs, inmates who have helped with training dogs have reported higher self-esteem, patience, and self-worth (Allison & Ramaswamy, 2016). In this study, individuals also reported lower disciplinary records and reduced tension. While it may be argued that individuals who are allowed to participate in animal

training are typically lower risk offenders, it is also noteworthy that these individuals may feel an increased sense of belonging and responsibility when caring for animals. Studies involving inmates and canine assisted therapy may be limited due to barriers including budgetary restrictions and history of violent crimes that exclude them from research with animals, such as animal abuse or violent sexual offenses.

Limitations

When considering whether to incorporate CAT, clinicians must be mindful of additional factors that may influence their counseling practice. Incorporating animals into the therapeutic setting may trigger fear in some clients if they have had negative experiences with dogs in their pasts which may negatively impact the therapeutic alliance before therapy begins. Clinicians must also consider that some clients may experience allergies to animals which could deter clients from receiving services from the practice or affect their desire to pursue services. Clients who have a history of disruptions in their attachment with loved ones may also have a strong negative reaction to animals that die during therapeutic services. While this may provide an opportunity for meaningful conversations between the client and therapist, it may also provide discomfort or disengagement with the client resulting in negative effects to the therapeutic relationship.

Animals in a therapeutic setting must also be supervised to ensure that they and clients are not at risk of harm. While in distress, clients may act impulsively or react in ways that may startle animal companions which may cause a defensive action from a canine in the therapy room. There is also a risk that clients may cause harm to an animal, intentionally or not. Being mindful of this risk is important for any provider providing CAT so that safety precautions can be provided. Screening for history of animal abuse is

also critical during the assessment process so that the clinician can assess if including the animal into therapy is healthy for all parties involved. If a client has a history of animal abuse, interventions may also be tailored to address empathy building and skills to increase compassion towards animals in a supervised setting.

Another limitation that clinicians must consider when providing CAT is the location where services are provided. In addition to finding a confidential, affordable, and accessible location for clients, clinicians would also have to consider if the location enables animals to be on the premises. Clinicians must also be ready to take on responsibilities with the animals such as bathing the animals, keeping the workplace sanitary, and ensuring that the animal does not become distressed and damage property. Professionals must also ensure that they have proper liability coverage for animal assisted therapy in addition to liability insurance for their therapeutic practice. Liability insurance for CAT may have guidelines regarding the dog's size, background, diet, grooming style, and temperament. Ensuring adherence to these guidelines may be time consuming and costly depending on the state of practice or the counselor's insurance coverage.

Finally, media platforms have released several stories that provide negative stereotypes for animal-assisted therapy. Articles displaying individuals using animals without adequate training and qualifications are widespread along with negative comments regarding abuse of laws in place for clients needing therapy animals. Recently, the Department of Labor has made headlines due to only qualifying canines as service animals and not allowing emotional support animals on flights. The lack of education regarding the differences among emotional support animals, service animals, and animals

used in animal-assisted therapy may be a contributing factor to the stigma regarding animal-assisted therapy.

While the media has discussed topics that include therapy animals, it often provides a negative view of individuals misusing or abusing laws that protect individuals with therapy animals. Although many doctors and psychiatrists provide written documentation for emotional support animals, it can be confusing for professionals and clients to know the difference between having a certified therapy animal or an emotional support animal. This article is provided in hopes of helping professionals differentiate between the two and learn the positive effects that certified therapy animals can have on the therapeutic environment.

Conclusion

Animal-Assisted Therapy is a practice that can be utilized in many different therapeutic scenarios including in outpatient, hospital, or court-ordered settings such as prison. Animal therapy in general also increases clients' motivation to attend and participate in therapeutic services (Holcomb & Meacham, 1989; Macauley, 2006; Lang, et al., 2007). Clients may view a canine's companionship as unconditional positive regard and as a bridge for building trust which are key components to the therapeutic alliance between the client and the therapist.

There are many healthy biological aspects of animal assisted therapy that help in mental health practice. It is also important for counselors to consider all of the legal and ethical considerations in providing CAT interventions in therapy to ensure best care for clients. Carefully screening clients for appropriateness of CAT, ensuring that canines are

adequately trained and screened, and monitoring client progress over time are vital for ensuring that CAT is effective.

References

- Abreu, T., & Figueiredo, A. R. (2015). Paws for help – animal-assisted therapy. *European Psychiatry, 30*, 1651. doi:10.1016/S0924-9338(15)31274-8
- Allison, M., & Ramaswamy, M. (2016). Adapting animal-assisted therapy trials to prison-based animal programs. *Public Health Nursing, 33*(5), 472-480. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=edb&AN=118174645&site=eds-live&scope=sit>
e
- Altschuler, E. L. (2018). Animal-assisted therapy for post-traumatic stress disorder: Lessons from "case reports" in media stories. *Military Medicine, 183*(1), 11-13. doi:10.1093/milmed/usx073
- Balluerka, N., Muela, A., Amiano, N., & Caldentey, M. A. (2014). Influence of animal-assisted therapy (AAT) on the attachment representations of youth in residential care. *Children and Youth Services Review, 42*, 103-109. doi:10.1016/j.childyouth.2014.04.007
- Beetz, A., Ira Schöfmann, Girgensohn, R., Braas, R., & Ernst, C. (2019). Positive effects of a short-term dog-assisted intervention for soldiers with post-traumatic stress disorder—A pilot study. *Frontiers in Veterinary Science*, doi:10.3389/fvets.2019.00170
- Britton, D. M., & Button, A. (2005). Prison pups: Assessing the effects of dog training programs in correctional facilities. *Journal of Family Social Work, 9* (4), 79-95.
- Chandler, C. (October 2001). Animal Assisted Therapy in Counseling and School Settings. *ERIC Digest*. doi:EDO-CG-01-05

- Chandler, C. K. (2017). *Animal assisted therapy in counseling* (3rd ed.) Routledge, Taylor & Francis Group. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=cat00024a&AN=vmc.b31648630&site=eds-live&scope=site>
- Compitus, K. (2019). Traumatic pet loss and the integration of attachment-based animal assisted therapy. *Journal of Psychotherapy Integration, 29*(2), 119-131. doi:10.1037/int0000143
- Dietz, T. J., Davis, D., & Pennings, J. (2012). Evaluating animal-assisted therapy in group treatment for child sexual abuse. *Journal of Child Sexual Abuse, 21*(6), 665-683. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=eric&AN=EJ986620&site=eds-live&scope=site> <http://dx.doi.org/10.1080/10538712.2012.726700>
- Dravnsnik, J., Signal, T., & Canoy, D. (2018). Canine co-therapy: The potential of dogs to improve the acceptability of trauma-focused therapies for children. *Australian Journal of Psychology, 70*(3), 208-216. doi:10.1111/ajpy.12199
- Eugene, T. (2016). Animal-assisted therapy can help with PTSD. *Army Magazine, 66*(2), 7. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=a9h&AN=112392470&site=eds-live&scope=site>
- Friedmann, E., Katcher, A. H., Thomas, S. A., Lynch, J. J., & Messent, P. R. (1983). Social interaction and blood pressure: Influence of animal companions. *Journal of Nervous and Mental Disease, 171*, 461-465.
- Germain, S. M., Wilkie, K. D., Milbourne, V. M. K., & Theule, J. (2018).

Animal-assisted psychotherapy and trauma: A meta-analysis. *Anthrozoos*, 31(2), 141-164. doi:10.1080/08927936.2018.1434044

Goff, A., Rose, E., Rose, S., & Purves, D. (2007). Does PTSD occur in sentenced prison populations? A systematic literature review. *Criminal Behaviour and Mental Health*, 17, 152-162.

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. doi:10.1080/10888691.2015.1134267H

olcomb, R., & Meacham, M. (1989). Effectiveness of an animal-assisted therapy program in an inpatient program. *Anthrozoos*, 2, 259-265. doi:10.2752/089279389787057902.

Hunt, M. G., & Chizkov, R. R. (2014a). Are therapy dogs like Xanax? Does animal-assisted therapy impact processes relevant to cognitive behavioral psychotherapy? *Anthrozoos*, 27(3), 457-469. doi:10.2752/175303714X14023922797959

Imel, Z. E., Laska, K., Jakupcak, M., & Simpson, T. L. (2013). Meta-analysis of dropout in treatments for posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 81, 394-404. doi:0/1037/a0031474.

International Association of Human-Animal Interaction Organizations. (2014). The IAHAIO definitions for animal assisted intervention and animal assisted activity and guidelines for wellness of animals involved [White Paper]. <http://www.iahaio.org/new/fileuploads/4163IAHAIO%20WHITE%20PAPER-%20FINAL%20-%20NOV%2024-2014.pdf>

- Jacobs, G. (2017). "It's not like therapy": Patient-inmate perspectives on jail psychiatric services. *Administration and Policy in Mental Health and Mental Health Services Research*, 45(2), 265–275. <https://doi.org/10.1007/s10488-017-0821-2>
- Johanna Lass-Hennemann, Sch, S. K., Sonja Römer, Holz, E., Streb, M., & Michael, T. (2018). Therapy dogs as a crisis intervention after traumatic events? – an experimental study. *Frontiers in Psychology*, doi:10.3389/fpsyg.2018.01627
- Jones, M. (2018). Innovative therapeutic intervention for children: Animal-assisted therapy in south Australia. *Childhood Education*, 94(1), 50-54. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=eric&AN=EJ1169612&site=eds-live&scope=site> <http://dx.doi.org/10.1080/00094056.2018.1420367>
- Julius H., Beetz A., Kotrschal K., Turner D., Uvnas-Moberg K. (2013). *Attachment to Pets – An Integrative View of Human-Animal Relationships with Implications for Therapeutic Practice*. Hogrefe (2013).
- Kelly, M. A., & Cozzolino, C. A. (2015). Helping at-risk youth overcome trauma and substance abuse through animal-assisted therapy. *Contemporary Justice Review*, 18(4), 421-434. doi: 10.1080/10282580.2015.1093686
- Kemp, K., Signal, T., Botros, H., Taylor, N., & Prentice, K. (2014). Equine facilitated therapy with children and adolescents who have been sexually abused: A program evaluation study. *Journal of Child & Family Studies*, 23(3), 558-566. doi:10.1007/s10826-013-9718-1
- Lang, A. M., Cox, J. A., Bernert, D. J., & Jenkins, C. D. (2007). Is counseling going to

the dogs? An exploratory study related to the inclusion of an animal in group counseling with adolescents. *Journal of Creativity in Mental Health*, 2, 17-31. doi:10.1300/J456v02n02_03.

Macauley, B. L. (2006). Animal-assisted therapy for persons with aphasia: A pilot study. *Journal of Rehabilitation Research & Development*, 43, 357-366.

Mallow, A., Mattel, P., & Broas, L. (2011). 'For the love of horses': Establishing a protocol for women in a therapeutic community to work with rescued horses. *Journal of Social Work Practice in the Addictions*, 11(2), 205-208. doi:10.1080/1533256X.2011.566477

Mende, E., & Mende, M. (2011). Integrating animals in psychotherapy: The dog as co-therapist in the hypnotherapeutic treatment of trauma -- a case report. *Contemporary Hypnosis & Integrative Therapy*, 28(1), 8. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=edb&AN=65482523&site=eds-live&scope=site>

Mims, D., & Waddell, R. (2016a). *Animal assisted therapy and trauma survivors*. Great Britain: Taylor and Francis. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=edsbl&AN=vdc.100035699537.0x000001&site=eds-live&scope=site>

Parish-Plass, N. (2008). Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Child Psychology & Psychiatry*, 13(1), 7-30. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=rzh&AN=105747200&site=eds-live&scope=site>

- Parish-Plass, N., & Peiffer, J. (2019). Implication of animal-assisted psychotherapy for the treatment of developmental trauma through the lens of interpersonal neurobiology. In P. Tedeschi, & M. A. Jenkins (Eds.), *Transforming trauma: Resilience and healing through our connections with animals*. Purdue University Press.
- Registry, N. (2020). All about therapy animals. November 02, 2020, from <https://www.nsarco.com/qualify-therapy-dog.html>
- Rumayor, C. B., & Thrasher, A. M. (2017). Reflections on recent research into animal-assisted interventions in the military and beyond. *Current Psychiatry Reports, 19*(12), 1. <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s8863137&db=edb&AN=134111654&site=eds-live&scope=site>
- Sable, P., sable@usc.edu. (2013). The pet connection: An attachment perspective. *Clinical Social Work Journal, 41*(1), 93-99. doi:10.1007/s10615-012-0405-2
- Schramm, E., Hediger, K., & Lang, U. E. (2015). From animal behavior to human health: An animal-assisted mindfulness intervention for recurrent depression. *Zeitschrift Für Psychologie, 223*(3), 192-200. doi:10.1027/2151-2604/a000220
- Schroeder, K., & Stroud, D. (2015). Equine-facilitated group work for women survivors of interpersonal violence. *Journal for Specialists in Group Work, 40*(4), 365-386. doi:10.1080/01933922.2015.1082684
- Shank, K. (2006). *Animal assisted therapy : Carl Rogers with a tail ; an extension to the humanistic approach* James Madison University. Retrieved from <https://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,cpid,athens,shib&custid=s88>

63137&db=cat00024a&AN=vmc.b1977400x&site=eds-live&scope=site <https://aeon.lib.jmu.edu/logon?Action=10&Form=30&genre=monograph&title=Animal%20assisted%20therapy&author=Shank,%20Keith&callNumber=LB1028.M29%20S524%202006&place=%5BHarrisonburg,%20Virginia%5D&pub=James%20Madison%20University&date=2006&edition=&url=http://catalog.lib.jmu.edu/record=b1977400>

Signal, T., Taylor, N., Prentice, K., McDade, M., & Burke, K. J. (2017). Going to the dogs: A quasi-experimental assessment of animal assisted therapy for children who have experienced abuse. *Applied Developmental Science, 21*(2), 81-93. doi:10.1080/10888691.2016.1165098

de Vries, G. J., & Olf, M. (2009). The lifetime prevalence of traumatic events and posttraumatic stress disorder in the Netherlands. *Journal of Counseling and Professional Psychology, 3*, 82-101.

What is Animal Assisted Therapy? (2017, September 15).

<https://www.therapet.org/about-us/what-is-animal-assisted-therapy>