# Perceptions and Pragmatics of Therapy Dog Implementation in Schools

A Dissertation

Presented to

The College of Graduate and Professional Studies

Department of Special Education

Slippery Rock University

Slippery Rock, Pennsylvania

In Partial Fulfillment

of the Requirements for the Degree

Doctorate of Education

by

Janet Garchinsky

April, 2022

© Garchinsky, 2021

Keywords: therapy dog, facility dog, animal-assisted therapy, animal-assisted activity, animal-

assisted education, animal-assisted interventions

Slippery	Rock	Unive	ersity
----------	------	-------	--------

# Department of Special Education

# Perceptions and Pragmatics of Therapy Dog Implementation in Schools

A Dissertation written by Janet Garchinsky Bachelor of Science, Education, Millersville University of Pennsylvania, 1998 Master of Science, Education, The Johns-Hopkins University, 2004 Doctorate of Education, Slippery Rock University, 2022

Approved by

	, Associate Professor of Special Education
Robert S. Isherwood, Ed.D.	Slippery Rock University of Pennsylvania
Dissertation Chair	

	, Associate Professor of Special Education
Matthew Erickson, Ed.D.	Slippery Rock University of Pennsylvania
Dissertation Committee Member	

	, Director of Special Education Oxford
Chad Kinsey, Ed.D.	Oxford Area School District
Dissertation Committee Member	

Accepted by

	, Dean, College of Education
A. Keith Dils, Ed.D.	Slippery Rock University of Pennsylvania

#### ABSTRACT

The benefits of the application of therapy dogs have been well documented. Studies related to therapy dogs have shown success in reducing stress and anxiety, improving behavior and selfesteem, increasing reading scores, promoting socialization and motivation, increasing rates of deescalation, and helping younger children develop empathy. Common concerns related to the use of therapy dogs have previously been documented. These concerns include child and animal welfare, animal hygiene, zoonotic disease, and fear or cultural differences. Concerns such as these may cause schools to deny the use of therapy dogs in their facilities. The purpose of this qualitative study was to determine what problems have manifested in schools and how they compare to concerns documented by previous studies. Staff in Pennsylvania schools were surveyed to identify what, if any, problems arose during the implementation of therapy dog programs within their districts, and whether staff perceptions changed after implementation.

Results from this study can assist school stakeholders in decision-making and policy development related to therapy dog implementation. Despite problems that have manifested, including those specific to K-12 schools, staff perspectives of therapy dogs became more favorable after implementation.

#### ACKNOWLEDGMENTS

Throughout the process of this dissertation, I have received support, guidance, and encouragement. I would first like to thank Dr. Isherwood for serving as my chairman, for his support and interest in this research, and for guiding me forward in this accomplishment. Second, I would like to thank Dr. Erickson and Dr. Kinsey for their insightful comments and suggestions during the research process. Third, I am grateful to my dear husband, Christopher, for being my sounding board. He has provided me with unwavering support and belief in me, helping me to achieve something outside of my comfort zone. Finally, my appreciation goes out to my family and friends who have helped with managing everyday tasks related to family life and providing encouragement to keep me on track.

# **TABLE OF CONTENTS**

TABLE OF CONTENTS	5
CHAPTER 1: INTRODUCTION	10
Background of the Study	12
Problem Statement	14
Purpose of the Study	15
Limitations	16
Definition of Terms	17
Summary	18
CHAPTER 2: LITERATURE REVIEW	19
Distinguishing Therapy Dogs	19
Organizations and Certification	21
Non-Educational Benefits	22
Hospitals	23
Doctors and Therapists	23
Courthouses	25
Nursing Homes, Rehabilitation Centers, and Hospice	25
Educational Benefits	25
Reading Achievement	26

Mental Health Benefits	27
Social-Emotional and Behavioral Learning	28
Autism Spectrum Disorder	29
Motivation	30
Post-Secondary Education	31
Financial Benefits	32
Concerns related to Therapy Dogs in Educational Settings	32
Mitigation of Concerns	35
Contradicting Research	37
Current Guidelines for Implementation	39
Purpose of the Study	41
Research Questions	41
Need for the Study	42
Summary	43
CHAPTER 3: METHODOLOGY	44
Research Method	44
Research Design	45
Data Analysis	47
Presentation of Results	48
Site Permission	48
Limitations	48

	7
Summary	49
CHAPTER 4: FINDINGS	50
Site Permissions	50
Individual Consent and Participation	51
Roles of Participants	51
School Age Levels of Involvement	52
Manifestation of Anticipated Problems	52
Manifestation of Other Problems	54
Staff Perceptions Pre and Post Implementation	56
Implementation Planning	57
Open-Ended Experiences	58
Fear of Dogs.	60
Allergies.	61
Program Supervision.	61
Sanitation.	62
Animal Maintenance.	63
Animal Welfare.	63
Child Safety/Welfare.	63
Legal Implications and Liability.	64
Maintenance Costs.	64
Cultural Differences.	64
Alienation.	64

Breed types.	65
Animal supervision.	66
Distraction from Academics.	67
Animal Behavior/Training.	68
Equitable Access.	69
Knowledge/Misconceptions.	70
Post-Traumatic Stress Disorder.	70
Conclusion	71
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS	73
Summary of Findings	74
Most Noteworthy Problems	75
Fear of Dogs.	75
Allergies.	76
Proper Supervision.	76
Less Noteworthy Problems	78
Animal Maintenance and Maintenance Costs.	78
Legal Implications and Liability, Cultural Differences, and Animal Welfare.	79
Sanitation.	79
Child Safety/Welfare.	79
Other Problems	80
Animal Supervision.	80
Equitable Access.	81
Animal Behavior/Training.	81
Breed Specific Problems.	82
Misconceptions about Therapy Dogs.	82
Alienation of Individuals.	83

8

Post-Traumatic Stress Disorder.	83
Distraction.	84
Validation of Other Findings.	84
Perspectives Before and After Implementation	85
Limitations	86
Implications	87
Theoretical Implications	88
Practical Implications	89
Recommendations for Further Research	91
Conclusions	92
REFERENCES	94
LIST OF TABLES	107
LIST OF FIGURES	108
APPENDIX A: INTRODUCTORY EMAIL	109
APPENDIX B: SURVEY INTRODUCTION AND CONSENT	110
APPENDIX C: SURVEY QUESTIONS	112
APPENDIX D: FOLLOW-UP EMAIL	114

#### **Chapter 1: Introduction**

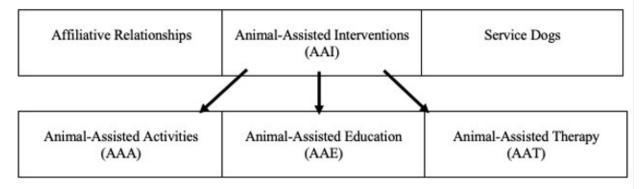
As the phrase goes, "Dog is man's best friend". When humans first started working with dogs, they were used in many different jobs, from farming to hunting, to personal protection and military operations. As the relationship between dog and man evolved, an additional responsibility was informally charged to many canines — Therapy. One example of this is Smoky, a Yorkshire Terrier. In 1944, during World War II, she was found in a foxhole, abandoned and malnourished. She was adopted by a United States soldier, Bill Wynn, and nursed back to health. Ironically, Smoky returned the favor when Bill fell ill with dengue fever. She stayed at his side all night. During the day, Smoky would complete rounds with the nurses. The medical staff noted how Smoky lifted the spirits of the ill and injured with her presence. When Bill recovered, he dedicated his time to visiting hospitals with Smoky. While this was not the first time a dog provided therapeutic benefits, the news of Smokey spread quickly. By 1947, American citizens had donated about 700 dogs to comfort wounded soldiers (Frankel, 2014).

The story above introduces us to the human-animal bond, also called the human-animal interaction. It could simply be described as the relationship between a human and animal; however, Griffin et al. (2011) defines it as a "mutual and dynamic exchange" resulting in "psychophysiological effects on humans." To further explain the human-animal interaction, Thayer & Stevens (2019) provide a taxonomy for classification. The first category is *affiliative relationships*. An example of which is a typical relationship between a domesticated pet, or companion animal, and its owner(s). This category includes the emotional support dog. The second category is *animal-assisted interventions* (AAI). There are three subsets to AAI. They are *animal-assisted activities* (AAA), *animal-assisted education* (AAE), and *animal-assisted therapy* (AAT). Therapy dogs and facility dogs promote AAI. Finally, the third and final

category is service dogs. The specific service provided by this dog is directly related to the owner's disability. *Service dogs* are specially trained to aid its owner by providing a specific service to their owner. A common example of a service dog would be a seeing eye dog. Figure 1 illustrates the relationship between categories.

# Figure 1.

Human-Animal Interactions



Note. Adapted from Thayer & Stevens (2019).

AAI is common in schools, usually benefiting many people, as opposed to affiliative relationships and service dogs. Each of the three subcategories of AAI falls within the scope of education. AAA occur without structure, with the intent of improving quality of life, motivation, or social interactions. AAE occurs when structured, goal-oriented educational outcomes utilize the animal in ways that support empirically-recognized programs. Finally, AAT is conducted with individuals to deliver therapeutic services based on their identified individual needs (Thayer & Stevens, 2019).

Many people may recall having or knowing of someone who had a classroom pet. Schools have been known to incorporate various creatures including many types of mammals, reptiles, and even equine into classroom experiences. Schools and the public usually refer to all dogs used for animal-assisted interventions as "*therapy dogs*" even though they may not provide targeted therapy. For the purpose of this study, the terms therapy dog and facility dog may be interchanged.

#### **Background of the Study**

While it is known by psychologists, Dr. Sigmund Freud (1856-1939) used his dog as an aide during therapy sessions, however, Dr. Boris Levinson has been credited as the pioneer of AAT. In the 1960s and 1970s, Levinson described his dog as a "social lubricant" between himself and his patients, providing for a more relaxed environment. Both Levinson and Freud concluded that having a dog in therapy sessions seemed to set people at ease and improved communication between therapist and client (Coren, 2013; Friesen, 2009). This was only the beginning. In 1980, there were fewer than 20 documented therapy dog programs in operation worldwide. By the year 2000, the number of therapy dog programs was estimated to be over 1,000. In 2007, Bercovitz et al. found that 58.6% of hospice programs in the United States had included canines for AAI within their programs.

Over time, therapy dog programs have extended into schools, medical facilities, mental health treatment facilities, nursing facilities, retirement homes, and government facilities (Alliance of Therapy Dogs, 2017; Pessah, 2017). In 1995, bringing dogs into classrooms to support reading was a recent phenomenon (Jalongo et al., 2004). One of the earliest documented uses of a therapy dog for AAI in an educational setting came after a school shooting in Oregon, in 1998, when a Husky named Bear visited traumatized students (Chandler, 2001).

In 1999, The Reading Education Assistance Dogs (READ) initiated the first AAI/AAE program to help children improve reading skills (Intermountain Therapy Animals, 2019). READ dogs are trained and certified as "therapy dogs." They simply accompany children as the read stories to the dog. By 2002, Bonding, Animals, Reading, Kids, and Safety (BARKS), a spin off

program of READ, had been established and spread nationwide, encouraging children to "teach" the dogs to read. Sit, Stay, Read began in 2003, promoting reading fluency. In 2005, Canine Assisted Reading Education (CARE) became yet another volunteer organization to promote reading to dogs in schools. Also in 2005, the Good Dog Foundation began using the READ program in libraries in New York. Their successes with at-risk children in Brooklyn helped change New York's state law to allow certified therapy dogs into schools (Stone, 2008).

A rapidly growing body of research supports the use of therapy dogs in educational settings. As a result, today, one may read seemingly unlimited articles in newspapers and educational publications with titles such as:

- "Carnegie Elementary School students read to therapy dogs in new reading program" (DelPilar, 2019)
- Beaver Area therapy dogs aid mental health counseling" (Schaeffer, 2017)
- "Local dentist relies on therapy dog named Smudge to provide comfort and affection during visits" (Gable, 2019)
- "Dogs go to school as part of social-emotional learning programs" (Jacobson, 2018)
- "Northwest Indiana School District puts dogs into every school this year" (Schwartz, 2012)
- "Cute and calm: Therapy dogs offer services at reading event" (McDonald, 2019)
- "Therapy pup brings smiles to students in county schools" (Ravina, 2019)
- "Izzy she sweet? Moody (the) therapy dog comforting kids in schools" (Thomas, 2020)
- "These dogs helped Parkland students cope with tragedy..." (Shannon, 2019)

# **Problem Statement**

Much existing research supports the use of therapy dogs in education to support academic, physiological, social, and emotional needs (Glenn-Applegate & Hall, 2017; Friesen, 2009; Kotrschal & Ortbauer, 2003). Researchers have called therapy dogs "social catalysts" (Berry et al., 2013) and referred to them as a "springboard for learning (Friesen, 2009). These studies provide compelling evidence to support the use of therapy dogs in schools.

Therapy dogs can be found in classrooms across the globe. Research has been conducted to identify concerns related to the use of therapy dogs in schools. Jalongo et al. (2004) and Jalongo (2008) identified concerns related to canine visitation in schools and hospitals. Concerns included:

- Sanitation
- Safety
- Allergies
- Cultural differences
- Fear of dogs

Even though these concerns have been documented, it has not been determined whether the concerns have been perceived as problems upon therapy dog implementation in K-12 schools, or if they remain only general concerns. It is also possible that unanticipated problems have been experienced. Problems such as these can have an effect on perceptions of stakeholders working with therapy dog programs.

Without the data from this study, school staff and administrators may be missing important considerations when planning for the implementation of therapy dog programs in their schools or classrooms. They may also be focusing on concerns that have not manifested in over 20 years of school implementation. It is possible that schools are missing out on the many benefits of therapy dogs, especially for those with greater learning and emotional challenges. Having data about which problems have occurred and which problems are only concerns, stakeholders may be able to better plan for policy and implementation related to the use of therapy dog programs.

# **Purpose of the Study**

This study considered therapy dogs within the perspective of K-12 public schools in Pennsylvania. The purpose of this study is to fill a void of information by identifying current problems related to therapy dog programs implemented in K-12 schools in Pennsylvania. Objections and problems were be reported by public school staff members, handlers, and therapy dog organizations, both before and during implementation. The data was compared to that from existing research. This study also sought to identify if there were shifts in the perceptions of those participants during implementation.

Given the research-backed benefits and prevalence of therapy dogs in education, educational stakeholders should be aware of not only the perceived problems related to therapy dogs in public schools but also any problems and objections that arose during implementation. This research answered this and the following questions:

- How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?
- 2. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously?
- 3. Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

Results from the study may better prepare school stakeholders to more successfully implement therapy dog programs so that students will receive proven benefits attributed to the application of therapy dogs in school settings. Results will better align anticipation and reality so that educational leaders can make informed decisions, remove potential barriers, and ensure the well-being of all those involved.

## Limitations

- The first limitation is due to the relatively small distribution of surveys. While the state of Pennsylvania has 500 school districts and 29 Intermediate Units, the responses that come from schools that have implemented therapy dog programs may not be representative of the entire community.
- Qualitative reporting relies on the participant's ability to self-disclose concerns or problems experienced during the implementation of therapy dog programs. Inaccuracies in recall or perception can influence the data.
- Potential biases may exist from the researcher, who is an advocate of therapy dogs in educational settings, or in the results from participants who may or may not favor therapy dog implementation.
- 4. A geographic limitation may exist because only schools in Pennsylvania were surveyed.
- 5. All schools and persons were granted complete anonymity. If a particular school or district had a significantly more responses, it could sway the data in one direction.
- 6. This limitation was added after coding the data. Confounding factors have been identified based on perception, which may have led to overlap between categories or omission in some categories.

## **Definition of Terms**

*Therapy dog:* A dog that has received recognition from a certifying agency that provides therapy or activity that benefits all those with whom they interact, typically in a facility such as a school or a hospital (American Kennel Club, 2017)

Animal-Assisted Therapy (AAT): A goal-directed intervention with an animal to improve the cognitive, emotional, social, or physical function of a person (Thayer & Stevens,

2019 & Giuliani & Jacquemettaz, 2017)

*Animal-Assisted Activity (AAA):* A voluntary activity with an animal for motivational, recreational, or educational reasons (Thayer & Stevens, 2019)

*Animal-Assisted Intervention (AAI)*: Using animals to assist in activities, therapies, or other activities (Thayer & Stevens, 2019 & Glenk, 2017)

*Service dog*: A specially trained dog to provide a specific function or task for one individual. A service dog is the only dog with federal protections granted by the Americans with Disabilities Act (ADA) of 1990 and later, 1994 (United States Department of Justice, 2014)

*Facility dog:* A dog that is regularly present within an institution. It may or may not perform therapy or other activities (Paws Teams, 2021)

*Emotional support dog:* A dog that provides comfort specifically to one person (Reisen, 2021)

Assistance dog: Any therapy dog, service dog, facility dog, or emotional support dog (Service Dog Express, 2014)

*Human-animal interaction:* Exchanges between people and animals that have psychophysiological impact (Griffin et al., 2011, pp. 3–9)

# **Summary**

The human-animal interaction has been defined as both mutual and dynamic, dating back to the time of Sigmund Freud's studies. The use of AAI has spread from medical, clinical, and psychological applications to common everyday occurrences in educational settings. There is sufficient data available supporting the specific use of dogs to provide various activities, educational programming, and therapy to children. This body of research continues to grow. Currently missing from this body of research is information regarding concerns related to therapy dog programs, both before and during implementation. The objective of this study is to help fill that void in the current research. Educators have a responsibility and need to make informed decisions to ensure the well-being of all who are involved.

#### **Chapter 2: Literature Review**

Today, therapy dogs can be found in many different environments: government facilities, private clinical practices, public and private schools, colleges and universities, courthouses, and more. The body of evidence, both empirical and anecdotal, supporting the use of therapy dogs continues to grow. Studies have demonstrated positive effects of therapy dogs on personal health, psychological health, social and emotional well-being, and self-esteem and confidence.

Therapy dog programs seek the benefits of the human-animal interaction promoting human health, both mental and physical, and enhancing learning opportunities. Humans experience these benefits by participating with therapy dogs in reading programs, classrooms, counseling and therapy sessions, hospice programs, rehabilitation settings, residential and correction facilities, and even during crisis situations (Friesen, 2007, Rae & Boe, 2008, & Levinson, et al., 2017). Existing studies related to public schools are commonly centered around reading programs, special education support, stress reduction, and motivation.

The research available to support the benefits in educational settings appears to be growing. Therapy dogs provide a range of potential benefits to students and even to entire school communities when programs are successfully implemented (Charlotte Helen Bacon Foundation, 2014). Despite the benefits, there are concerns related to the implementation of therapy dog programs in schools. Concerns and objections related to the use of therapy dogs in schools are derived from people's perceptions prior to implementing a therapy dog program.

# **Distinguishing Therapy Dogs**

Some may confuse the different categories of dogs in the human-animal interaction service dogs, therapy dogs, facility dogs, and emotional support dogs. A service dog is trained to do a specialized job for a person with a disability. The specialized job is related to the disability. These dogs are highly trained for a specific purpose such as providing seizure alerts and responses, assisting with mobility, assisting with deafness, and providing various options for persons with autism. Service dogs are the only dog category with rights protected by law, specifically the Americans with Disabilities Act. Service dogs cannot be denied entry to any public place, including schools unless the animal causes disruption (*Commonly Asked Questions About Service Animals in Places of Business*, 2017), is not "housebroken", or is not under control of the handler (U.S. Department of Justice, 2013).

Some schools utilize facility dogs. These dogs often only participate at one designated location. A facility dog may have been purchased from a service dog organization, or it may be certified as a therapy dog. If purchased from a service dog organization, it will likely have two to three years of intensive training. The dog fulfills the role of AAI performing activities, serving as a morale booster, mascot, or providing comfort (*Therapy Dogs United - About Us*, 2011).

Like any other dog who serves the purpose of AAI, therapy dogs must be good-natured, well-trained, and certified. They offer their services in schools, clinics, medical facilities, and hospice settings, and more. Therapy dogs are trained and certified, but have fewer requirements, a shorter duration of training, and cost less money than dogs that are purchased through service dog organizations. The Alliance of Therapy Dogs (2017) recommends assessing a prospective therapy dog for sensitivity to touch, sight, and sound to ensure that it isn't easily startled. The dominance or submissiveness of the dog must also be considered during selection. "The animal should be inherently gentle and placid while possessing an affiliative nature with a strong desire to interact directly with unfamiliar humans" (Crowley-Robinson & Blackshaw, 1998, p. 102).

Emotional support dogs, facility dogs, and therapy dogs may be denied access to any location. Emotional support dogs have an affiliative relationship in which they provide a type of

therapeutic support to only the owner. These dogs are considered companion animals. There is no training or certification for emotional support dogs, even though the owner may possess a recommendation from a physician or psychiatrist (*Service Dog Express*, 2014).

# **Organizations and Certification**

There is much research available to demonstrate benefits for working with animals in various fields, from counseling and education, to hospitals and hospices. Dogs that serve in this capacity are typically required to have training or certification from an organization. It is unknown exactly how many of these organizations exist in the United States; however, the American Kennel Club (AKC) recognizes 180 therapy dog organizations (Serpell et al., 2020). The AKC maintains a list on their website (Stepanek, 2017). Examples of these organizations include:

- Therapy Dogs International (<u>https://www.tdi-dog.org/default.aspx</u>)
- Pet Partners Dog Therapy (<u>https://petpartners.org</u>)
- Alliance of Therapy Dogs (<u>https://www.therapydogs.com</u>)
- Love on a Leash (<u>https://www.loveonaleash.org</u>)
- Bright and Beautiful Therapy Dogs (<u>https://golden-dogs.org</u>)

Serpell et al. (2020) conducted a study of organizations in the United States that deliver AAI to determine the most widely used policies and practices for therapy dog certification. They found that the therapy dog industry is largely self-regulated, as most organizations use their own criteria. Most organizations require re-evaluation of certified dogs every two to three years. The majority of organizations required dogs to be at least one year of age before certification. Nearly all required dogs to be kept on a leash. Seventy-five percent of the organizations had a written policy regarding acceptable and non-acceptable training methods. Serpell et al. (2020) identified several major omissions from many therapy dog organizations related to animal and human welfare. First was that only about half of the organizations gave time limits on the duration of services during visits, which could place too much stress on a dog. The second is concern that the diet of therapy dogs can put the dog and humans at risk. For example, if a dog is fed raw meats, it could lead to the transmission of parasites. Third, few organizations addressed guidelines on how to handle dogs that may be taking antibiotics or medications that can reduce immune system response. Twenty-five percent of organizations did not provide information on zoonotic and parasitic transmission and prevention. Additionally, this group of researchers found the lack of overall consistency between therapy dog organizations disturbing.

The data collected in this study is very important when it comes to therapy dogs in educational settings. The policies and practices discussed may assist school administration and school boards in developing policies as related to the participation of therapy dogs in their buildings. Best practice recommendations could also be developed for schools based on this data. There is no nationally-recognized governing body. Therapy dog certifications vary widely between therapy dog organization. When considering which agency to use, one should compare the requirements because there is no standard protocol for testing and handling. There is no governing body for these certifications.

#### **Non-Educational Benefits**

The initial application of therapy dogs began in non-educational settings. After World War II, the United States government used therapy dogs to provide support and comfort to wounded soldiers (Frankel, 2014). Both Freud and Levinson used dogs with their clients while practicing psychology long before therapy dogs entered the educational settings (Coren, 2013 & Friesen, 2009).

#### *Hospitals*

There has been positive research about the use of therapy dogs in medical settings. Yap, Scheinberg, and Williams (2017) stated that therapy dogs can assist with movement, improve emotional regulation, and act as a calming agent. The dogs even assisted in diverting aggressive behavior and supported other positive behaviors. Hospital staff reported that the dogs helped provide a sense of normalcy in a situation that can be stressful for patients.

Kline et al. (2019) had hospital emergency room doctors identify 86 patients they believed to be showing significant anxiety. The selected patients were welcomed to interact with a therapy dog. Patients reported a 35% decrease in anxiety, as well as a significant decrease in pain. They concluded that therapy dogs can significantly reduce the perception of anxiety in emergency rooms.

Lastly, Whiteman (2014) cited a study from Loyola University. Here they used therapy dogs to assist patients with pain relief after joint replacement. While postoperative pain is not the same as an anxiety disorder, there are psychological stressors that are part of recovery. The results demonstrated that patients required 50% less pain medication than the control group.

#### **Doctors and Therapists**

Stefanini, Martino, Bacci, and Tani (2016) studied 40 children with acute mental disorders over 14 months. The children, who were mostly diagnosed with mood disorders, anxiety disorders, and eating disorders, participated in weekly group and individual therapy sessions involving therapy dogs. The results showed that therapy dogs reduced emotional and behavioral symptoms, improved social interactions, helped the children develop an

understanding of cause and effect, and well as an improvement in their overall psychological functioning.

Giuliani and Jacquemettaz (2017) conducted a study on 53 patients to determine if therapy dogs would reduce anxiety levels in people with learning disabilities. They cite that depression and anxiety are two to four times more likely to be present in those with learning disabilities than those without learning disabilities. The patients completed the STAI (State-Trait Anxiety Inventory) both before and after interactions with the dog. The results showed a decrease in the anxiety of the study participants. There is, however, a concern with this study. It appears as though no control group was used. Due to this limitation, there is a possibility that the outcome is not valid.

In another recent study, 20 children, 4 to 11 years old, completed surveys related to anxiety upon entering the dental office. They were then given 15 minutes with a therapy dog in a waiting area. A Wilcoxon test was given afterward, demonstrating that the therapy dogs helped 80% of the children reduce anxiety while waiting to see the dentist (Nammalwar & Rangeeth, 2018).

In another study, 12 patients diagnosed with major depression were given two 30-minute sessions with a Therapy Dog. They used the STAI to determine that the use of therapy dogs causes "highly significant" reductions in anxiety (Hoffmann et al., 2009).

Gadomski et al. (2015) conducted a study in a primary care facility. Over an 18-month period, they administered the SCARED-5, a five-item questionnaire regarding anxiety, to 643 children. While they did not bring in a therapy dog to meet with the children, they did find some interesting results pertinent to this literature review. Families with dogs in the home had no significant difference in Body Mass Index, amount of screen time, or physical activity. They did find that having a dog in the home was associated with a 9% decrease in an elevated SCARED-5 score. In other words, children with a pet dog were less likely to have symptoms of anxiety.

# Courthouses

Courthouse facility dogs assist in comforting witnesses of crimes and providing emotional support in family court proceedings. As of June 19, 2020, there were 244 dogs working in 40 states. Courthouse dogs also work in Canada, Chile, Australia, and Europe (*Courthouse Dogs Foundation*, 2018). In the United States, dogs must be certified as therapy dogs or facility dogs to be allowed on site. During the time that the therapy dog is present, it must be accompanied by its certified/trained handler (Courthouse Dogs Act, 2019).

# Nursing Homes, Rehabilitation Centers, and Hospice

Klimova et al. (2019) have documented that Animal-Assisted Activities provide the following benefits for persons in nursing homes, in rehabilitation centers, and those receiving hospice care: It can contribute slightly to physical activity, improve short-term memory, enhance eating habits, and reduce loneliness. Gee et al. (2017) cite many additional sources that show the connection between Animal-Assisted Activities and improved cardiovascular health, decreased anxiety and depression, and increased social support.

Therapy dogs provide a broad scope of services in various non-educational settings. The studies discussed above are only a sampling of those that have been published. Therapy dogs provide benefits to individuals at various stages of life, physical health, mental health, and emotional health.

#### **Educational Benefits**

Friesen (2009), who was one of the earlier researchers examining the use of therapy dogs in education, found many psychological benefits for school-age children. Some of these benefits

include: physiological, emotional, and social support; reductions in behavior and emotional distress; increased self-esteem; and increased alertness. Therapy dogs were also found to improve children's attitudes toward school and increase communication.

According to Glenn-Applegate & Hall (2017), using a therapy dog in a preschool setting provides the opportunity for children to develop empathy, caretaking skills, and respect for living things. Therapy dogs have been found to encourage social interaction (Freisen, 2009 and Kotrschal & Ortbauer, 2003). Friesen also stated that therapy dogs serve as a springboard for learning. Kotrschal & Ortbauer (2003) conducted a study in Austria with 24 students, mean age of 6.7 years, and concluded that having a dog in the classroom improved the classroom climate, increased interest from formerly withdrawn students, and reduced behavioral extremes. Lane and Zavada (2003) found that the implementation of therapy dogs can increase self-confidence of young readers.

#### **Reading** Achievement

There are sufficient studies that prove that using a therapy dog to assist in reading activities has a positive effect on reaching achievement. Briggs (2018) and Jalongo, et al. (2004) concluded that the implementation of therapy dog programs can increase students' reading ability by two grade levels over the course of a year. Jalongo et al. (2004), found that some children in the R.E.A.D. program improved as many as four grade levels in the course of a year. Shaw (2013) found that ten out of ten of the students in a study of the R.E.A.D. program showed improvement, while Weller (2015) found a 12% increase in reading proficiency among students in elementary school through college. When comparing reading scores of students interacting with therapy dogs and their respective control groups, scores were significantly higher in the groups that interacted with therapy dog (Kathy et al., 2014, le Roux et al., 2014 and Levinson et

al., 2017). In 2017, Ko conducted a pilot study that found reading to therapy dogs improves literacy attitudes in second-grade students. Some examples of established dog therapy reading programs (Stepanek, 2017) include:

- Bow Wow Read (https://www.thedogalliance.org/about)
- Sit, Stay, Read (<u>https://www.sitstayread.org</u>)
- R.E.A.D. (<u>http://www.therapyanimals.org/R.E.A.D.html</u>)
- Tail Waggin' Tutors

(https://www.tdi-dog.org/OurPrograms.aspx?Page=Children+Reading+to+Dogs)

• Paws for Reading (<u>https://www.pawsforpeople.org</u>)

## Mental Health Benefits

In 2018, 70% of students with mental health disorders were undiagnosed. At least 10 million teenage students needed professional help with mental health issues including, but not limited to depression, anxiety, and bipolar disorder. Half of mental health disorders begin prior to the age of 14 (Walker, 2018).

The Individuals with Disabilities Education Act ensures that students who are eligible for special education services are also provided related services that meet their needs. Many children with disabilities related to their mental health are diagnosed with an emotional disturbance or other health impairment, such a generalized anxiety disorder (Eggert et al., 2015). School guidance counselors have some training to assist student with mental health disorders, but usually that training is limited to short-term therapy, crisis interventions and risk assessment (Walker, 2018).

Studies have demonstrated that even brief interactions with dogs can lower stress levels in children, reduce anxiety, decrease negative mood, and support a positive mood (Crossman et al., 2015). Granger et al. (2015) conducted a small study including two preteen children with emotional disturbances. They concluded that AAT helped reduce aggressive and negative behaviors. In 2012, Dietz et al. conducted a study of 153 children, ages 7-17 who had been sexually abused. Researchers concluded that using AAT in group sessions helped at-risk children deal with trauma.

### Social-Emotional and Behavioral Learning

After conducting a study with 21 eight-year-olds, Dicé et al. (2017) concluded that therapy dogs can act as an "Emotional catalyst that can speed up clinical processes..." (Dicé et al., 2017, p. 456) in a psychological setting. It appears logical that these benefits might carry over into an educational setting. Malchik (2015, para. 3) cites evidence showing "the inability for stressed students to learn." Similarly to Dicé et al. (2017), Malchik (2015, para. 16) states that a dog can serve as a "stress reducer and catalyst for helping students deal with trauma or on-going situations..." Beetz (2013) and Anderson & Olson (2006) state that the implementation of therapy dogs can result in an improvement in positive attitudes. This is likewise supported by Bassette & Taber-Doughty (2013), who identified more willingness of students to read, and Esteves & Stokes (2008), reported a decrease in negative interaction, an increase in positive interaction, and an improved relationship between the teacher and students.

K. L. Anderson & Olson (2006) conducted an eight-week study of self-contained
classrooms with six students diagnosed with severe emotional/behavioral disorders.
Emotional/behavioral disorders, diagnosed in children under 18 years of age, are mental health
issues which affect an individual's ability to function in functions of daily living routines.
Qualitative data were recorded when a child went into crisis. They found that the dog contributed

to the overall emotional stability of all six students. The students used the dog to assist in remaining in control of themselves, to reduce further escalation, and de-escalate more quickly.

Rae and Boe (2008) conducted a single-subject study using A-B-A-B design. The participant was an 18-year-old student diagnosed with an Emotional/Behavioral Disability (EBD). The data collected showed a 46% decrease in off-task behavior when comparing the intervention to the baseline. Bassette & Taber-Doughty (2013) lead a dog-based reading intervention program. All three students, diagnosed with EBDs who participated in the program experienced moderate to significant improvements in on-task behavior. Researchers recorded the percent of intervals in which the participants were on-task. The first student had a baseline estimation of 25% on-task behavior, with 95% during the intervention. The next student had an estimated baseline of 73% on-task behavior, with 88% during intervention. Finally, the third student increased from 71% to 93% on-task behavior. All students stated that they enjoyed reading to the dogs. It was also noted that school attendance among these students had risen during program implementation.

#### Autism Spectrum Disorder

When it comes to providing canine support to individuals with autism spectrum disorder (ASD), a service dog may be selected if a person needed intervention for a behavior such as self-harming. In contrast, a therapy dog may provide an Animal-Assisted Activity to support academic or social behaviors (Cole et al., 2016).

Autism Spectrum Disorder is a neurodevelopmental disorder that affects an estimated one in 54 children (Maenner et al., 2020). Therapy dog interventions might provide a powerful multisensory stimulus that could increase social interactions between students with ASD and their community members (Watson, 2016). Upon review and discussion of six published studies, Berry et al. (2013) concluded that when working with students identified with ASD, dogs can act as a "social catalyst" by promoting interaction with others. Berry et al. (2013) suggests that using therapy dogs as an intervention allows therapists to manipulate the emotional aspect of the human-animal relationship to help one overcome a characteristic of their disability.

In 2015, Stevenson et al. cited several studies that show an increase in interactions among students with ASD while working with animals. Two studies show a decrease in the severity of ASD characteristics, and three demonstrate a reduction in problem behaviors. Stevenson et al. also conducted an independent study involving three students with ASD to determine the effect of a dog on motivation for communication. They concluded that the students had demonstrated an increase in visual interest, vocalizations, and interactions resulting from the intervention of therapy dogs—additionally, a decrease in isolated and ritualistic behaviors had been observed. Silva et al. (2011) conducted a single case study in which dogs were used to successfully support one-to-one activities promoting prosocial behaviors. They found that students with ASD had an increase in visual interest, smiling, and affectionate behaviors in general. Therapists participating in this study also observed a decrease in negative behaviors displayed by their clients.

### Motivation

Alexandra Protopopova, a behavior analyst and professor of companion animal science, believes that therapy dogs may provide a unique form of motivation. Protopopova suggests that therapy dogs may provide a non-contingent reward with just their presence, while also offering a contingent reward when a student completes a task (Watson, 2016). When comparing dogs with other reinforcements such as iPads, which tend to diminish in value over time, she speculated that "with a dog, you might see the exact opposite situation over time where the child grows attached to the dog and the quality of the reward grows as well." (Watson, 2016, para. 9). In 2019, Protopopova et al. conducted research comparing contingent and non-contingent access to therapy dogs as motivation for children with ASD to complete academic tasks. Four out of five participants responded best to the use of a therapy dog as a contingent reward. One out of those five children responded better to non-contingent access. While all students were motivated by the reward of the therapy dog, the outcome was consistent with other research on motivation. Contingent rewards tend to yield better motivational results. Bassette & Taber-Doughty (2013) expressed that the stronger the connection with a dog, the more motivation it can yield.

#### **Post-Secondary Education**

College students in Canada interacted with dogs for up to 10-15 minutes in one session. Using the STAI, students reported feeling less homesick and more general satisfaction with life after interacting with the dogs. In addition to the STAI, Wood et al. (2018) also collected and measured salivary and serum cortisol levels to monitor biological markers. These biological markers measure the body's reaction to stress, indicating that these researchers did not rely on perception alone. The "optimal levels" were reached after as little as five minutes with the dogs and lasted up to 45 minutes after the interaction.

Binfet (2019) currently runs a 60-dog program at the University of British Columbia designed to reduce stress and student well-being. He monitored 1,960 students over three semesters. Students self-reported their stress levels before and after interacting with the therapy dogs. The typical stay for students was 35 minutes. Students were presented with a Likert-like scale of one through five, with five being the most stressful. The average scores showed a reduction from 4.47 to 1.73 on the same scale.

Grajfoner et al. (2017) clearly believe the benefits of therapy dogs, as evidenced by their study. Using 132 college students, they provided separate interactions with the dog, the handler,

and the dog and handler together. The moods of the students had the most significant gains when the students were alone with the dogs. It appears it is not the interaction with the dog handler that affects mood.

# **Financial Benefits**

Grajfoner et al. (2017) stated "Dog-assisted intervention appears to be a suitable, cheap, and effective alternative method to sustain student mental health and wellbeing." Wood et al. (2018) noted that "this may be a very cost-effective way to deliver stress management to study groups" (Wood et al., 2018, p. 257). Binfet (2019) calls therapy dog programs "low-cost", particularly due to the number of volunteer handlers from the community. Kotrschal & Ortbauer (2003) conclude that the presence of a dog in a classroom could positively stimulate social interactions in children and provide a relatively cheap and easy means of improving teaching conditions.

# **Concerns related to Therapy Dogs in Educational Settings**

As of June 28, 2020, four references were found which discussed concerns related to the implementation of therapy dogs. Cumulatively, the three (Friesen, 2009; Jalongo et al., 2004; and Ryan 2002) cited the following concerns:

- Sanitation
- Safety
- Allergies
- Cultural differences
- Fear of dogs
- Legal implication and liability
- Proper supervision

- Animal maintenance
- Animal welfare
- Maintenance costs

Sanitation concerns include the transfer of bacteria, viruses, parasites, and fungi between animals and humans; also referred to as zoonotic diseases (Jalongo et al., 2004). During the recent Covid-19 pandemic, there were many concerns related specifically to the transmission of this disease, as evidenced by the American Kennel Club (AKC) publishing "Expert Advice" articles discussing the likelihood that a dog would contract or spread the Covid-19 virus, as well as other related topics (AKC Staff, 2021). According to the Centers for Disease Control and Prevention (2021), there is no evidence that a pet will transmit Covid-19. In addition to zoonotic disease, a second sanitation concern is bodily fluid. On a rare occasion, even a well-trained and certified therapy dog can vomit, urinate, or defecate on school property. Lastly, if a dog is not properly groomed, animal odor may be a concern related to sanitation (Charlotte Helen Bacon Foundation, 2014).

Safety is an important concern related to bringing dogs into schools. A survey of a California public schools in 2002 reported that 36.1% of the respondents were concerned about potential harm to students and staff (Mclean, 2002). Dog bites are often a problem during childhood. Because young children are usually smaller than adults, they are more likely to be bitten in the head, face, or neck. Larger children and adults are usually bitten on their hands, arms or legs. A dog bite can lead to disfigurement, emotional trauma, and other medical complications (Jalongo, 2008).

Dander is a well-known allergen that is produced by animals, especially dogs. It is

possible that allergic reaction could create an uncomfortable reaction for participants (Jalongo et al., 2004). Mclean (2002), cites that 40.2% of respondents were concerned about allergies.

Cultural differences refer to the fact that not all societies believe that dog is "man's best friend." Some cultures, many of them from the middle east and south-east Asia, strongly discourage interactions with dogs (Friesen, 2009 & Jalongo et al., 2004). This can create objections to therapy dogs within schools in some communities.

Whether from past experience, unfamiliarity, or perception, some people have a fear of dogs. Both Jalongo, et al. (2004) and Mclean (2002) cite this as a common objection. Objections or concerns related to the fear of dogs was reported at 25.8% of respondents (Mclean, 2002).

Understanding the fear of dogs and the fact that dogs are capable of inflicting damage on humans and/or property, liability and legal implications can be a concern. In fact, this was the most common concern reported by Mclean (2002), with a total of 50.5% respondents selecting liability and legal implications in the survey.

Second in importance, selected by 43.3% of respondents in the same survey, was proper supervision. Proper supervision is the oversight and management of the therapy dog program. It is assumed that with proper supervision, program risks or complications can be avoided. It would also include program development and monitoring.

The remaining three areas of concern are animal maintenance, animal welfare, and maintenance costs. Animal maintenance includes daily, routine care, such as grooming, walking, feeding, and housing. Animal welfare refers to any potential harm or stress to the dog. Finally, maintenance costs include on-going expenditures for food, medical care, and supplies (Mclean, 2002).

# **Mitigation of Concerns**

The Charlotte Helen Bacon Foundation (2014), Friesen (2009), and Jalongo et al. (2004) offer ways that the concerns can be mitigated. Friesen (2009) provides the most detail and greatest quantity of proposed precautions. To decrease sanitation concerns, ensure hand washing or sanitizing of participants before and after interactions with the dog. Routine examinations and vaccinations of the dog are also important to address potential disease and hygiene. Regular bathing and grooming of the dog are required, as is washing of any bedding or blankets the dog may use (Friesen, 2014). The use of disposable pads for a dog to lay on is another option to promote cleanliness (Jalongo et al., 2004). Most certified therapy dogs are trained not to lick or scratch, helping to control potential infection. Research by Brodie et al. (2002) shows that the dangers of zoonotic disease in healthcare settings are minimal if responsible safety measures are observed.

To reduce allergens, one should choose a dog carefully. Some breeds shed less than others, while some are known to present fewer allergens, and are considered hypoallergenic. Proper bathing and grooming can also reduce allergens released from the dog. Many therapy dog organizations have minimum requirements for cleanliness and grooming (Grové et al., 2021). Ensuring that the handler and dog use the same exit and entrance from the building will reduce the spread of allergens (Friesen, 2014). Hand washing after contact with the dogs will also help (Friesen, 2014 & Grové et al., 2021). Jalongo et al. (2004) suggest meetings take place in a large auditorium or outdoors to increase airflow which can disperse allergens. Grové et al., (2021) also suggest that technology, such are video recording or live feeds, can be applied to include those with allergies. Informed consent is recommended by Jalongo et. al. (2004), while Grové et al., (2021) suggests reviewing medical records to identify students with allergies. The welfare of everyone involved is critical. Prior to interaction with the therapy dog, children should have instruction on how to appropriately interact with a dog in a gentle manner. Procedures and expectations should be clearly and firmly established (Friesen 2009 & Grové et al., 2021). Dogs should be certified by a valid therapy dog organization (Jalongo et al., 2004). Many therapy dog organizations require reevaluation every two to three years to maintain certification. In case an injury should occur, there should be a pre-existing emergency plan to be followed (Grové et al., 2021).

To ensure the safety of the therapy dog, access to water and a kennel should be provided. The handler must monitor the dog for signs of stress. Dogs may indicate stress by constant licking, trembling, pulling back its ears, and tucking its tail between its legs. Treats should only be provided under the supervision of the handler (Friesen, 2014). Most certifying agencies have evaluations to ensure proper training of both the animal and the handler so that the handler knows how to appropriately monitor the dog for stress (Jalongo et al., 2004). Children should be taught how to interact appropriately with a dog and should never be left unsupervised with a dog (Grové et al., 2021).

Both adults and children may have a phobia related to dogs, whether caused by a past experience or another underlying cause. This is another reason why informed consent is recommended. When working with children, consent must come from both the parent(s) and the child (Friesen, 2014). It may also be possible to systematically desensitize an individual, if consent if given (Jalongo et al., 2004). A second reason why informed consent is recommended is in case of cultural differences. Some cultures, for example, see dogs as unclean, and therefore, must be avoided (Friesen, 2014). If school staff work with members of the community, it may be possible to arrive at a mutual agreement (Jalongo et al., 2004). Participation in the program should always be voluntary. An optional activity should be provided for those who are not comfortable with the dog (Grové et al., 2021).

To assist with legal liability, the Charlotte Helen Bacon Foundation (2014) suggests checking with certifying agencies to see if they provide insurance options. These organizations may provide options for one to two million dollars. Informed consent for participants is strongly recommended to reduce liability (Charlotte Helen Bacon Foundation, 2014 & Grové et al., 2021). Grové et al., (2021) recommends that only certified dogs are used in school programs. Additionally, the school should have a written policy to address how the therapy dog may be implemented in the school.

The only study found that addresses program supervision was conducted by Grové et al., (2021). They categorize is as "evaluation and maintenance of the program". They recommend that the program outcomes are based on overall goal. Outcomes should then be monitored via questionnaires, surveys, or interviews with all stakeholders. Perspectives must be gathered at regular intervals so that concerns may be promptly addressed. Student reactions to situations should be monitored and debriefed when unexpected situations occur.

No discussions or data on how to address concerns related to maintenance costs have been identified at this time.

### **Contradicting Research**

Despite the numerous studies documented in the literature review, there were two studies that did not prove statistically significant differences after intervention. The first study used AAI for stress reduction in 106 pediatric oncology patients and their parents. The second used AAI in a laboratory setting with 75 adolescents, anticipating stress reduction. The pediatric oncology patients selected for this study were between the ages of three and 17 years. Their treatment plans all required at least a month of outpatient visits. Children with cognitive impairments were excluded from the study, as well as anyone who had any concerns or objections to interacting with dogs. Participants were randomly assigned to either a control group or intervention group. The children and their parents in the intervention group received AAI for 10-20 minutes weekly. In the control group, participants received support from various specialists including nurses, social workers, and other child specialists. Researchers measured heart rate and blood pressure. They also administered surveys to both the children and their parents. The resulting data showed no significant differences between the two groups of children during the timeframe of the study. Both groups showed improvement (McCullough et al., 2017).

The goal of second study was to examine whether social interaction and/or physical contact with a therapy dog reduced stress. Researchers randomly assigned adolescents into three groups. The first group had social interaction with a therapy dog, but without physical contact. The second group had social interaction and physical interaction with the therapy dog. The third group was offered no interaction at all with the therapy dog, but a stuffed toy dog was placed on a chair. All three groups were given tasks to induce stress. Researchers measured changes during the tasks as consistent with the Trier Social Stress Task for Children. Some children experienced slight, temporary decreases in stress, but no statistically significant differences were not found between any of the three groups (Mueller et al., 2021).

The first study tells us that more traditional supports for anxiety may be just as effective. It may be beneficial to investigate the social supports and services that were given to the second group. This hospital system may have an effective team of humans that can also reduce anxiety. This is one of the limitations of this study. While the goal of the second study was to test mechanisms of actions, the stress was artificially induced. This may or may not be representative of other groups that are diagnosed with anxiety issues. If the study was repeated with students who have generalized anxiety disorder or recently experienced trauma, the results could prove to be different.

#### **Current Guidelines for Implementation**

When planning for a school therapy dog program, consideration should be given to the selection and training of the animal. Jalongo et al., (2018) states that the different breeds can have an impact on financial commitment, maintenance, temperament, allergies, and other factors. Consideration should also be the certifying therapy dog organization, as there is no national standard. Dogs must be properly trained, screened, and evaluated. Therapy dogs should be trained to walk on a leash without pulling, should not jump up on people, or lick their faces. The dog should not bark at people or sounds. They should also not react negatively to other dogs.

The handler of the dog should also be considered. The handler should also be trained as they should work together as a team. It is the handler's responsibility to proactively monitor the dog's behavior. The handler should be trained in identifying signs of stress and ensure that the dog has a safe, low-stress environment. Therapy dogs should be seen by veterinarians regularly to ensure health checks, vaccinations, and fecal testing are conducted. Dogs should be always kept on a leash and under control. Therapy dogs and handlers should also have liability insurance. A lack of training for either the dog or its handler can have serious consequences, emotionally, physically, and financially.

Grové et al., (2021) conducted research in Australia to help establish recommendations for successful implementation in schools. The study was qualitative, with a combination of an online survey and interviews. It was based on the perceptions of 13 personnel from school environments and two personnel from therapy dog organizations. As a result, they established five facilitative factors for success.

First is the flexibility of the program to meet the needs of the school. As explained in the body of this text, schools have many options to choose from when implementing therapy dog programs. It is not only possible, but likely that program objectives can change with the needs of the population the therapy dog is supporting. As an example, a therapy dog may have initially been brought in to support students with autism in a classroom by promoting tactile stimulation or social interaction. In another school year, the dog may benefit children struggling with transition to a new environment.

The second factor is the quality of the program coordinator. This person must be emotionally aware and considerate of the whole school community. Being aware of who has allergies or other objections to the dog(s) or the program is important. The coordinator must also be flexible, be goal oriented, and ensure that the dog is adequately prepared for the school environment. They should be knowledgeable and understand the research and purposes of therapy dogs.

This leads us to the third factor - whole school support. For a program to be successful, the acceptance of the community is required. This includes staff cooperation, the backing of administrators, and support of the school board. Parent cooperation and support are not exempt from this category. The lack of stakeholder acceptance can create significant limitations to the success of programs.

The fourth key to program success in communication, education, and training. Those involved need to understand the benefit and possible outcomes related to therapy dogs in schools. Before implementation, the students' knowledge about the program needs to be facilitated. The students need to be instructed on the goals of the program and what the expectations are for them as participants. It is recommended that there be information packets and orientation meetings to discuss key information. All parties should understand the roles, responsibilities, and management of the dog. The coordinator or handler needs to collect feedback from the stakeholders.

The fifth and final facilitative factor is the welfare of the dog. Dogs in schools need a dog-friendly environment. Like humans, dogs can experience fatigue and exhaustion. Dogs who are in schools for an extended length of time need opportunities to rest and relax. Schools are full of unexpected sights and sounds which could cause stress for animals. According to Abat-Roy, (2021) the welfare of dogs is often not addressed in publications. She states that arguably, the well-being of the dog is "as important as that of the students in avoiding negative incidents or burnout."

## **Purpose of the Study**

Given the research-backed benefits and prevalence of therapy dogs in education, educational stakeholders should be aware of the perceived problems related to the actual implementation of therapy dogs in public schools. Prior research only discusses concerns prior to the implementation of therapy dog programs.

### **Research Questions**

This research answers this and the following questions:

- 1. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously?
- 2. How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?

3. Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

### Need for the Study

There have been no known studies at this time that identify what concerns were perceived related to the implementation of therapy dog programs in schools. This study intends to fill that void. Additional support to validate this lack of research is found in Abat-Roy's (2021) literature review, *Service Animals and Pet Therapy in Schools: Synthesizing a Review of the Literature*. She states that there is a "…virtual absence of publication in educational journals, which is exacerbated by the lack or researchers in the field" (p. 9). Abat-Roy found only 29 empirically based publications related to the effects of dogs in school. June of 2021, Grové et al. (p. 1), states that "Research is further lacking into the implementation process of therapy dog programs in educational settings."

Results from this study will assist anyone planning on implementing a therapy dog program. Programs may be made more successful by stakeholders understanding of concerns that developed during implementation, in addition to the pre-implementation concerns documented in the previous research. Stakeholders will know what does or does not need to be addressed as a potential issue.

Therapy dogs are a cost-effective and proven investment which benefits students of all ages in both regular and special education settings. By knowing which concerns were realized during the implementation of therapy dog programs, teachers, administrators, school boards, and other stakeholders can better prepare to meet and resolve those concerns.

## **Summary**

Therapy dog programs are used to improve the school environment for struggling learners. Not only can non-disabled students benefit from therapy dog programming, but research proves that it also benefits students with developmental delays in reading, improves desired behaviors in school settings for students diagnosed with emotional-behavioral disorders, reduces stress for those experiencing trauma, such as abuse, provides motivation, and provides multi-sensory stimulation for students with autism spectrum disorder. Some or all of these benefits can be obtained at relatively low-cost and reasonably high effectiveness.

Research related to the benefits of therapy dogs in educational settings has grown considerably since about the year 2000. The studies discussed above are indicative of the growth in related research. They also show that the implementation of therapy dog programs can improve reading ability, decrease stress and anxiety, improve attitudes toward school and teachers, foster social-emotional learning, and serve as motivation for all students, especially those who are struggling learners.

At this point, no research has been found documenting post therapy dog program implementation, nor does there appear to be anything discussing post program concerns or problems.

#### **Chapter 3: Methodology**

Existing literature, as cited in Chapter 2, generally demonstrates that therapy dogs are beneficial to students in school. Potential concerns related to the implementation of therapy dog programs in schools are also documented. What the existing literature does not cite are problems that have occurred during the implementation of therapy dogs in schools. This study answers the following questions:

- 1. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously?
- 2. How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?
- 3. Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

## **Research Method**

The three main types of research conducted are qualitative, quantitative, and mixed methods. Qualitative research is focused on non-numeric data collection. The emphasis is often focused more on "how" and "why" questions. It can be used to interpret and bring understanding for people. It may be used to study how things work or learn about people's experiences, perspectives, and recollections. Quantitative research collects and analyzes numeric data. The emphasis of quantitative data is computational and statistical in nature. The third type, mixed-methods research, is an integration of qualitative and quantitative methodologies. Mixed methods may provide more breadth and depth to research questions, when appropriate.

This study is qualitative. By answering the stated research questions, the qualitative benefits included people's perspectives, experiences, and recollections. The study also identifies

unanticipated consequences and identify important patterns or themes related to therapy dog implementation in schools. Numerical or statistical data is not required to answer the research questions presented.

The framework for this qualitative study is based upon pragmatism and generic qualitative inquiry. It is concerned with practical consequences and useful applications as related to the implementation of therapy dog programs. Answers to the research questions provide useful and actionable results that will support real-world decision-making. The primary audiences for this research topic are school administrators, faculty, staff, and school board members in Pennsylvania.

### **Research Design**

This qualitative study used an online survey to collect data. A survey is defined as, "the collection of information from a sample of individuals through their responses to questions" (Check & Schutt, 2012, p. 160). An online survey was chosen due to the speed and convenience of distribution and the potential to reach a larger pool of respondents. The survey consisted of eight questions. The survey did not take more than five minutes for most participants to complete.

All data submitted was automatically saved via eSurveysPro.com and available for download and synthesis. eSurveysPro is commercial professional online survey software. It provides eight options for question format. Format options for the participants in this study included: select only one answer, select multiple answers, and free form text response, commonly known as dialogue boxes. Results may also be viewed online as a summary or on an individual respondent basis. Data may be sent to a portable document format (PDF) or downloaded as comma-separated values (CSV) for permanent storage or additional manipulation. No questions in this survey asked for personal information or specific school names. An informed consent agreement was built into the introductory page of the online survey.

The first question sought to understand the type of experience the participant has had with therapy dogs. The participants may have brought trained therapy dogs into their school, worked with an organization who brought dogs into their school, or trained or certified their own therapy dog. Participants who have no experience with therapy dogs were be excluded from the study. The second question was a checklist containing common concerns related the application of therapy dogs in therapy-based settings, hospitals, and classrooms as identified by Friesen (2009), Jalongo et al. (2004), and Mclean (2002). Additionally, there was an option labeled "Other". Participants may have selected more than one response for this question. If a participant chose "other" in question two, he was asked to explain what that other concern was in questions four. Together these two questions identified problems that occurred, including any concerns that have not been previously documented.

Questions four and five are a Likert-like format that inquired about staff perceptions before and after therapy dog implementation. Responses to these questions were compared to identify any potential shift of perception due to the implementation of therapy dogs in their schools. The sixth question sought to understand the role the role of the participant. It is possible that certain personnel may or may not have been involved in the implementation process.

The seventh asked if there is anything else the participant wished to share. This openended question provided the opportunity for participants to paint a more vivid picture about their therapy dog experience(s). The anecdotal data collected in this question provided additional information about problems and staff perceptions. The survey was distributed in an online format, specifically to individuals who work or volunteer within Pennsylvania schools. There are 500 school districts in Pennsylvania. The survey was initially be distributed to each school district, via email addresses, made available by the Pennsylvania Department of Education webpage. In the introductory letter, chief school administrators were asked to distribute the survey to their staff by forwarding the initial email or providing an email distribution list for their school. A second, follow-up email was sent to school administrators seven days after initial contact to further promote participation. The anticipated timeline to collect data was 20 days. Initial contacts most occurred prior to winter break. The survey was distributed to staff members in mid-January.

Once the survey was closed, data from individuals who had no experience with therapy dogs in school settings was be omitted so as not to skew the data. The remaining data was coded and analyzed for themes. Special attention was focused on data that did not fall within common concerns previously identified by Friesen (2009), Jalongo et al. (2004), and Mclean (2002), so as to identify additional problems related to the implementation of therapy dog programs.

### **Data Analysis**

Coding is the process of labeling and organizing qualitative data, which prepares the data for analysis. Manual coding of the questionnaire responses was applied to identify themes and experiences. Data was coded and analyzed following a model explained by Creswell (2011). In a visual model he presented the following steps to analyze qualitative data:

- 1. Initially read through the text data.
- 2. Divide the data into segments of information.
- 3. Label the segments with codes.
- 4. Reduce overlap and redundancy of the codes.

5. Collapse codes into themes.

Once the patterns and themes emerged, data analysis performed was both deductive and inductive. Deductive analysis determined which data fit into previously existing research. Inductive analysis occurred by identifying and defining any patterns or themes that developed. These themes may not have previously been labeled. Coded data and identified themes are discussed in Chapter Four. Data was entered into tables to facilitate the analytic process.

## **Presentation of Results**

The results are presented in narratives visual representations. A narrative was written to provide an explanation of the comparison of the results of the study to the findings from Mclean (2002), Friesen (2009), and Jalongo et al. (2004). The narrative discussed observed patterns and themes, as well as any significant remarks study participants shared on open-ended questions.

## **Site Permission**

Contact was made via email to school administrators to request participation and for distribution of the survey. All data, including the location from which it was collected, remained undisclosed. The three ethical principles identified in the Belmont Report, respect for persons, beneficence, and justice, were strictly applied.

### Limitations

 The first limitation is due to the relatively small distribution of surveys. While the state of Pennsylvania has 500 school districts and 29 Intermediate Units, the responses that come from schools that have implemented therapy dog programs may not be representative of the entire community.

- Qualitative reporting relies on the participant's ability to self-disclose concerns or problems experienced during the implementation of therapy dog programs. Inaccuracies in recall or perception can influence the data.
- Potential biases may exist from the researcher, who is an advocate of therapy dogs in educational settings, or in the results from participants who may or may not favor therapy dog implementation.
- 4. A geographic limitation may exist because only schools in Pennsylvania were surveyed.
- 5. All schools and persons were granted complete anonymity. If a particular school or district had a significantly more responses, it could sway the data in one direction.
- 6. This limitation was added after coding the data. Confounding factors have been identified based on perception, which may have led to overlap between categories or omission in some categories.

### Summary

A growing body of literature indicates that therapy dogs are beneficial to students in a school environment. This literature lacks information regarding any experienced problems or concerns related to the implementation of therapy dog programs. This study used an online survey designed to gather qualitative data collected from educational settings within the geographic boundaries of the Commonwealth of Pennsylvania. The data received came from K-12 public school personnel who voluntarily and anonymously chose to participate. The data was coded and analyzed in anticipation of better preparing stakeholders for the implementation of therapy dog programs in schools.

## **Chapter 4: Findings**

The use of therapy dogs in schools is a growing phenomenon due to the continued documentation of potential benefits for students. This study sought to provide qualitative data from schools that have implemented therapy dog programs. The questions asked in this study include:

- 1. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously?
- 2. How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?
- 3. Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

### **Site Permissions**

Requests for permission to contact staff and faculty in all 500 schools and 29 Intermediate Units were sent via email to school superintendents and directors in Pennsylvania. Four-hundred eighty-one schools gave no response to the request. Twenty-four schools granted written consent for voluntary participation. One responded that they did not have a therapy dog program, but they were still willing to share the survey. Consent to participate represents 4.5% of the schools contacted. An additional twenty-four schools declined to participate and cited reasons being:

- 1. They have never had a therapy dog program.
- 2. Their board policy does not permit external research.
- 3. Their staff has already been given many surveys this school year.
- 4. They felt their staff were currently overwhelmed due to the ongoing impact of Covid-19.

## **Individual Consent and Participation**

The survey contained a built-in consent question. If a potential participant did not consent to participate, he could not simply submit the survey. While the introduction to the survey specified that qualified candidates would have therapy dog experience, some participants identified that they had no therapy dog experience. These responses were excluded from the survey results.

During the review of open-ended response submissions, some participants described their therapy dog experience in a way that indicated the dogs used in their schools were not therapy dogs. The dogs were described as belonging to a student or being used by only one person. These participants were also excluded from the final survey results. The term "therapy dog" was defined on the survey introduction as "certified canines that: provide Animal-Assisted Therapy (provide comfort to many), Animal-Assisted Activities (provide therapy based on diagnosis/needs), or Animal-Assisted Education (support education outcome/goals). This does include facility dogs. It does NOT include emotional support dogs or (ADA) service dogs."

## **Roles of Participants**

After excluding non-qualified participants, the total number of participants was 314. Of those participants, 12 had taken a therapy dog into a school, while 209 were only staff members who experienced interactions with the dogs.

## Table 1

## Percentage of Dog Handlers and School Participants

What is your experience with therapy dogs?	n	Percent
I have taken therapy dogs into schools.	12	3.8%
I have experience within a school that uses therapy dogs.	290	92.4%
Both	12	3.8%

## School Age Levels of Involvement

The third question sought to identify the age-level(s) in which the experiences were derived. One-hundred nineteen participants reported experience at the elementary level. One-hundred forty-eight participants reported expense at the secondary level. Fifteen percent had experience at both elementary and secondary levels.

## Table 2

Age Levels of Students with Whom Therapy Dogs were Experienced

With which age levels is your experience?	n	Percent
Elementary	119	37.9%
Secondary	148	47.1%
Both	47	15%

## **Manifestation of Anticipated Problems**

Question four asked participants to identify problems they experienced as related to implementing therapy dogs in their school(s). The following categories were derived from potential concerns documented in the previously existing literature and listed in the survey:

- Sanitation (bacteria, virus, parasites, bodily waste, odor, etc.)
- Safety/child welfare
- Allergies to dogs
- Cultural differences
- Fear of dogs
- Legal implication and liability
- Proper supervision (Program oversight)
- Animal maintenance (daily dog care)
- Animal welfare
- Maintenance costs (medical and other supplies)

The top two categories rated by participants in this study were fear of dogs (37.7%) and allergies to dogs (31%). The next closest category was animal maintenance (10.5%). The two least common problems are cultural differences (0.6%) and animal welfare (2.2%). Table 3 gives a complete breakdown of all the responses.

# Table 3

# Anticipated Problems Experienced

To the best of your knowledge, which problems manifested?	n	Percent
Sanitation (bacteria, virus, parasites, bodily waste, odor, etc.)	17	5.4%
Safety/Child welfare	16	5.1%
Allergies to dogs	97	31.0%
Cultural differences	2	0.6%
Fear of dogs	118	37.7%
Legal implication and liability	16	5.1%
Proper supervision (Program oversight)	28	8.9%
Animal maintenance (Daily dog care)	33	10.5%
Animal Welfare	7	2.2%
Maintenance costs (medical and other supplies)	12	3.8%
*Other	29	9.3%
**No problems reported	92	29.4%

\*Before coding

\*\*Category added after coding

## **Manifestation of Other Problems**

This study aimed to identify possible new problems related to education that may not have been documented in previous literature as a concern. The category of "other" was added to this list. One-hundred twenty-two respondents (38.7%) chose "other." Participants who responded with "other " were required to explain why they chose "other." Responses to this question were coded into two groups. First were those who identified no problems by writing descriptors such as "none" or "n/a." The number of respondents in this category was 92 (29.4%). The second was 29 respondents (9.3%) who explained problems in response to this question.

Problems that were cited were further coded. Some responses were duplicates of existing problems. All data from each of those participants were analyzed to ensure that they had selected the corresponding data in question 4. Those that did not fit into a previously known category of concern were coded separately. This revised data contained 29 respondents (9.3%).

The coding of question five adds several new categories to the identification of problems related to therapy dogs in education. One respondent (0.3%) cited "misconceptions about therapy dogs in general." Another respondent (0.3%) cited dog hair on clothing as a problem, specifically mentioned due to the breed characteristics. A different respondent (0.3%) stated that a school in his district had experienced an incident of mass violence after which therapy dogs were deployed. According to the respondent, the presence of therapy dogs now triggers Post-Traumatic Stress Disorder (PTSD) in some faculty members. Two respondents (0.6%) expressed concern about animal behavior. One referenced it indirectly, while the other described it as the dog being "scared to death during class breaks and does not want to walk in the halls with all the students." The problem of equitable access to therapy dogs was stated by three respondents (1.0%). A lack of supervision of the dog was indicated by five respondents (1.6%). This lack of supervision was inferred by comments such as students feeding the dogs without consent, a dog being taunted and teased by a student, and a dog that roamed the building freely. Finally, the most significant new category report was that the dog was a distraction to the educational process (2.2%). These data are summarized in Table 4.

## Table 4

Explain any other problems experienced	n	Percent
Misconceptions about therapy dogs	1	0.3%
Breed-specific concern	1	0.3%
PTSD	1	0.3%
Animal behavior/Training	2	0.6%
Equitable access	3	1.0%
Animal supervision	5	1.6%
Distraction	7	2.2%

# **Staff Perceptions Pre and Post Implementation**

The sixth survey question sought to understand staff perceptions of therapy dogs before their experience with them in their schools. The question was presented using a Likert-like scale of zero through five. Zero meant that they were unsure. One meant that they were very concerned about the use of dogs in schools. Two meant somewhat concerned; three, neutral; four, somewhat supportive; and five meant very supportive. The seventh survey question used the same scale, but it asked the question of their perception after the implementation of the therapy dog program. Tables 5 and 6 show this data, respectively.

# Table 5

# Perceptions Prior to Implementation

How would you describe staff perceptions prior to implementation	n	Percent
Unsure	24	7.6%
Very concerned	2	0.6%
Somewhat concerned	32	10.2%
Neutral	76	24.2%
Somewhat supportive	72	23.0%
Very supportive	108	34.4%

# Table 6

# Perceptions after Implementation

How would you describe staff perceptions after to implementation	n	Percent
Unsure	3	1.0%
Very concerned	1	0.3%
Somewhat concerned	8	2.6%
Table 6 (Continued).		
Neutral	23	7.3%
Somewhat supportive	66	21.0%
Very supportive	213	67.8%

# **Implementation Planning**

Question eight asked participants whether there was a plan in place for the therapy dogs at the time of implementation. Table 7 summarizes this data. One hundred thirty-nine

participants said there was either no plan or no plan shared with them. One hundred seventy-five participants said detailed plans or objectives were shared with the faculty.

## Table 7

## Implementation Plans Shared

Was there a plan or objective share before implementation	n	Percent
Yes	175	55.7%
No or Unanswered	139	44.3%

## **Open-Ended Experiences**

The final question in the survey asked participants to share anything they wanted to share about their experience with therapy dogs: good, bad, or noteworthy. There were 234 responses to the question. Table 8 shows a breakdown of these responses. The majority of responses showered praise for the therapy dogs, the benefits they observed with students, and the overall support of their programs.

One-hundred ninety-three responses (82.5%) expressed only positive remarks. These comments ranged from basic comments such as "Very worthwhile" and "We love having him around" to more detailed statements. Some examples of the more detailed reports include:

- "The experience was very therapeutic for my students and the staff in my classroom. The therapy dog brought a sense of peace and calmness in a very confusing and emotional time for all of us. The dog was very perceptive to our emotions helped make a horrific situation more bearable."
- "Such a positive concept! I've seen therapy dogs able to help students in ways adults just can't: deescalating them, motivating them to rejoin their expected area, etc."

"It's been great! The dogs that come into our building are wonderful and the students love when they get to see them...the scheduled times usually include interested students getting on the ground and petting, sitting, and sometimes laying down with the dog. Some of the dogs are very low key and like to just accept the attention, but we have one she is a ball of energy, and the students like to play fetch with her. I've been in a handful of different classrooms when the dogs have arrived and I've only experienced positive reactions from students. In fact, I've found that some otherwise quiet high school students seem to open up more and talk more freely while with the dogs."

### Table 8

#### Free Style Responses

What would you like to share about your experience	n	Percent
Only favorable remarks	193	82.5%
Favorable remark with an added concern or suggestion	26	11.1%
Unfavorable remark only	8	3.4%
Insignificant to study	7	3.0%

Another group of respondents, 26 (11.1%), indicated their favor for the use of therapy dogs in schools, but they also cited a problem or preferences. Some of these concerns fit into those documented by previously existing research: allergies, program supervision, and fear of dogs. One respondent cited that the therapy dog program was discontinued "due to allergies."

Eight of the respondents (3.4%) appeared to have an unfavorable view of therapy dogs in their schools. The problems and concerns from this group were alienation of those who would rather not interact with the dog, not seeing any benefit to the dogs' participation in school, opposition to particular breeds, distraction, and possible training issues. Additionally, seven

(3.0%) participants provided input that is not relevant to this study. Additional open-ended responses for categories can be found below.

## Fear of Dogs.

• "We worked on everything from reading, with no pressure, to the dogs to introducing students to dogs with fears and working through those fears. In the end, there were no students in my program that were afraid."

• "We definitely had a bit of a learning curve when it came to keeping track of allergies and fears but once we had that in place it has gone very well."

• "Actually, the students who were afraid became less fearful."

• "Even kids who do not like (fear?) dogs complete the visit with a new understanding of dog behavior."

• "I am aware of 1 student that is afraid of dogs and that student moves away to a more comfortable location."

• "I actually noticed that students who were afraid of dogs at the beginning grew to love my Therapy Dog."

• "We had stickers on classroom doors to warn handlers of students who were allergic or fearful of the dogs."

• "I do have one student this year who is afraid of dogs, so parents requested not to have any dogs come to the classroom. So far this individual approach has worked very well."

• "Some children (kindergarten) were very afraid of the dog due to an outside of school experience. The downside was that the dog visited during my students' library special time, and I did not know that was happening, so I wasn't able to prepare them."

## Allergies.

• "The dog was hypoallergenic, which means I was able to go down and visit when he was here. It was nice that people with allergies could still be part of the experience."

• "The program had to end because one student has many allergies and the program came to an end."

- "I feel that consideration of allergies is a huge part of overall acceptance of the program."
- "I also brought up that the allergens could not be contained if in a library with carpeting."

## **Program Supervision.**

• "I feel that my concerns are pushed aside and my heath is not valued because the implementation of therapy dogs are popular with some students."

• "Allergies were not checked. People that were not in charge of dog got in trouble by parents of kids with dog allergies without knowing about dog."

• "Students and staff with allergies, fear of dogs, or a desire to NOT interact with the dog is not taken into consideration. The dog roams freely and jumps up without invitation or permission. School needs to be a safe space for all students and staff, even those that do not find the dog therapeutic."

• "...Without clear expectations as to who, where, why and for how long students were able to access the dogs, I think students used it as an excuse to go "play" with the dogs even when not warranted."

• "Our therapy dog is free to roam the school. A majority (if not all) of the students in our school value the dog, however with the dog unsupervised students were starting to sneak food to the dog and train it with new habits."

• "The downside was that the dog visited during my students' library special time, and I did not know that was happening, so I wasn't able to prepare them."

• "I'm not opposed to therapy dogs, but our policies seem inconsistent."

• "I would like a more structured idea of who would get to see and pet the dogs and where, as opposed to an announcement that the dogs would 'just be around'."

• "To have a more definitive plan with them....it would just be random times in the middle of lessons and such."

• "She spends most days in the school's main office and very rarely visits classrooms. The hoops teachers need to jump through in order to handle the dog are a deterrent."

• "Without clear expectations as to who, where, why and for how long students were able to access the dogs, I think students used it as an excuse to go "play" with the dogs even when not warranted."

### Sanitation.

• "...some of them are quite hairy and shed."

• "...Preferences regarding dog hair on clothing...our school has golden retrievers, which shed a lot on professional clothing."

• "...Also the dog gets hair on my clothes and I feel I should sanitize my hands after petting him every time."

• "...Drool is all over my office when the dog leaves, on my seats for parents and students, on my desks, on my carpet."

• "...The dog continually drools and it is excessive. Drool is all over my office when the dog leaves, on my seats for parents and students, on my desks, on my carpet."

## Animal Maintenance.

• "Very positive, but due to the nature of the animal being owned by one staff member, the bulk of training and responsibilities fell to that individual, and yet the demands of the animal, and training, and vet bills fell to the owner, even though the school community benefited."

## Animal Welfare.

• "In one situation, the dog was kicked by a student by accident (he was trying to do a dance move) and they got a tiny little nip from the dog, however, no one was injured or upset with the situation."

• "A previous dog had to be removed because of overstimulation. That dog couldn't handle all the kids all day long and started to get a little aggressive."

• "One of our dogs bit a student--after being taunted and teased by the student--so he is no longer with us."

• "Kids would feed the dog even though they were told not to and the dog had food allergies."

### Child Safety/Welfare.

• "One previous dog had an issue at nipping and had to be removed as a therapy dog. A new was brought in and there hasn't been an issue since."

• "In one situation, the dog was kicked by a student by accident (he was trying to do a dance move) and they got a tiny little nip from the dog, however, no one was injured or upset with the situation."

• "A previous dog had to be removed because of overstimulation. That dog couldn't handle all the kids all day long and started to get a little aggressive."

- "One of our dogs bit a student--after being taunted and teased by the student--so he is no longer with us."
- "Yes, one of the dogs used at [Redacted] SD bit staff/students."

## Legal Implications and Liability.

• None applicable

### Maintenance Costs.

• "Very positive, but due to the nature of the animal being owned by one staff member, the bulk of training and responsibilities fell to that individual, and yet the demands of the animal, and training, and vet bills fell to the owner, even though the school community benefited."

### **Cultural Differences.**

• None applicable

Concerns not documented in previous literature included breed-specific preferences, concerns with the alienation of those who would prefer not to interact with therapy dogs, a lack of animal supervision, the dogs causing distraction, possible training issues, and equity of access to the dogs. Examples of open-ended comments include:

# Alienation.

• "I think it is unfair to put everyone in a situation that if they speak up, are allergic or just fearful they will be asked to leave the area. Does this not single these individuals out?

Does this not make them feel alienated? It sure does and can be detrimental to the wellbeing of some while maybe helping some. If a therapy dog could be contained in an area that if someone is comfortable going to then by all means, go for it. If the dog in brought to various classrooms and makes some children happy and others afraid that is undermining their well being. There is a time and place for ALL to get the help they need, with or without a therapy dog."

• "...at the risk of sounding like a grinch, it's a bit like having someone who you don't know stop by with their baby: some people love babies, and welcome the break. But some of us feel a little resentful that we have to stop what we are doing every time to show enthusiasm, coo, and put energy into fawning over the baby or dog. It's just a little tiring, and some days I'd rather be left alone to do my job. Also the dog gets hair on my clothes and I feel I should sanitize my hands after petting him every time. I think really it's the assumption that everyone should feel the same level of joy when seeing a dog that's a little frustrating: I find no socially acceptable way to opt out of dog worshipping. So I just have to continue to feign interest."

### Breed types.

• "I personally have allergies to animals, and while I love the program in our school, I wish that we used breeds with less shedding/dander, such as poodles."

• "Probably my biggest criticism would be the breed of the dog the owner chose to use for the program. The dog continually drools and it is excessive..."

• "I have found that certain breeds such as labs, tend to make much better therapy dogs. As a caretaker, I take one of the dogs home..."

• "It should be noted that some students have severe pet allergies so maybe only bring hypoallergenic dogs to schools?"

• "I think therapy dogs should be hypoallergenic breeds in order to accomodate for allergies and asthma."

• "Probably my biggest criticism would be the breed of the dog the owner chose to use for the program. The dog continually drools and it is excessive. Drool is all over my office when the dog leaves, on my seats for parents and students, on my desks, on my carpet."

• "I personally have allergies to animals, and while I love the program in our school, I wish that we used breeds with less shedding/dander, such as poodles. I understand this is a personal opinion, but I feel that consideration of allergies is a huge part of overall acceptance of the program."

• "I feel large breed dogs are a better choice for therapy dogs."

### Animal supervision.

• "Our therapy dog is free to roam the school. A majority (if not all) of the students in our school value the dog, however with the dog unsupervised students were starting to sneak food to the dog and train it with new habits."

• "...The dog roams freely and jumps up without invitation or permission. School needs to be a safe space for all students and staff, even those that do not find the dog therapeutic. I believe a dog can be successfully integrated into the school setting with proper supports and considerations."

• "Students trying to feed the therapy dog. Having to keep an eye on the therapy dog when it walked down the hall/entered classrooms to make sure it didn't eat anything it found."

### **Distraction from Academics.**

• "I found that having dogs in school was a distraction to the majority of the population. It may have helped some students in therapy settings but having dogs walking in the hallway and entering classrooms only caused distraction from my perspective."

• "As much as I support the use of therapy dogs, it was sort of a disruption to classrooms. Without clear expectations as to who, where, why and for how long students were able to access the dogs, I think students used it as an excuse to go "play" with the dogs even when not warranted."

• "Although the therapy was good for the student, I felt that the experience was a distraction to the other students in the school."

• "At the start, I felt it was more of a PR push than anything else. I do not believe the dogs are helpful in class settings at all. I am a huge dog lover, and therefore was trained and had them come to my room on a few occasions. Overall, it really just became a distraction."

• "Though I realize the program is provided to help the students, I find the dogs are just a temporary distraction when brought into the general classroom. Granted, I am biased because our district paid a substantial amount of money to have the dogs when we desperately need to hire new teachers and purchase supplies. The dogs come in and students pet them for 5 minutes. Again, this provides a distraction and at the secondary level."

• "I work in an office setting with a therapy dog nearby, and I find it disruptive. I am not afraid of dogs, grew up with them, and like them just fine. But, at the risk of sounding like a grinch, it's a bit like having someone who you don't know stop by with their baby: some people love babies, and welcome the break. But some of us feel a little resentful that we

have to stop what we are doing every time to show enthusiasm, coo, and put energy into fawning over the baby or dog. It's just a little tiring, and some days I'd rather be left alone to do my job... I think really it's the assumption that everyone should feel the same level of joy when seeing a dog that's a little frustrating: I find no socially acceptable way to opt out of dog worshipping. So I just have to continue to feign interest."

• "We had a brief time after [Redacted] student suicides that therapy dogs were in the building. As much as I support the use of therapy dogs, it was sort of a disruption to classrooms. Without clear expectations as to who, where, why and for how long students were able to access the dogs, I think students used it as an excuse to go "play" with the dogs even when not warranted."

## Animal Behavior/Training.

• "A dog was in the school that wasn't properly trained - the dog was nervous most of the time."

• "We've had many dogs "fail out" of the program because they were not well suited to be around the high volume of students in the building."

• "A dog was in the school that wasn't properly trained - the dog was nervous most of the time."

• "I have a Golden Retriever I was trying to train as a therapy dog. He currently is almost 3 years old. I still am working on training and have yet to get him the Canine Good Citizenship certificate. I will say that when the pandemic hit his socialization was dramatically cut and he now has issues with other dogs which was not present before."

• "A previous dog had to be removed because of overstimulation. That dog couldn't handle all the kids all day long and started to get a little aggressive. I think the school learned that the dogs have to gradually get used to this new environment."

• "I am disappointed in our program. We've had many dogs "fail out" of the program because they were not well suited to be around the high volume of students in the building."

• "He stopped working with us as he developed a habit of eloping. He ran out the door of the building and did not respond to commands. His handler was not able to identify the trigger or break the habit."

• "The dog does bark occasionally, and I think this could contribute to some fears students may have."

#### Equitable Access.

• "It seems like the dog is simply at the building and may be used for a few students, not benefiting all in some way. It is possible that more is being done that is not seen by teachers."

• "In a large school like a high school, you definitely need more than one therapy dog, and right now, we only have one. Most students don't even know we have this dog because so few are able to see and interact with her."

• "The therapy dog in our building is taken care of by our counselor. I feel like more could be done with the dog regarding all students. It seems like the dog is simply at the building and may be used for a few students, not benefiting all in some way."

• "The facility dog we currently have, while she is a sweet dog, is underutilized. She spends most days in the school's main office and very rarely visits classrooms."

• "Though I realize the program is provided to help the students, I find the dogs are just a temporary distraction when brought into the general classroom. Granted, I am biased because our district paid a substantial amount of money to have the dogs when we desperately need to hire new teachers and purchase supplies. The dogs come in and students pet them for 5 minutes."

• "I think that they would be excellent if used long-term but just bringing them in one time for one day was not effective. "

## Knowledge/Misconceptions.

• "I do not feel that we need to have dogs or other therapy animals with us all through the day. I understand that there may be benefits to having a pet with you in stressful situations, but I really do see why it is a new necessary."

• "I do not believe petting a dog for a short time changes the anxiety or depression students may be experiencing long term."

• "At the start, I felt it was more of a PR push than anything else. I do not believe the dogs are helpful in class settings at all."

### **Post-Traumatic Stress Disorder.**

• "...we have also utilized them after an incident of mass violence... As you can imagine, this topic still elicits a strong response from many of our staff members. Some view it as very positive, while it triggers some PTSD responses in others.... At the time, the therapy dogs were very instrumental in our recovery. Students and staff all found a great deal of comfort from these wonderful animals... However, when we brought the dogs back into the school environment for Finals Week it elicited some very strong emotions from certain staff members. They associated the return of the dogs in the school environment with that painful time in their own personal journeys."

## Conclusion

The purpose of this study is to answer three primary questions. Summaries to those questions are provided below.

- "What perceived problems, if any, arose during the implementation of therapy dog
  programs within schools that have not been documented previously?" The
  perceptions of those who have therapy dog experience in schools have noted the
  following seven previously undocumented problems in the following areas:
  - Alienation of those not wishing to participate with therapy dogs,
  - misconceptions or a lack of information about therapy dogs,
  - breed specific concerns,
  - PTSD,
  - animal behavior or training concerns,
  - equitable access to therapy dogs,
  - a lack animal supervision, and
  - dogs causing a distraction.
- "How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?" Results of this study indicate that all the concerns cited by Friesen, (2009) Jalongo et al. (2004), and Ryan (2002) were perceived as problems that manifested within Pennsylvania schools.
- "Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?" The consensus based on staff perceptions is that

concerns were significantly lessened after having experience working with a therapy dog program and their support for the programs grew in favor.

#### **Chapter 5: Conclusion and Recommendations**

The application of therapy dogs in a school-based setting is a relatively new phenomenon. These trained animals may serve a variety of purposes from preschool through college. The purpose of the therapy dogs may be a planned activity to reduce stress or build morale. Or they may have a more specific function in which they serve a goal-oriented intervention or therapy for students. There is a growing body of research showcasing numerous benefits to including therapy dogs in educational settings. It has been documented as recently as June 2021 that therapy dog research, particularly that related to implementation in schools, has been limited (Abat-Roy, 2021).

Regardless of the intended purpose, bringing a dog into school can cause problems. To improve implementation protocol and plan for potential problems, stakeholders need to understand the perceptions and pragmatics of having therapy dogs in schools. Previous research addressed common concerns related to the implementation of dogs around children, but no studies have previously been found that identify the post-implementation problems as reported by the perceptions of the school staff. The purpose of this study was to answer the following questions:

- 1. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously?
- 2. How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature?
- 3. Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

73

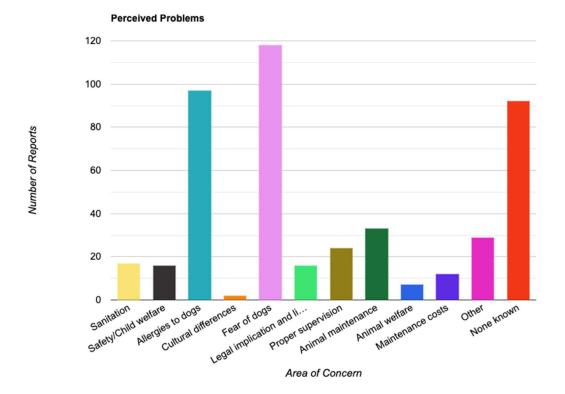
A qualitative online survey was administered in 24 Pennsylvania schools to answer these research questions. The survey questions asked for perceptions related to problems that manifested during the implementation of therapy dog programs in schools, and sought perceptions before and after implementation. Qualified participants were adults that had experience with a therapy dog in a school. Experience type, handler or standard participant, and grade category were also requested. Three-hundred fourteen qualified responses were received. All participants and school districts were given complete anonymity.

### **Summary of Findings**

The data collected in this study confirms that the concerns cited in pre-existing literature did manifest as perceived problems in K-12 settings. These areas include sanitation, safety/child welfare, allergies to dogs, cultural differences, fear of dogs, legal implication and liability, proper supervision, animal maintenance, animal welfare, and maintenance costs. This study found that each of these concerns was reported at least two times; however, the frequency of those problems varied. Participants in this study also reported "other" problems, which are also discussed in this chapter.

Figure 2 demonstrates that while there were 92 respondents stating there were no problems, there were two categories that had many problems reported. Not reflected in this figure are many qualitative comments in which participants shared praise and positive feedback about their experience with therapy dogs in the school. The frequency of these reports was high, but those responses will not be further addressed in this discussion, as they do not support the intended research questions. This study and the discussion of the research findings focus on the problems and perspectives staff members shared.

# Figure 2



# Comparison of Perceived Problems

# Most Noteworthy Problems

Given the potential categories for problems, documented in prior research, the two most frequently reported problems are fear of dogs (118) and allergies to dogs (97). These two problems were far more frequently reported that any other problem category in survey question two, as illustrated in Figure 2. Program Supervision (28) has also been identified as a notable problem due to the relatively high percentage of open-ended comments addressing this issue and additional data provided in question eight.

# Fear of Dogs.

While dogs are commonly found as pets throughout the United States, survey responses indicated a relatively large number of problems related to the fear of dogs, especially when compared to other categories. One may find this surprising when a certified therapy dog has been trained and tested to meet set requirements. To further understand this, it is helpful to read the open-ended responses included in this study.

These responses indicate that although the fear of dogs may have been a problem initially, it was often a minor or short-lived problem. More than half of the respondents shared that the fear of dogs decreased during therapy dog visits. Study participants also shared strategies for working with students who are afraid of dogs. Strategies include:

- ensuring there is no pressure to interact with the dogs
- asking the student to read to the dog rather than touching or being too close
- allowing students to move to a new location
- placing a sign or sticker on the door if there is a fearful student in the room

# Allergies.

Allergies to dogs are a common issue that can typically range from minor irritation to asthma or difficulty breathing. Some participants noted that the dog used in their school was hypoallergenic. Some that used hypoallergenic breeds often commented that this was helpful. Others made recommendations that hypoallergenic breeds be used or wished that they were. While allergy issues can be mitigated by dog selection, proper grooming and bathing, and other methods, severe allergies can end a program, as cited by at least one participant. Another participant stated that his overall health was affected by an allergy to the therapy dog.

# **Proper Supervision.**

A successful therapy dog program is most likely well-planned and thoughtfully executed. If program supervision is lacking, it can easily create problems in multiple areas. The category of program supervision was selected 28 times as a problem in question two. Noteworthy about this category is the number of open-ended responses addressing the issue. That number is equal to the number of open-ended responses in the most frequent category, fear of dogs. These two categories combined makeup about half of all the open-ended comments regarding reported problems. Despite this, proper supervision falls fourth on the list of problems selected in question number two.

When presented with the "Program Supervision", it was defined as "oversight of the program." This clarification was so that respondents didn't rate the dog handlers or therapy dog organizations. However, the definition may not have been clear enough, or the respondents may not have identified their issue as supervisory in nature. For example, allergies may have been the reported problem, but it could have been mitigated if the individual supervising the program had communicated with stakeholders ahead of time. As a second example, if the time and date of the visitation were shared with staff in advance, young students could be prepared for the dogs, perhaps reducing fear. Having a better understanding of program supervision could have led to different results.

Given that this study examines problems related to therapy dog implementation, the survey contained a question asking if an objective or implementation plan was shared. One hundred seventy-five respondents said information was shared before program implementation, but nine of those respondents said the information shared was minimal. One hundred thirty-eight respondents said no information was shared or they could not recall. Given that approximately 45% of respondents were given inadequate or no information about the program, then program oversight is arguably the most critical problem facing therapy dog implementation in schools today. Program supervision can have a ripple effect, increasing other potential issues.

# Less Noteworthy Problems

The remaining categories were less frequently cited as problems, as evidenced by the lower frequency of open-ended responses and direct responses to question number two. It does not mean that any one of these categories is unimportant. It simply means that in this data set, these problems are relatively infrequent. When working with children, all potential problems must be taken into consideration. Failure to do so can result in injury, illness, emotional trauma, liability, and ethical issues.

### Animal Maintenance and Maintenance Costs.

The lesser documented problems were animal maintenance (33) and maintenance costs (12). Animal maintenance was defined as daily dog care, while maintenance costs refer to the financial obligation of having a therapy dog. If these two categories were combined, that would account for 14% of the perceived occurrences. Despite this, it is still less than half of the next largest category.

There is only one open-ended comment that addresses either of these categories. "...due to the nature of the animal being owned by one staff member, the bulk of training and responsibilities fell to that individual, and yet the demands of the animal, and training, and vet bills fell to the owner, even though the school community benefited". The responsibilities and costs associated with therapy dogs must be recognized.

Regardless of whether the dog handler pays for those expenses themself or if they are reimbursed through the school district, the costs for a therapy dog can be thousands of dollars. These expenses do not include the cost of time. Initial and maintenance training can accumulate to weeks and months over the dog's lifetime. It might be beneficial to have a secondary caregiver assist with time demands.

#### Legal Implications and Liability, Cultural Differences, and Animal Welfare.

Sixteen participants (5%) identified legal implications and liability as a problem. Two participants selected cultural differences (0.06%) as a problem. Seven (2.2%) cited that animal welfare was a problem. It is assumed that any issues related to these are minimal due to the low response numbers. There were three open-ended responses addressing animal welfare. They were all regarding the dog consuming food for which it was not allowed. Two of these responses may be from the same school, given the proximity of the response time in the survey. They were submitted consecutively, three minutes apart.

### Sanitation.

Sanitation had a total count of 17 participants (5.4%) who cited this as a problem. The four open-ended responses addressing this category focused primarily on dog hair and saliva. Given the current timing, nearing the end of a global pandemic, it is somewhat surprising to see no mention of bacteria and viruses in these responses. Additionally, there are no comments about urine or feces. The most frequent sanitation concerns shared had to do with shedding and saliva.

## Child Safety/Welfare.

Given that this study examines problems related to therapy dogs in school, child welfare and safety are of utmost importance. Sixteen respondents (5.1%) selected this as a problem. One dog is reported to have "nipped" a child. A child reportedly received a "tiny nip" after being accidentally kicked by a dancing student. In another response, a dog bit a student only after being "taunted and teased" by a student. Another respondent shared that a dog in his school may have bitten more than one person. "Yes, one of the dogs used at [Redacted] SD bit staff/students." It was also reported that the "dog couldn't handle all the kids all day long and started to get a little aggressive."

In response to the dog that started to become aggressive, it appears that a handler was monitoring the situation. This dog was removed from service at the school before anything worse occurred. It contrasts with the dog who bit a child after being "taunted and teased." If a handler were with the dog during this event, it possibly could have been prevented. There is not enough data to determine if a handler was monitoring the dogs in the remaining two reports, but it is disconcerting to hear that a dog may have bitten more than one person in a school. Most, if not all, certifying agencies train the handler to monitor a dog's behavior for stress to prevent one bite, let alone multiple bites.

# **Other Problems**

Another purpose of this study was to identify any other problems related to implementing therapy dog programs in schools. Some participants checked the "Other" box when presented with a checklist of options. This indicates that they felt some problems didn't fit into the existing categories. Those who selected the "Other" category were asked to explain the situation. This data creates seven more problem areas, after coding.

# Animal Supervision.

This summary of findings has indirectly addressed animal supervision twice so far. Interestingly, both times were in categories related to animal and child welfare. In one case, the dog was "taunted and teased" by a child until the dog bit him. The phrasing of taunted and teased leads one to believe this was an intentional provocation. In other cases, the dogs were being fed by students, intentionally or by food items left behind. In yet another case, the dog was being "re-retrained" by students providing treats to the dog. Another participant reported that their school therapy dog roams around the building freely and will jump up on people. This lack of supervision can be a significant problem, particularly for those with allergies or a fear of dogs. Proper animal supervision or monitoring can reduce the number of issues in a school.

### **Equitable Access.**

Therapy dogs in school can create much favor for the animals. Some participant responses indicated there was not enough time or access for those interested in interacting with the therapy dog(s). One participant said that their school was so large that "most students" are not even aware that there is a therapy dog. Another suggested that more students would benefit from the therapy dog if the dog did not spend most of its time in one person's office. Three other participants commented on the length of time the dogs were present. In one case, the dogs were brought in for a one-time visit, leaving the staff member feeling it was inadequate to meet the needs of the students. This is not an isolated case, as another reported that the school could not have the dogs there as often as needed. The third claimed that the dog is only present for five minutes, which, in his opinion, is too short of a time to foster changes in anxiety or depression. These examples demonstrate interest and demand to interact with these animals. When planning for implementation, equitable access should be considered.

# Animal Behavior/Training.

The entire premise of a therapy dog is based on animal behavior and training. For a dog to become a certified therapy dog, it needs to pass a test in which its temperament and obedience are assessed. It appears as those some dogs may not be thoroughly tested until they participate in the schools. Comments indicating this include dogs that "failed out," were nervous most of the time, jumped up on people, and experience overstimulation. In one case, a dog that was "absolutely monumental" in the classroom developed that habit of eloping. Another participant hypothesized that a dog who occasionally barked may have contributed to the fear of dogs in some cases. A school setting with the potential of hundreds of students and high noise volumes can present difficulties, even for certified dogs.

### **Breed Specific Problems.**

Any dog can become a certified therapy dog if it demonstrates the required temperament and necessary training. However, some participants voiced a preference for certain types of dogs. The most compelling comments include choosing a hypoallergenic dog to help accommodate allergies and a breed of dog that does not produce large amounts of saliva, otherwise described as excessive drool. Being selective on the breed of dog may help reduce problems related to allergies and sanitation.

# **Misconceptions about Therapy Dogs.**

This category has the least amount of participant feedback supporting it. Three respondents didn't know or believe there was any benefit to having therapy dogs in the school. If any program in a school is going to be successful, program administrators need to have buy-in from the stakeholders. Forty-five percent of the participants in this survey were given insufficient information about the programs being implemented in their schools. This likely also led to comments such as, "I really don't see why it is a new necessity" and "…I felt it was more of a PR push…" Stakeholders should be given information about why these animals are being used and how empirical data support those benefits.

### Alienation of Individuals.

Two respondents reported that they felt alienated because they were not in support of using therapy dogs in the school. One feels as though he needs to feign interest in the dog due to social pressures, while the other believes it is unfair to put people in a situation where they must explain their allergy, fear, or another issue. He continues by saying that presenting them with these choices can be detrimental to their well-being. These persons may feel judged or isolated if or when the suggestion is made to leave the area. Many schools bring therapy dogs in to support mental health, but it is important to be aware that this solution may present problems for some.

### **Post-Traumatic Stress Disorder.**

Only one respondent cited Post-Traumatic Stress Disorder (PTSD) as a problem related to the use of therapy dogs. Although the survey was anonymous, he documented that he was the only person responding from his school district. This school district was one of the earliest to use therapy dogs in response to use therapy to an incident of mass violence in a school. The dogs were cited as being "instrumental" in the recovery process as students and staff found great comfort in these animals. The therapy dogs positively impacted the school decided to bring dogs back again to support the elementary reading program and high school students during finals week.

Despite this success, some staff members have linked therapy dogs to the trauma they experienced on that awful day. Just as an individual who experienced a traumatic accident can have PTSD triggered by sirens, some staff members in this school experience PTSD as the presence of therapy dogs in schools takes their mind back to that painful time. The school district continues to bring therapy dogs into school, but they are careful to provide advance warnings to staff members.

In the event of a traumatic school experience, schools may benefit by to having history of using therapy dogs in schools. This might allow participants to associate the dogs with other scenarios as opposed to the trauma they experienced. Knowledge of this issue can help prevent problems in future therapy dog implementation plans.

## Distraction.

There were several reports of the dogs being a distraction in school. Having dogs walking in the hallway and entering classrooms without notice can take away instructional time. In another scenario, the dog only spent a few minutes in the classroom and was determined not to be worthwhile by that participant. Another participant shared that the dog could become an excuse to "go play" when it is kept in another location in the school. An individual who works in an office setting stated that it pulled him away from his work. Being aware possible distraction can help program administrators develop better guidelines for therapy dog implementation.

# Validation of Other Findings.

The findings of this study are consistent with recent literature regarding the success of therapy dog programs. Grové et al. (2021) identified keys to a successful program. These keys were flexibility of the program, quality of the program coordinator, support from the whole school, animal welfare, and communication, education, and training. Table 9 demonstrates how these reported problems fit into the characteristics of successful programs.

# Table 9

<b>Program</b> <b>Coordinator</b> (Grové et al.)	Whole School Support (Grové et al.)	<b>Flexibility of</b> <b>Program</b> (Grové et al.)	<b>Communication,</b> <b>Education, and</b> <b>Training</b> (Grové et al.)	Animal Welfare (Grové et al.)
Animal supervision	Alienation	PTSD	Misconceptions	Animal supervision
Equitable access				
Distraction				
Animal behavior and training				

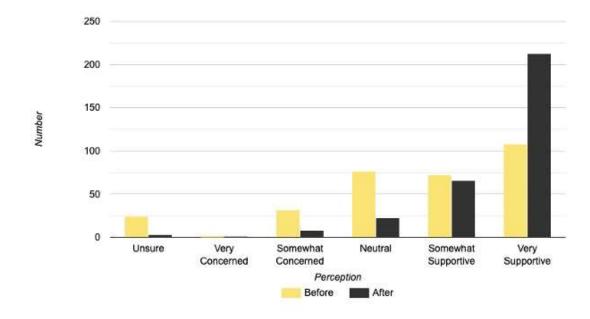
Other Problems Categorized by Characteristics of Successful Programs

# Perspectives Before and After Implementation

Figure 3 shows how staff perceptions changed from before therapy dog implementation to after implementation. The data provided by this study indicates that there are many perceived problems related to therapy dog programs in schools. Despite these problems that participants in this study have experienced, staff perspectives became more supportive of therapy dogs in schools after implementation.

Before implementation, the number of participants in the unsure, very concerned, somewhat concerned, and neutral categories was higher than the after-implementation numbers, with 134. After implementation, numbers in these categories decreased to 35. Prior to implementation, the participants in the somewhat supportive and very supportive categories totaled 180. After implementation, the new total for these categories is 279. The category of very supportive showed a dramatic increase in the numbers of those who were very supportive. Those who have experience with therapy dogs became more supportive of their use after implementation.

# Figure 3



# Staff Perceptions Before and After Therapy Dog Experience

# Limitations

- The first limitation is due to the relatively small distribution of surveys. While the state of Pennsylvania has 500 school districts and 29 Intermediate Units, the responses that come from schools that have implemented therapy dog programs may not be representative of the entire community.
- Qualitative reporting relies on the participant's ability to self-disclose concerns or problems experienced during the implementation of therapy dog programs. Inaccuracies in recall or perception can influence the data.
- Potential biases may exist from the researcher, who is an advocate of therapy dogs in educational settings, or in the results from participants who may or may not favor therapy dog implementation.
- 4. A geographic limitation may exist because only schools in Pennsylvania were surveyed.

- 5. All schools and persons were granted complete anonymity. If a particular school or district had a significantly more responses, it could sway the data in one direction.
- 6. This limitation was added after coding the data. Confounding factors have been identified based on perception, which may have led to overlap between categories or omission in some categories.

# Implications

Therapy dogs have been found to bring many benefits to children in schools. This research documents problems experienced within schools related to implementing therapy dog programs. These results provide stakeholders with a better understanding of what problems may arise, which can ultimately serve as a guide for planning purposes.

The framework provided in the study was sufficient in gaining a better understanding of what types of problems have arisen during therapy dog implementation It has shown that the common concerns previously suggested in literature manifest in K-12 settings. It has also revealed some additional problems with using therapy dogs in the school. Finally, it also shows that staff perspectives become more favorable toward the program despite the occurrences of problems after experiencing therapy dogs in schools.

A significant finding in this study is the discovery of confounding factors. This result is due to the cause-and-effect nature of the categories, or the problems related to program implementation. As an example, if a problem is identified by a dog being fed by children while it is walking through the halls, the problem could be (1) animal welfare because the dog could be fed something harmful, like chocolate, or the problem could be (2) animal supervision because the dog was left alone, or the problem can be (3) related to the oversight of the program because the dog is not being monitored. This example gives us three different problem areas to try to identify what is the cause, what is the effect, and what that means for therapy dog implementation.

# **Theoretical Implications**

To provide better support for future implementation of therapy dog programs, the concerns and problems for a K-12 educational setting should be classified into more definitive categories. Doing so may reduce confounding factors in future research. As a result of this study, the following categorization is recommended.

- 1. Animal Welfare
  - a. Adequate supervision
  - b. Animal maintenance, including daily care and routine veterinary care
  - c. Costs of animal maintenance
  - d. Proper and ongoing training

# 2. Whole School Support

- a. Allergies
- b. Cultural differences
- c. Fear of dogs
- d. Alienation
- 3. Communication, Education, and Training
  - a. Proper staff and community education to avoid misconceptions
  - b. Proper communication to staff about participation
  - c. Animal and handler training
  - d. Training for students to teach proper interactions around dogs

### 4. Program Oversight

- a. Legal implication and liability
- b. Proper supervision of the animal
- c. Sanitation plans
- d. Breed and temperament selection
- e. Equitable access
- f. Distraction

# 5. Child and Staff Welfare

- a. Sanitation
  - i. Prevention of zoonotic pathogens
  - ii. Spread of bodily fluids or excessive hair
- b. Proper supervision of both the program and animal
- c. Proper education and training for staff, children, and animal
- 6. Flexibility of the Program
  - a. Monitor and address changes to meet school needs

# **Practical Implications**

Given the data found in this study and existing literature, as documented in this dissertation, recommendations can be made for schools with therapy dog programs and school planning to implement therapy dog programs. The program facilitator and other stakeholders should establish program objectives, policies, and procedures to address potential problems. To manage policies and procedures, stakeholders can use the list provided in the Theoretical Implications section of this chapter. Arguably, the single most critical factor is the quality of the program facilitator. All six of the categories listed in the theoretical implications fall under the purview of this person. Negligence, apathy, or ignorance can result in a cascading event leading to problems that can terminate a therapy dog program, injury to a person or dog, or worse. The program facilitator must have the necessary skills, knowledge, and interest to manage and support the therapy dog program. The facilitator also needs to be a good planner and communicator who can work with the entire school community.

The facilitator must decide whether the breed and temperament are suitable for the school. He must also consider whether the proposed certifying agency provides adequate training since no national standard defines expectations for the dog or the handler. Selecting the right dog for a school and ensuring it is properly trained and evaluated is necessary to reduce the frequency of problems in schools.

Community buy-in would be the next critical factor. To gain community buy-in, the facilitator should be conducting surveys and training sessions for both staff and students. Facilitators should use survey results to identify and meet with those with concerns to help prevent feelings of alienation. Parental consent should be obtained for students wishing to participate in the program. Doing so can help reduce issues with allergies, fear of dogs, cultural differences and limit liability.

All stakeholders should understand the objective and overall scope of the program. It may be beneficial to institute a pilot program to identify any potential issues. Programs should be monitored and evaluated regularly to ensure it meets the objectives and that the experiences of the community remain positive. Additionally, stakeholders need knowledge of how therapy dog programs differ from service dogs and animals used for affiliative support. Supervision of the animal appears to be another critical factor. Keeping a dog with its handler can be vital. Ideally, the dog would be on a leash, no longer than five feet. A leash would prevent or almost eliminate issues related to the dog from running away, being re-trained by students, taunted and teased by students, being fed harmful foods, nipping or biting, jumping up on people when overstimulated, and roaming the building, causing distraction.

Due to the nature of therapy dogs and the Human-Animal Bond, the findings from this study may assist researchers in other fields, including but not limited to veterinary, humananimal interaction, counseling, and other therapies. It can also support therapy dog organizations in developing or refreshing their requirements and protocol or support the development of a new standardized certification.

### **Recommendations for Further Research**

Additional research areas could include studying and comparing implementation plans, policies, or therapy dog organization requirements. Doing so could lead to further insight into school planning or the selection of therapy dog certification. It is possible that specific therapy dog organizations may have more appropriate guidelines for schools or that a secondary certification could be developed to better assess dogs for the demands of a school environment.

This study is the first known that revealed an occurrence related to PTSD triggered by the post-trauma visitation of therapy dogs. PTSD could be unique to this school, or it could be more common. It could also be depended on whether a school has used therapy dogs before a traumatic event. Further research can be done in this area to learn whether this is an anomaly or a more frequent problem.

Given the rapid growth of mental health concerns for school-age students, a long-term study could evaluate whether children in a school that regularly includes therapy dogs have fewer mental health problems.

Some schools use certified therapy dogs, while others pay more for service dogs used for the same purposes. There may or may not be a difference in satisfaction or frequency of problems in using one dog type over the other.

# Conclusions

This study began by asking three questions related to therapy dogs in schools. After this study, these questions now have a resolution. What perceived problems, if any, arose during the implementation of therapy dog programs within schools that have not been documented previously? How do the perceived problems upon implementation of therapy dog programs compare to the anticipated concerns cited in existing literature? Was there a shift in perception of the staffs' concerns during or after implementation? If so, how?

Based on the data collected from 314 participants with therapy dog experience in schools, eight new categories were to those previously documented by multiple researchers. The first is animal supervision. This comes from dogs not being under an assigned handler's direct supervision or control. It resulted in concerns for both child and animal welfare. The second was equitable access. Several people felt there wasn't enough time for everyone who wanted to be with the therapy dogs. The third was animal behavior/training. Even though some dogs presumably earned therapy dog certification, the demands of a school setting were overwhelming. The fourth was breed-specific problems. Some participants shared a strong preference for hypoallergenic and low shedding dogs. There was also a complaint about dog breeds that drool excessively. The sixth category was misconceptions about therapy dogs. The data suggested that many people did not have adequate knowledge about therapy dogs or the programs in their schools. The seventh was only reported from one school that used therapy dogs after a traumatic event. Upon future visitations, staff members suffered PTSD. The final category was that the dogs served as a distraction to some for academics and office work.

Previously existing literature documented concerns related to therapy dog use around children. The list included fear of dogs, allergies, proper program supervision, animal maintenance (daily care), maintenance costs, legal implications and liability, sanitation, child welfare, animal welfare, and cultural differences. Each of these concerns did manifest at some point in schools. The most noteworthy were a fear of dogs, allergies, and proper program supervision.

Finally, the data showed a shift in staff perceptions before and after therapy dog implementation. The data clearly indicate increasingly favorable views toward therapy dogs after implementation. Therapy dog experiences were favorable for most people, despite reported problems. This implies that problems that arise in schools can be dealt with and that the benefits outweigh the drawbacks. Proper planning and handling of these issues can allow students and staff to experience benefits related to therapy dog programs.

### References

Abat-Roy, V. (2021). Service Animals and Pet Therapy in Schools: Synthesizing a Review of the Literature. *Exceptionality Education International*, *31*(1), 1–23. https://eric.ed.gov/?q=service+animals+in+hospitals&id=EJ1318564

AKC Staff. (2021, May 21). *Can dogs get coronavirus?* American Kennel Club. https://www.akc.org/expert-advice/health/can-dogs-get-coronavirus/

- Alliance of Therapy Dogs. (2017, March 12). *Difference between a therapy dog vs a service dog*. Alliance of Therapy Dogs Inc. <u>https://www.therapydogs.com/service-dog-vs-therapy-dog/</u>
- American Kennel Club. (2017, November 29). *AKC therapy dog*. American Kennel Club. <u>https://www.akc.org/sports/title-recognition-program/therapy-dog-program/</u>
- Anderson, K. (2007). Who let the dog in? How to incorporate a dog into a self-contained classroom. *Teaching Exceptional Children Plus*, 4(1). ERIC. https://files.eric.ed.gov/fulltext/EJ967469.pdf
- Anderson, K. L., & Olson, M. R. (2006). The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoös*, 19(1), 35–49. Research Gate. https://doi.org/10.2752/089279306785593919
- Bassette, L. A., & Taber-Doughty, T. (2013). The effects of a dog reading visitation program on academic engagement behavior in three elementary students with emotional and behavioral disabilities: A single case design. *Child & Youth Care Forum*, 42(3), 239–256.
  Springer Link. <u>https://doi.org/10.1007/s10566-013-9197-y</u>
- Bercovitz, A., Sengupta, M., Jones, A., & Harris-Kojetin, L. (2007). Complementary and alternative therapies in hospice: The national home and hospice care survey: United

states, 2007. In *Centers for Disease Control and Prevention* (pp. 1–20). U.S. Department of Health and Human Services. <u>https://www.cdc.gov/nchs/data/nhsr/nhsr033.pdf</u>

- Berry, A., Borgi, M., Francia, N., Alleva, E., & Cirulli, F. (2013). Use of assistance and therapy dogs for children with autism spectrum disorders: A critical review of the current evidence. *The Journal of Alternative and Complementary Medicine*, *19*(2), 73–80.
  PubMed. https://doi.org/10.1089/acm.2011.0835
- Binfet, J.-T. (2019, March 10). *Dog therapy: What I've learned overseeing 60 canine campus teams*. The Conversation. <u>https://theconversation.com/dog-therapy-what-ive-learned-overseeing-60-canine-campus-teams-112944</u>
- Briggs, R. (2018). Paws for Reading: An innovative program uses dogs to help kids read better. School Library Journal. <u>https://www.schoollibraryjournal.com/?detailStory=paws-for-reading-an-innovative-program-uses-dogs-to-help-kids-read-better</u>
- Brodie, S., Biley, F., & Shewring, M. (2002). An exploration of the potential risks associated with using pet therapy in healthcare settings. *Journal of Clinical Nursing*, *11*(4), 444–456. PubMed.Gov. <u>https://doi.org/10.1046/j.1365-2702.2002.00628.x</u>
- Centers for Disease Control and Prevention. (2021). *What you should know about COVID-19 and pets*. <u>https://www.cdc.gov/healthypets/covid-19/pets.html</u>

Chandler, C. (2001). *Animal-Assisted Therapy in Counseling and School Settings*. <u>https://www.counseling.org/resources/library/ERIC%20Digests/2001-05.pdf</u>

Charlotte Helen Bacon Foundation. (2014). Bringing therapy dogs to your school: A practical guide for school administrators and educators. In *CharlottesLitter.org*.
 CharlottesLitter.org. <u>http://charlotteslitter.org/wp-</u>content/uploads/2014/09/Educator Resource.pdf

- Check, J. W., & Schutt, R. K. (2012). *Research methods in education* (p. 160). Sage Publications.
- Cole, J., Miller, B., & Maxim, R. (2016). *How to decide between autism service dogs & autism therapy dogs*. Autism Speaks. <u>https://www.autismspeaks.org/expert-opinion/service-dog-or-therapy-dog-which-best-child-autism</u>
- Coren, S. (2013). *How therapy dogs almost never came to exist*. Psychology Today. https://www.psychologytoday.com/us/blog/canine-corner/201302/how-therapy-dogsalmost-never-came-exist
- Courthouse Dogs Act, no. HR 5403, The House of Representatives (2019).

https://www.govinfo.gov/content/pkg/BILLS-116hr5403ih/pdf/BILLS-116hr5403ih.pdf

- Courthouse Dogs Foundation. (2018). Home. Courthouse Dogs. https://courthousedogs.org/
- Creswell, J. (2011). Educational research: Planning, conducting, and evaluating quantitative and qualitative research (p. 244). Allyn & Bacon.
- Crossman, M. k., Kazdin, A. E., & Knudson, K. (2015). *Brief Unstructured Interaction with a Dog Reduces Distress*. Anthrozoös.

https://www.tandfonline.com/doi/abs/10.1080/08927936.2015.1070008

Crowley-Robinson, P., & Blackshaw, J. K. (1998). Nursing home staffs' empathy for a missing therapy dog, their attitudes to animal-assisted therapy programs and suitable dog breeds. *Anthrozoös*, 11(2), 101–104. Taylor & Francis Online.

https://doi.org/10.2752/089279398787000779

DelPilar, J. (2019, April 26). Carnegie elementary school students read to therapy dogs in new reading program. Fox 23 News; KOKI. <u>https://www.fox23.com/news/carnagieelementary-school-students-read-to-therapy-dogs-in-new-reading-program/943566285/</u>

- Dicé, F., Santaniello, A., Gerardi, F., Menna, L. F., & Freda, M. F. (2017). Meeting the emotion!
  Application of the Federico II model for pet therapy to an experience of animal assisted
  education (AAE) in a primary school. *Pratiques Psychologiques*, 23(4), 455–463.
  Science Direct. https://doi.org/10.1016/j.prps.2017.03.001
- Dietz, T., 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.
- Eggert, D., Minutelli, A., & McGown, C. (2015). *High Anxiety: Mental Health Issues and the IDEA Presented to the New Hampshire Association of Special Education Administrators*. Wadleigh, Starr & Peters, P.L.L.C. <u>http://wadleighlaw.com/wp-</u>

content/uploads/2015/03/IDEA-Mental-Health-Issues-and-the-IDEA-High-Anxiety.pdf

Esteves, S. W., & Stokes, T. (2008). Social effects of a dog's presence on children with disabilities. *Anthrozoös*, 21(1), 5–15. Taylor & Francis Online.

https://doi.org/10.1080/08927936.2008.11425166

- Fine, A. H. (2015). Handbook on animal-assisted therapy theoretical foundations and guidelines for practice. San Diego Elsevier Science & Technology.
- Frankel, R. (2014, May 22). Dogs at war: Smoky, a healing presence for wounded WWII soldiers. National Geographic. <u>https://news.nationalgeographic.com/news/2014/05/140520-dogs-war-canines-soldiers-</u> <u>military-healing-yorkshire-terrier-smoky/</u>

Friesen, L. (2009). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early Childhood Education Journal*, 37(4), 261–267. Springer Link. https://doi.org/10.1007/s10643-009-0349-5 Gable, K. (2019, December 26). Local dentist relies on therapy dog named smudge to provide comfort and affection during visits. CBS Pittsburgh.

https://pittsburgh.cbslocal.com/2019/12/26/dentist-uses-therapy-dog-to-provide-comfort/

- Gadomski, A. M., Scribani, M. B., Krupa, N., Jenkins, P., Nagykaldi, Z., & Olson, A. L. (2015).
   Pet dogs and children's health: Opportunities for chronic disease prevention? *Preventing Chronic Disease*, *12*. <u>https://doi.org/10.5888/pcd12.150204</u>
- Gee, N. R., Mueller, M. K., & Curl, A. L. (2017). Human–Animal interaction and older adults: An overview. *Frontiers in Psychology*, 21(8). National Center for Biotechnology Information. <u>https://doi.org/10.3389/fpsyg.2017.01416</u>
- Giuliani, F., & Jacquemettaz, M. (2017). Animal-Assisted therapy used for anxiety disorders in patients with learning disabilities: An observational study. *European Journal of Integrative Medicine*, 14, 13–19. Science Direct.

https://doi.org/10.1016/j.eujim.2017.08.004

- Glenk, L. (2017). Current perspectives on therapy dog welfare in animal-assisted interventions. *Animals*, 7(12), 7. PubMed. <u>https://doi.org/10.3390/ani7020007</u>
- Glenn-Applegate, K., & Hall, K. (2017). Child's best friend: Preparing for and reaping the benefits of a dog in school. *Teaching Young Children*, *10*(4), 23–26.
- Grajfoner, D., Harte, E., Potter, L. M., & McGuigan, N. (2017). The effect of dog-assisted intervention on student well-being, mood, and anxiety. *International Journal of Environmental Research and Public Health*, 14(5), 483. PubMed.

https://doi.org/10.3390/ijerph14050483

- Granger, B., Kogan, L., Fitchett, J., & Helmer, K. (2015). A Human-Animal Intervention Team Approach to Animal-Assisted Therapy. Anthrozoös. https://www.tandfonline.com/doi/abs/10.2752/089279398787000689
- Grové, C., Henderson, L., Lee, F., & Wardlaw, P. (2021). Therapy Dogs in Educational Settings:
   Guidelines and Recommendations for Implementation. *Frontiers in Veterinary Science*, 8. <u>https://doi.org/10.3389/fvets.2021.655104</u>
- Griffin, J., McCune, S., McCardle, P., & Maholmes, V. (2011). How animals affect us:
   Examining the influences of human–animal interaction on child development and human health. (pp. 3–9). American Psychological Association.
- Hoffmann, A. O. M., Lee, A. H., Wertenauer, F., Ricken, R., Jansen, J. J., Gallinat, J., & Lang, U. E. (2009). Dog-assisted intervention significantly reduces anxiety in hospitalized patients with major depression. *European Journal of Integrative Medicine*, 1(3), 145–148. Science Direct. <u>https://doi.org/10.1016/j.eujim.2009.08.002</u>
- Intermountain Therapy Animals. (2019). *R.E.A.D. team steps*. Therapyanimals.org. <u>https://therapyanimals.org/read-team-steps/</u>
- Jacobson, L. (2018, March). *Dogs go to school as part of social-emotional learning programs*. Education Dive; Industry Drive. <u>https://www.educationdive.com/news/dogs-go-to-</u> <u>school-as-part-of-social-emotional-learning-programs/518156/</u>
- Jalongo, M. (2008). Beyond a pets theme: Teaching young children to interact safely with dogs. *Early Childhood Education Journal*, *36*(1), 39–45. <u>https://doi.org/10.1007/s10643-008-</u> <u>0272-1</u>
- Jalongo, M. R., Astorino, T., & Bomboy, N. (2004). Canine visitors: The influence of therapy dogs on young children's learning and well-being in classrooms and hospitals. *Early*

Childhood Education Journal, 32(1), 9–16. Springer Link.

https://doi.org/10.1023/b:ecej.0000039638.60714.5f

- Jalongo, M. R., E. Linder, D., Rotz, F., & Schultz, D. (2018). Future Directions in Canine-Assisted Activities, Education, and Therapy. *Children, Dogs and Education*, 321–357. Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-77845-7\_15</u>
- Kathy, P.-P., Nikki, Y., & Laura, S. (2014). Sit, Stay, Read: Improving literacy skills using dogs! Dimensions of Early Childhood, 42(1), 5–9. Semantic Scholar. <u>https://pdfs.semanticscholar.org/97d8/6fdf89fa9eb1e889e8d35e92f647fd6e8d94.pdf?\_ga</u> =2.179792481.418055690.1593297876-704263705.1592964033
- Klimova, B., Toman, J., & Kuca, K. (2019). Effectiveness of the dog therapy for patients with dementia A systematic review. *BMC Psychiatry*, *19*(1). <u>https://doi.org/10.1186/s12888-019-2245-x</u>
- Kline, J. A., Fisher, M. A., Pettit, K. L., Linville, C. T., & Beck, A. M. (2019). Controlled clinical trial of canine therapy versus usual care to reduce patient anxiety in the emergency department. *PloS One*, 14(1), e0209232.

https://doi.org/10.1371/journal.pone.0209232

- Ko, M. (2017, May 29). Reading to therapy dogs improves literacy attitudes in second-grade students. Tufts Now; Tufts Institute for Human-Animal Interaction.
   <u>https://now.tufts.edu/news-releases/reading-therapy-dogs-improves-literacy-attitudes-second-grade-students</u>
- Kotrschal, K., & Ortbauer, B. (2003). Behavioral effects of the presence of a dog in a classroom. *Anthrozoös*, *16*(2), 147–159. Taylor & Francis Online.

https://doi.org/10.2752/089279303786992170

- Lane, H. B., & Zavada, S. D. W. (2013). When reading gets ruff: Canine-assisted reading programs. *The Reading Teacher*, 67(2), 87–95. International Literacy Association Hub. <u>https://doi.org/10.1002/trtr.1204</u>
- le Roux, M. C., Swartz, L., & Swart, E. (2014). The effect of an animal-assisted reading program on the reading rate, accuracy and comprehension of grade 3 students: A randomized control study. *Child & Youth Care Forum*, 43(6), 655–673. Research Gate. https://doi.org/10.1007/s10566-014-9262-1
- Levinson, E. M., Vogt, M., Barker, W. F., Jalongo, M. R., & Van Zandt, P. (2017). Effects of reading with adult tutor/therapy dog teams on elementary students' reading achievement and attitudes. *Society & Animals*, 25(1), 38–56. Semantic Scholar. https://doi.org/10.1163/15685306-12341427
- Maenner, M. J., Shaw, K. A., Baio, J., Washington, A., Patrick, M., DiRienzo, M., Christensen, D. L., Wiggins, L. D., Pettygrove, S., Andrews, J. G., Lopez, M., Hudson, A., Baroud, T., Schwenk, Y., White, T., Rosenberg, C. R., Lee, L.C., Harrington, R. A., Huston, M., & Hewitt, A. (2020). Prevalence of autism spectrum disorder among children aged 8 years. Autism and Developmental Disabilities Monitoring Network, 11 sites, united states, 2016. *MMWR. Surveillance Summaries*, 69(4), 1–12.

https://doi.org/10.15585/mmwr.ss6904a1

- Malchik, A. (2015, July 9). What if schools hired dogs as therapists? Bright Magazine. https://brightthemag.com/can-a-dog-at-school-help-struggling-kids-7317a8eff20d
- McCullough, A., Ruehrdanz, A., Jenkins, M. A., Gilmer, M. J., Olson, J., Pawar, A., Holley, L.,Sierra-Rivera, S., Linder, D. E., Pichette, D., Grossman, N. J., Hellman, C., Guérin, N.A., & O'Haire, M. E. (2017). 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. PubMed.Gov.

https://doi.org/10.1177/1043454217748586

- McDonald, L. (2019, July 3). *Cute and calm: Therapy dogs offer services at reading event*. The Brunswick News. <u>https://thebrunswicknews.com/news/local\_news/cute-and-calm-</u> <u>therapy-dogs-offer-services-at-reading-event/article\_ac59585a-ae4b-505a-8550-</u> <u>226d0e736688.html</u>
- Mueller, M. K., Anderson, E. C., King, E. K., & Urry, H. L. (2021). Null effects of therapy dog interaction on adolescent anxiety during a laboratory-based social evaluative stressor. *Anxiety, Stress, & Coping, 34*(4), 365–380. Taylor & Francis. https://doi.org/10.1080/10615806.2021.1892084
- Nammalwar, R. B., & Rangeeth, P. (2018). A bite out of anxiety: Evaluation of animal-assisted activity on anxiety in children attending a pediatric dental outpatient unit. *Journal of the Indian Society of Pedodontics and Preventive Dentistry*, 36(2), 181–184. PubMed.
   <a href="https://doi.org/10.4103/JISPPD.JISPPD\_54\_18">https://doi.org/10.4103/JISPPD.JISPPD\_54\_18</a>

Paws Teams. (2021). Facility dogs. Pawsitive Teams. https://pawsteams.org/facility-dogs

- Pessah, S. (2017, November 28). *What is a Therapy Dog*. American Kennel Club. <u>https://www.akc.org/sports/title-recognition-program/therapy-dog-program/what-is-a-therapy-dog/</u>
- Protopopova, A., Matter, A., Harris, B., Wiskow, K., & Donaldson, J. (2019). Comparison of contingent and noncontingent access to therapy dogs during academic tasks in children with autism spectrum disorder. *Journal of Applied Behavior Analysis*, 53(2). https://doi.org/10.1002/jaba.619

- Ravina, R. (2019, May 9). Therapy pup brings smiles to students in county schools. Ocean City Today, 39–40.
- Reisen, J. (2021, February 24). Service, working, therapy, emotional support dogs: Which is which? American Kennel Club. <u>https://www.akc.org/expert-advice/training/service-</u>working-therapy-emotional-support-dogs/
- Ryan, H. (2002). The use of dogs in California Public Schools: Current use, support for, potential concerns and educator familiarity with potential benefits (pp. 1–70) [Thesis]. <u>http://www2.uwstout.edu/content/lib/thesis/2002/2002ryanh.pdf</u>
- Schaeffer, K. (2017, March 8). *Beaver Area therapy dogs aid mental health counseling*. The Times. <u>https://www.timesonline.com/ff40878a-fecb-11e6-98fb-cb3cb1d286c3.html</u>
- Schulze, S. (2019, November 21). Northwest Indiana school district puts dogs into every school this year. FOX 32 Chicago. <u>https://www.fox32chicago.com/news/northwest-indiana-</u> <u>school-district-puts-dogs-into-every-school-this-year</u>
- Schwartz, M. (2012). Therapy dogs' presence steadily grows in libraries. *Library Journal*, *137*(4), 12. <u>https://www.libraryjournal.com/?detailStory=therapy-dogs-presence-steadily-grows-in-libraries</u>
- Serpell, J. A., Kruger, K. A., Freeman, L. M., Griffin, J. A., & Ng, Z. Y. (2020). Current standards and practices within the therapy dog industry: Results of a representative survey of united states therapy dog organizations. *Frontiers in Veterinary Science*, 7(35), 1–12. https://doi.org/10.3389/fvets.2020.00035
- Service Dog Express. (2014). *Types of assistance dogs*. Service Dog Express. <u>https://www.servicedogexpress.com/types-assistance-dogs/#3</u>

Shannon, J. (2019, May 18). These dogs helped Parkland students cope with tragedy. They got their own yearbook page. USA TODAY.

https://www.usatoday.com/story/news/nation/2019/05/18/parkland-students-honortherapy-dogs-yearbook-page/3719321002/

- Shaw, D. M. (2013). Man's best friend as a reading facilitator. *The Reading Teacher*, 66(5), 365–371. International Literacy Association Hub. <u>https://doi.org/10.1002/trtr.01136</u>
- Silva, K., Correia, R., Lima, M., Magalhães, A., & de Sousa, L. (2011). Can dogs prime autistic children for therapy? Evidence from a single case study. *The Journal of Alternative and Complementary Medicine*, 17(7), 655–659. PubMed.

https://doi.org/10.1089/acm.2010.0436

- Stefanini, M. C., Martino, A., Bacci, B., & Tani, F. (2016). The effect of animal-assisted therapy on emotional and behavioral symptoms in children and adolescents hospitalized for acute mental disorders. *European Journal of Integrative Medicine*, 8(2), 81–88. Science Direct. <u>https://doi.org/10.1016/j.eujim.2016.03.001</u>
- Stepanek, A. (2017, November 29). *Therapy dog organizations*. American Kennel Club. <u>https://www.akc.org/sports/title-recognition-program/therapy-dog-program/therapy-dog-organizations/</u>
- Stevenson, K., Jarred, S., Hinchcliffe, V., & Roberts, K. (2015). Can a dog be used as a motivator to develop social interaction and engagement with teachers for students with autism? *Support for Learning*, 30(4), 341–363. Wiley Online Library. <u>https://doi.org/10.1111/1467-9604.12105</u>
- Stone, A. (2008, November). "Reading" Dogs Help Children Learn. The Bark. https://thebark.com/content/reading-dogs-help-children-learn

- Thayer, E. R., & Stevens, J. R. (2019). *Encyclopedia of Animal Cognition and Behavior*. Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-47829-6</u>
- Therapy Dogs International. (2020). *Getting started*. <u>https://www.tdi-</u>

dog.org/About.aspx?Page=Getting+Started

Therapy Dogs United. (2011). *About us*. Therapydogsunited.org. http://www.therapydogsunited.org/about\_us/

- Thomas, E. (2020, September 25). *Izzy she sweet? Moody therapy dog comforting kids in schools*. The Trussville Tribune. <u>https://www.trussvilletribune.com/2020/09/25/izzy-she-sweet-moody-therapy-dog-comforting-kids-in-schools</u>
- U.S. Department of Justice. (2013). ADA Requirements: Service Animals. Ada.gov. https://www.ada.gov/service\_animals\_2010.htm
- United States Department of Justice. (2014). *The Americans with Disabilities Act (ADA) and service dogs*. US Service Animal Registrar. <u>https://usserviceanimalregistrar.org/ada-</u> <u>service-dogs/</u>
- US Department of Justice: Civil Rights Division. (2017). *Frequently asked questions about service animals and the ADA*. Ada.gov.

https://www.ada.gov/regs2010/service\_animal\_qa.html

- Walker, T. (2018). Are Schools Ready to Tackle the Mental Health Crisis? Nea.org. <u>https://www.nea.org/advocating-for-change/new-from-nea/are-schools-ready-tackle-mental-health-crisis</u>
- Watson, G. (2016, October 27). Can Therapy Dogs Assist in Motivating Children on the Autism Spectrum. Today.ttu.edu; Texas Tech University.

http://today.ttu.edu/posts/2016/10/autism-dogs

- Whiteman, H. (2014, June 12). Animal-Assisted therapy: Is it undervalued as an alternative treatment? Medical News Today; Healthline Media. https://www.medicalnewstoday.com/articles/278173.php
- Wood, E., Ohlsen, S., Thompson, J., Hulin, J., & Knowles, L. (2018). The feasibility of brief dog-assisted therapy on university students stress levels: The PAwS study. *Journal of Mental Health (Abingdon, England)*, 27(3), 263–268. PubMed.
   <a href="https://doi.org/10.1080/09638237.2017.1385737">https://doi.org/10.1080/09638237.2017.1385737</a>
- Yap, E., Scheinberg, A., & Williams, K. (2017). Attitudes to and beliefs about animal assisted therapy for children with disabilities. *Complementary Therapies in Clinical Practice*, 26, 47–52. PubMed. <u>https://doi.org/10.1016/j.ctcp.2016.11.009</u>

# LIST OF TABLES

Table 1. Percentage of Dog Handlers and School Participants	
Table 2. Age Levels of Students with Whom Therapy Dogs were Experienced	52
Table 3. Anticipated Problems Experienced	
Table 4. Other Problems Experienced	56
Table 5. Perceptions Prior to Implementation	57
Table 6. Perceptions after Implementation	57
Table 7. Implementation Plans Shared	
Table 8. Free-Style Responses	59
Table 9. Other Problems Categorized by Characteristics of Successful Programs	

# LIST OF FIGURES

Figure 1. Human-Animal Interactions	11
Figure 2. Comparison of Perceived Problems	75
Figure 3. Staff Perceptions Before and After Therapy Dog Experience	86

# **APPENDIX A: Introductory Email**

Subject: Request for Research Participation - Therapy Dogs

Dear Colleague:

My name is Janet Garchinsky. I am a doctoral candidate in the Doctor of Education in Special Education program at Slippery Rock University. I am requesting your participation in this research regarding application of therapy dogs in schools. This study is titles *Perceptions and Pragmatics of Therapy Dog Implementation in Schools*.

Results from this study will help educators better understand perceived objections and concerns during therapy dog implementation in schools and how they compare to documented existing pre-implementation data. Participation in this research will require completion of an online survey that will take less than 10 minutes of your time.

I hope that you are willing to take this opportunity to participate in this <u>anonymous</u> study and share it with other staff, faculty, and administrators within your school.

To access the survey, you may <u>click here</u> or use the address below: <u>https://www.esurveyspro.com/Survey.aspx?id=4eb94c7b-322f-482e-b496-898fb6bace3d</u>

If you have any questions regarding this study, please contact Janet Garchinsky at, jeg1011@sru.edu.

Sincerely, Janet Garchinsky

### **APPENDIX B: Survey Introduction and Consent**

#### Therapy Dog Experiences within Schools Answers marked with a \* are required.

#### Welcome to the Therapy Dog Experience Survey!

The use of therapy dogs in schools has been increasing rapidly since the concept was first introduced. Existing research demonstrates many benefits for therapy dog programs from preschool through college. Environments include everything from single rooms to entire campuses.

If you have experience with therapy dogs, please share your experience!

For the purpose of this research, school therapy dogs as defined as certified canines that: provide Animal-Assisted Therapy (provide comfort to many), Animal-Assisted Activities (provide therapy based on diagnosis/needs), or Animal-Assisted Education (support education outcome/goals). This does not include emotional support dogs or service dogs.

Before beginning, please read the information below regarding this research.

#### 1. RESEARCH PARTICIPANT INFORMATIONAL LETTER PERCEPTIONS AND PRAGMATICS OF THERAPY DOG IMPLEMENTATION IN SCHOOLS

Janet Garchinsky – jeg1011@sru.edu

#### Invitation to be Part of a Research Study

You are invited to participate in a research study. In order to participate, you must be at least 18 years of age and have experienced a therapy dog program in a school at which you work(ed) or volunteer(ed). Taking part in this research project is voluntary.

#### Important Information about the Research Study

#### Things you should know:

-The purpose of the study is to develop a better understanding of what problems or concerns may occur as related to the implementation of therapy dog programs in schools, and it will also seek to identify if perceptions of these programs have changed after implementation.

-If you choose to participate, you will be asked complete a brief survey. This will take approximately 5 minutes. There are no anticipated risks or discomforts from participation in this research. All data collected is anonymous.

-The study will not provide any direct benefits to you.

-Taking part in this research project is voluntary. You do not have to participate, and you can stop at any time. Please take time to read this entire form and ask guestions before deciding whether to take part in this research project.

#### What is the Study About and Why are We Doing it?

The purpose of the study is to develop a better understanding of what problems or concerns may occur as related to the implementation of therapy dog programs in schools, and it will also seek to identify if perceptions of these programs have changed after implementation.

#### What Will Happen if You Take Part in This Study?

If you agree to take part in this study, you will be asked to respond to an online survey asking basic questions about your experience with therapy dog programs in school. We expect this to take no more than 10 minutes. Information collected will be anonymous and will not be linked to any other data.

#### How Could You Benefit From This Study?

Although you will not directly benefit from being in this study, others might benefit because the information collected should guide school officials and educators in planning for or improving therapy dog programs.

#### What Risks Might Result From Being in This Study?

We do not believe there are any risks from participating in this research. All information is anonymous.

#### **How Will We Protect Your Information?**

I plan to publish the results of this study. To protect your privacy, I will not include any information that could directly identify you.I will protect the confidentiality of your research records by ensuring that data collection remains anonymous. No personally identifying questions are asked.

### What Will Happen to the Information We Collect About You After the Study is Over?

I will not keep your research data to use for future research or other purposes.

#### What Other Choices do I Have if I Don't Take Part in this Study?

If you choose not to participate, there are no alternatives options to participate.

#### Your Participation in this Research is Voluntary.

It is totally up to you to decide to be in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. If you decide to withdraw before this study is completed, simple exit the online survey without clicking on "Finished".

#### Contact Information for the Study Team and Questions about the Research.

If you have questions about this research, you may contact: Janet Garchinsky – jeg1011@sru.edu – 717-926-5742

#### Contact Information for Questions about Your Rights as a Research Participant

If you have questions about your rights as a research participant, or wish to obtain information, ask questions, or discuss any concerns about this study with someone other than the researcher(s), please contact the following: Institutional Review BoardSlippery Rock University 104 Maltby, Suite 008

Slippery Rock, PA 16057 Phone: (724)738-4846 Email: irb@sru.edu

#### Your Consent

Before agreeing to be part of the research, please be sure that you understand what the study is about. You may print a copy of this document for your records. If you have any questions about the study later, you can contact the study team using the information provided above.

I understand what the study is about and my questions so far have been answered. I agree to take part in this study. I understand that I can withdraw at any time. You indicate your voluntary agreement to participate by completing this online survey.

O I understand what the study is about, and I agree to my voluntary participation.

# **APPENDIX C: Survey Questions**

Therapy Dog Experiences within Schools Answers marked with a * are required.
Survey Questions This survey is intended for school staff who have experienced therapy dogs during their employment.
2. What is your experience with therapy dogs? (Check all that apply) *  I have taken a therapy dog into school I am affiliated with a school that has used therapy dogs Neither
<ul> <li>3. Related to therapy dog visits, did any of the following problems occur at your school? Please check all that apply. *</li> <li>Sanitation (bacteria, virus, parasites, bodily waste, odor, etc.)</li> <li>Safety (of humans)</li> <li>Allergies</li> <li>Cultural differences</li> <li>Fear of dogs</li> <li>Legal implication and liability</li> <li>Proper supervision (program oversight)</li> <li>Animal maintenance (daily dog care)</li> <li>Animal welfare</li> <li>Maintenance costs (medical and other supplies)</li> <li>Other</li> </ul>
4. If you chose "Other" in questions #3, please explain what that concern is/was.
5. How would you describe staff perceptions about therapy dog visitation PRIOR TO your experience? * O Unsure O Unsure O Very concerned O S Somewhat concerned O Neutral O A Somewhat supportive O 5 Very supportive
6. How would you describe staff perceptions about therapy dog visitation AFTER your experience? * O Unsure I Very concerned 2 Somewhat concerned 3 Neutral 4 Somewhat supportive 5 Very supportive

7. Was there a plan or objective in place before therapy dog implementation? If so, please explain briefly.
8. Is there anything you would like to share about your therapy dog experience(s)?
Exit Back Finished
eSurveysPro Created with eSurveysPro.com Survey Software.

# **APPENDIX D: Follow-up Email**

Subject: Perceptions and Pragmatics of Therapy Dog Implementation in Schools

Dear Colleague:

I am following up on the email I sent last week. I am hoping that you were able to participate in and forward that email to other personnel within your school district. I am aware that this is a very busy time of year for everyone. If you have completed and/or distributed the survey, I thank you. If you have not yet had time to do so, perhaps you would take a minute to share this with your school personnel?

My name is Janet Garchinsky. I am a doctoral candidate in the Doctor of Education in Special Education program at Slippery Rock University. I am requesting your participation in this research regarding application of therapy dogs in schools. This study is titles *Perceptions and Pragmatics of Therapy Dog Implementation in Schools*.

Results from this study will help educators better understand perceived objections and concerns during therapy dog implementation in schools and how they compare to documented existing pre-implementation data. Participation in this research will require completion of an online survey that will take less than 10 minutes of your time.

I hope that you are willing to take this opportunity to participate in this <u>anonymous</u> study and share it with other staff, faculty, and administrators within your school.

To access the survey, you may <u>click here</u> or use the address below: <u>https://www.esurveyspro.com/Survey.aspx?id=4eb94c7b-322f-482e-b496-898fb6bace3d</u>

If you have any questions regarding this study, please contact Janet Garchinsky at, jeg1011@sru.edu.

Sincerely, Janet Garchinsky