Furry Therapists: School Psychologists' Perceptions of the
Advantages and Disadvantages of Animal
Therapy in Wisconsin Schools

by

Erin E. Prey

A Research Paper
Submitted in Partial Fulfillment of the
Requirements for the
Educational Specialist Degree
in
School Psychology

Approved: 6 Semester Credits

Barbara Flom, Ph.D.

Jacalyn Weissenburger, Ph.D.

Crystal Cullerton-Sen, Ph.D.

The Graduate School
University of Wisconsin-Stout

February, 2008
ABSTRACT

Animal-assisted therapy and activities can greatly benefit students in schools in many ways. Many schools are successfully implementing animal-assisted therapy and activities, while many are not. The schools that are not using animals have many variables working against them, such as lack of information, lack of knowledge, and policies against having animals in schools. If more information became available and more schools who implement animal-assisted therapy communicated with the schools that do not, more students might benefit from this remarkable notion.

The purpose of this study was to survey school psychologists in the state of Wisconsin to determine their perceptions of what is commonly known today as animal-assisted therapy (AAT) and animal-assisted activities. When surveyed, most school psychologists in the state of
Wisconsin rated themselves as amateurs when asked about their knowledge of animal-assisted therapy in a school setting. Many respondents wrote informally on their surveys that they are interested in animal-assisted therapy and would like to implement a program; however, the schools they are in do not allow animals in their buildings. Others reported successful use of animal strategies. The survey data showed that respondents rated legal implications, liability and allergic reactions of students and staff as the top barriers. Several recommendations are offered for educators interested in implementing animal-assisted therapy in their schools. Among them, are gain more knowledge in the area and to work with other schools that successfully implement AAT with students in need.
The Graduate School
University of Wisconsin Stout
Menomonie, WI

Acknowledgments

I would like to thank Barb Flom, my thesis advisor, for being patient, flexible, and knowledgeable throughout the entire progression of my thesis. Thank you for making the process flow smoothly. I couldn’t have asked for a better advisor.

I want to thank my parents and my husband for all their love and support. I could never have gotten this far in my life without their encouragement. I would also like to thank my puppy Reese for keeping my lap warm the many hours I sat at the computer and worked on my thesis. Like my thesis describes, the benefits of animals are astonishing!

A special thank you to Christine Ness for taking the time to work with me and help me through the data analysis process. Also, I want to thank Jackie Weissenburger and Crystal Cullerton-Sen for taking the time to sit on my thesis committee.

Finally, I want to dedicate my thesis in memory of Jeanette B. Opper, my grandmother who passed away 3 years ago. Grandma, thank you for all those hours you spent listening to me play my violin and for always encouraging me to reach for the stars and accomplish my dreams; you are missed dearly each and every day.
# TABLE OF CONTENTS

ABSTRACT.................................................................................................................. ii

List of Tables................................................................................................................ vii

Chapter I: Introduction .............................................................................................. 1

  Purpose of the Study ............................................................................................... 5

  Research Questions ............................................................................................... 5

  Assumptions and Limitations .................................................................................. 6

  Definition of Terms .............................................................................................. 6

Chapter II: Literature Review .................................................................................... 7

  Advantages of Animal-Assisted Therapy and Animal-Assisted Activities ............ 7

  Disadvantages of Animal-Assisted Therapy and Animal-Assisted Activities ...... 12

  Implementation in Schools .................................................................................... 16

Chapter III: Methodology ......................................................................................... 20

  Subject Selection and Description ....................................................................... 20

  Instrumentation .................................................................................................... 20

  Data Collection Procedures ................................................................................. 20

  Data Analysis ....................................................................................................... 21

  Limitations ........................................................................................................... 21

Chapter IV: Results .................................................................................................. 22

  Item Analysis ........................................................................................................ 22

  Summary ............................................................................................................... 27

Chapter V: Discussion ............................................................................................... 29

  Limitations ........................................................................................................... 29
Conclusions..........................................................................................31

Recommendations..................................................................................33

References............................................................................................35

Appendix A: Survey..................................................................................38

Appendix B: Survey Letter........................................................................41

Appendix C: Respondent Comments on Surveys....................................42
List of Tables

Table 1: Knowledge of Therapeutic Benefit in Using Animals with Various Populations 23
Table 2: Perceived Barriers Concerning Animal-Assisted Therapy/Activities 24
Table 3: Current Use of Animals in Wisconsin Schools 25
Chapter I: Introduction

What is it about the presence of a dog or the touch of its soft fur that allows people to feel at ease and feel comfortable enough to release their emotions? Animals, especially canines, have been used in hospitals, schools, prisons, and other settings for years in order to bring about therapeutic change. Empirical research shows that being in the presence of calm animals can actually reduce the level of stress that a person is experiencing (Burton, 1995; Flom, 2005; Jalongo, Astorino, & Bomboy, 2004; Nebbe, 1991). Human-animal interaction can actually bring about measurable reductions in blood pressure, heart rate, and anxiety levels (Burton, 1995; Katcher, Friedmann, Beck, & Lynch, as cited in Jalongo, Astorino, & Bomboy, 2004; Nebbe, 1991). In children, being in the presence of an animal that is peaceful and composed can reduce stress more than does the presence of an adult or a friend. This is especially true when children are reading aloud or are in a doctor’s office or hospital (Jalongo, Astorino, & Bomboy, 2004).

More and more schools have been using animals for the roles of therapy and support for children’s emotional well-being, learning, and overall physical health (Jalongo, Astorino, & Bomboy, 2004). There are programs that allow for the visitation of trained dogs, used for the purpose of therapy, to come into schools to encourage the improvement of reading skills and fluency (Bueche, 2003; Glazer, 1995; Lynch, 2000). Animal-assisted activities also seem to be helpful in encouraging children throughout a wide variety of subjects in addition to reading (Nebbe, as cited in Jalongo, Astorino, & Bomboy, 2004).

It has been documented that animal therapy is also useful when working with populations of children who are autistic, physically and mentally disabled, and emotionally and behaviorally disturbed (Arkow, 1981; Corson, Corson, & Gynne, 1977; Jenkins, 1986; Katcher
According to Law and Scott (1995), when children with pervasive developmental delay (PDD)/autism work with pets such as hamsters, rabbits, and turtles, they gain a sense of responsibility, increase their socialization, and improve their receptive and expressive language development. By nurturing and taking care of an animal, the children are able to demonstrate responsibility. Law and Scott also claimed that when these same children were involved in a pet care program that trained them how to care for pets, they learned to become independent and gained valuable problem-solving skills, and also were able to strengthen their self-esteem and self-confidence (Law & Scott, 1995). Research shows that close to 70% of children seem to talk to and disclose their feelings to animals (Serpell, as cited in Jalongo, Astorino, & Bomboy, 2004). Due to these findings, many residential treatment facilities have begun to implement animal-assisted therapy as a common element in treatment procedures that assist children with severe emotional/behavioral problems (Arkow, 1981; Corson, Corson, & Gynne, 1977; Jalongo, Astorino, & Bomboy, 2004; Jenkins, 1986; Katcher & Beck, 1983; Katcher & Wilkins, 1994; Levinson, 1971; Marino, 1995; Redefer & Goodman, 1989).

The benefits of the human-animal bond have been known for many years. In 1792, psychiatrists at the York Retreat in England had their patients care for rabbits and poultry in order to benefit their physical and emotion health (Heimlich, 2001; Jalongo, Astorino, & Bomboy, 2004; Netting, Wilson, & New, 1987; Thigpen, Ellis, & Smith, 2005). In 1942, servicemen in a convalescent hospital in Pawlings, New York were exposed to dogs who served as companions (David, as cited in Thigpen, Ellis, Smith, 2005; Netting, Wilson, & New, 1987; McCulloch, as cited in Thigpen, Ellis, Smith, 2005; Willis, as cited in Thigpen, Ellis, & Smith,
Levinson, a child psychologist, found that using his dog, Jingles, in the presence of children who had emotional disturbances brought about positive effects. He discovered that he could "reach" the child when Jingles was present in therapy sessions (as cited in Thigpen, Ellis, & Smith, 2005; Mallon, as cited in Heimlich, 2001; Netting, Wilson, & New, 1987).

Today, there are many programs in place, such as Pets Are Wonderful Support (PAWS), which is a group that provides a companion animal to HIV patients (Spence & Kaiser, as cited in Jalongo, Astorino, & Bomboy, 2004). The human-animal bond is commonly used when working with elderly populations. Both institutional (i.e. psychiatric hospitals and nursing homes) and community-based programs (i.e. animal visits and subsidy programs) are using animals and pets for "pets-on-wheels" and "pets by prescription" programs in order to bring about positive changes in the elderly (Netting, Wilson, & New, 1987).

The Purdy Treatment Center provides prison inmates with employment opportunities in fields involving dogs. They use classroom instruction and hands-on training in areas such as breeding, obedience, grooming, training, and specialized disability training (Catanzaro, 2003). Reports of the training stated that the programs successfully brought about positive changes in the prisoners' and staffs' psychological well-being. There were even reports of rehabilitation success after the release of the prisoners (Catanzaro, 2003; Netting, Wilson, & New, 1987). Flourishing programs using animals in prison demonstrate a constructive method that should be considered when working with a younger, disturbed population (Thigpen, Ellis, & Smith, 2005). With many years of research and literature backing up the benefits of animal-assisted therapy, it is no wonder that it is becoming a budding worldwide field of study (Ascione & Arkow, as cited in Jalongo, Astorino, & Bomboy, 2004; Fine, as cited in Jalongo, Astorino, & Bomboy, 2004;
Animal-assisted therapy does not involve just any animal being used for services whenever requested. Certain animals, mainly dogs, are selected based on their demeanor and ability to adapt to different and unfamiliar situations. The dogs must pass a test in order to be accredited as a registered therapy dog (Jalongo, Astorino, & Bomboy, 2004). The trainer/handler of the dog must also be trained and registered. Dogs in the program must be at least one year of age and can be either a mixed breed or a pure-bred. The most widely-known programs that train these dogs and their handlers are Therapy Dogs International, Inc. and the Delta Society, which offer their members liability insurance through their annual dues (Jalongo, Astorino, & Bomboy, 2004). Moreover, these dogs are part of a high-quality service in which the visitation of these animals is entirely incorporated into the goals of the schools/hospitals and in which many institutions are in collaboration with the involvement of the therapy (Jalongo, Astorino, & Bomboy, 2004).

There are many reasons why therapy animals and volunteer pets are often not allowed in schools. Some of the reasons include: sanitation concerns; safety concerns (for the animals as well as humans); allergies; cultural differences; and some people’s fear of animals such as canines (Jalongo, Astorino, & Bomboy, 2004). Some of the recommendations that schools can use when considering allowing animal-assisted programs in their buildings are to only work with therapy animals that are registered, always prepare the children for the animals and assess their suitability for being around the animals, and last, but not least, consider the safety of the animals (Jalongo, Astorino, & Bomboy, 2004).
Animals bring about a certain fascination and captivation from the children who are involved with them (Melson, as cited in Jalongo, Astorino, & Bomboy, 2004). Despite the hesitation some people have in allowing animals to work with children, there has been a plethora of literature which supports that animals can exert positive changes in children’s physical and emotional well-being, academic achievement, and social interactions (Bueche, 2003; Burton, 1995; Flom, 2005; Jalongo, Astorino, & Bomboy, 2004; Law & Scott, 1995 Thigpen, Ellis, & Smith, 2005).

Purpose of Study

The purpose of this study, adapted from two other studies which collected similar data in schools in California and Minnesota (Ryan, 2000 & 2002), will focus on the use of animals in Wisconsin schools. The study will analyze information provided by school psychologists in Wisconsin regarding their knowledge of animal-assisted therapy. The study will also determine the current use of animals in their schools. In addition, or their colleagues’ current use of animals in their schools, and their perceptions as to the barriers that exist that hinder the implementation of an animal-assisted therapy program in their schools will be assessed.

Research Questions

The following research questions guided this study:

1. To what extent are school psychologists in Wisconsin aware of the benefits of animal-assisted therapy/activities?

2. To what extent are school psychologists or their colleagues in Wisconsin schools using animal assisted therapy activities?

3. What do school psychologists in Wisconsin perceive as the barriers to implementing an animal-assisted therapy program or animal-assisted activities in their schools?
Assumptions and Limitations

An assumption of this study is that the school psychologists who receive the survey will understand the survey and have a basic knowledge about using animals in schools. It is also assumed that they will answer the questions honestly.

A limitation of this study is its small sample size, which limits the generalizability of the results. Another limitation of this study is that the instrument was not piloted prior to distribution.

Definition of Terms

The following list of terms helps the reader better understand the processes of animal therapy and activities.

Animal-assisted activities (AAA): An informal method that involves volunteers sharing their pets with others in which the animal acts like a “social lubricant” or a distraction in order to bring about positive results (Thigpen, Ellis, & Smith, 2005). AAA’s purpose is not for specific therapeutic process, unlike the purpose of AAT (Thigpen, Ellis, & Smith, 2005).

Animal-assisted therapy (AAT): A formally controlled method/program in which animals are used to assist in improving the welfare of an individual or group of individuals suffering from emotional or physical illness or injury (Beck & Katcher; Cusak & Smith, & Arkow, as cited in Moody, King, & O’Rouke, 2002; Thigpen, Ellis, & Smith, 2005).
Chapter II: Literature Review

This literature review first provides a description of the advantages/benefits of using animal-assisted therapy (AAT) and animal-assisted activities (AAA), especially with school aged children. In addition, the disadvantages/drawbacks of AAT and AAA are also described. Finally, the chapter concludes with ways to implement an animal-assisted therapy/activity program in a school setting.


According to Nebbe (1991, p. 364), when discussing the advantages of animals, “theory is our only best guess.” However, the literature on the benefits of the human-animal bond is plentiful. Dogs have been documented to provide social, psychological, and physical benefits for both children and adults (Heimlich, 2001). Relationships with animals are low risk and can be safe and easy (Nebbe, 1991). Animals can be patient, devoted, affectionate, and dependable. These traits can fulfill a person’s vital need to be loved and to feel valuable (Nebbe, 1991). The non-judgmental connection with animals, especially dogs, can promote a sense of purpose and significance in children (Moody, King, & O’Rourke, 2002). Visitation of pets, known as animal-assisted activities, has been found to produce measurable benefits such as increasing awareness, facilitating mental attentiveness, and promotion of socialization (Heimlich, 2001). Animals seem to provide such a positive influence on people, especially children, that it appears that the effects are universally beneficial (Beck & Katcher, as cited in Nebbe, 1991).

Physical benefits. Many physical health advantages come from interactions with animals. Research shows that being in the presence of animals and interacting with them lowers blood pressure, reduces stress reactions, reduces heart rate, reduces levels of anxiety, and even lowers triglyceride levels (Anderson et al., as cited in Thigpen, Ellis & Smith, 2005; Burton,
1995; Flom, 2005; Grossberg et al., as cited in Thigpen, Ellis, & Smith, 2005; Katcher et al., as cited in Thigpen, Ellis, & Smith, 2005; Katcher, Friedmann, Beck, & Lynch, as cited in Jalongo, Astorino, & Bomboy, 2004; Nebbe, 1991). Research also shows that patients who have improved from heart difficulties lived, on average, one year longer if they owned a pet (Friedmann, Katcher, Lynch, & Thomas, as cited in Thigpen, Ellis, & Smith, 2005).

**Developmental benefits.** Animals have been shown to contribute in helping children learn how to trust others, be compassionate, and take responsibility for themselves and their belongings (Ascione, & Weber, as cited in Thigpen, Ellis, & Smith, 2005; Levinson, as cited in Thigpen, Ellis, & Smith, 2005). “Pocket pets,” which constitute small animals such as rabbits, hamsters, gerbils, fish, reptiles, and birds, are animals that can easily be taken care of by children (Flom, 2005). According to Flom (2005), assigning a child to chore responsibilities of a pocket pet in a school setting is a means of acquiring the routine of trustworthiness and dependability (Flom, 2005). Students who struggle with daily expectations and school homework profit from having a living thing be dependent on them (Flom, 2005). Also, children who come from struggling families who are not able to provide adequate hygiene assistance need help in order to understand the importance of sanitation issues, and are able to gain the knowledge of responsibility of caring for oneself by caring for these pets (Flom, 2005). These children are able to see the importance of keeping an animal clean and healthy and then can carry on these acquired skills into their own home lives simply by learning from this useful, non-humiliating educational tool (Flom, 2005).

**Psychological benefits.** Owning a pet has been shown to be correlated with enhancement of socialization and an optimistic attitude towards oneself (Cusack & Smith, as cited in Nebbe, 1991). An 18-month long study in three nursing homes found that perceived levels of anxiety,
confusion, hopelessness, tiredness, and apprehension (based on the POMS Mood State Questionnaire) were significantly reduced when the residents \((n = 95)\) were in the presence of a resident dog (Crowley-Robinson et al., as cited in Moody, King, & O’Rourke, 2002). Another study found that animals, mainly dogs, were able to “distract” chronically ill children in a hospital, which was an important coping method in the reduction of stressors of the hospital (Boyd & Hunsberger, as cited in Moody, King, & O’Rourke, 2002). Animals are able to “improve social interactions” and “promote social harmony” for the children involved, as well as the general public (Brodie & Biley, as cited in Moody, King, & O’Rourke, 2002, p. 539).

Service dogs are known to be used as “social lubricants” when working with children and people in a mental health or medical atmosphere (Mugford & M’Comisky, as cited in Moody, King, & O’Rourke, 2002, p. 539; Thigpen, Ellis, & Smith, 2005, p. 2). When working with elderly patients in nursing homes and hospitals, animals are said to have served as a common conversation starter as well as an “attention-getting stimulus” (Barba, as cited in Heimlich, 2001, p. 48; Fick, as cited in Heimlich, 2001, p. 48; Gammonley & Yates, as cited in Heimlich, 2001, p. 48; Rossbach & Wilson, as cited in Heimlich, 2001, p. 48; Savishinsky, as cited in Heimlich, 2001, p. 48). Adults who live alone seem to report that owning a pet even compensated for their lack of social interaction (Hart, as cited in Thigpen, Ellis, & Smith, 2005; Smith, as cited in Thigpen, Ellis, & Smith, 2005). The researchers of a study that placed a dog in a residential home for children with emotional disorders concluded that the animal was able to offer many positive benefits that included social, emotional, and physical advantages for the children, as well as the staff (Mallon, as cited in Heimlich, 2001).

In families that own a pet and where the pet is a perceived member of that family, children are shown to have greater feelings of capability and self-worth, as well as greater
empathy for others (Levine & Bohn, as cited in Nebbe, 1991). Families that own pets also reported less incidences of thumb-sucking among their children because the pets seemed to offer a more emotionally safe atmosphere (Levine & Bohn, as cited in Nebbe, 1991). Pets also help teach children important skills such as anger control and tolerance (Levine & Bohn, cited in Nebbe, 1991).

Counselors in schools find that animals are great rapport builders and that they can help establish a bond between the counselor and the student (Nebbe, 1991). Animals provide a communication linkage because of the special mutual interest that people have of them. This shared interest allows counselors to gain trust and admiration from child clients (Nebbe, 1991). When a child will not open up to a counselor, sometimes the child will begin talking to the animal because it is perceived as warm, accepting, natural, and non-threatening (Nebbe, 1991). This can usually lead to a gradual acceptance of the counselor since the counselor is thought to "belong" to the animal (Nebbe, 1991). According to Nebbe (1991) Counselors are also able to observe feelings and fears that are projected onto the animal by a child and are able to receive insight into a child's character by witnessing the child's behaviors (Nebbe, 1991). Doing special tricks and touching the animal brings out trust in children who are experiencing responsibility and control by working with the animal (Nebbe, 1991). Working with dogs and other animals can also boost low self-esteem in children and can increase the transference of vital social skills (Nebbe, 1991).

*Educational benefits.* Animals have been and are currently being used to develop reading and communication skills in school settings (Filiatre, Millot, & Montagner, as cited in Thigpen, Ellis, & Smith, 2005; Guttman et al., as cited in Thigpen, Ellis, & Smith, 2005). According to the American Psychiatric Association, stuttering is reduced and has known to even be absent when
children are engaging in verbal communication in the presence of animals/pets (as cited in Thigpen, Ellis, & Smith, 2005).

When dogs are used for therapy purposes for children who have learning disabilities that are considered severe, improvement on continual focus and cooperative relations have been observed (Limond, Bradshaw, & Cormack, as cited in Thigpen, Ellis, & Smith, 2005). When animal-assisted therapy is used with children who have autism, there is a positive change in sense of worth, socialization, and improvement in language proficiency (Law & Scott, as cited in Thigpen, Ellis, & Smith, 2005). Animal-assisted therapy has also been shown to aide in helping children control their actions while at the same time increasing empathy for other living things (Gonski, as cited in Thigpen, Ellis, & Smith, 2005; Ross, as cited in Thigpen, Ellis, & Smith, 2005).

Canines have also been used in reading programs in schools, for AAT purposes, and in libraries, for AAA purposes, in which children read aloud to the animals (Bueche, 2003; Thigpen, Ellis, & Smith, 2005). The READ Program (Reading Assistance Dogs) in Salt Lake City, Utah (Bueche, 2003) and the Lincoln Parish Library in Ruston, Louisiana (Thigpen, Ellis, & Smith, 2005) are just two of the many reading programs that have been developed across America. It is believed that the dogs provide a “cold nose” (p. 5), unconditional acceptance, and full interest/attention to children who have reading difficulties (Bueche, 2003; Thigpen, Ellis, & Smith, 2005). It is thought that the dogs are able to provide the children with these qualities and characteristics in ways that humans cannot (Bueche, 2003).

The READ program in Utah uses age-appropriate, animal themed, “pawtographed” books that children who are set up with pre-determined reading goals are allowed to keep once they progress to the next reading level (Bueche, 2003). Children who have low-self esteem, refuse to
read aloud, and/or who are poor readers are the populations that are selected for these reading programs (Bueche, 2003). The dogs who are able to sit for long amounts of time, are calm and mild, and are able to become accustomed to novel situations make the best reading partners (Bueche, 2003). Canines who can “pay attention” to the child reader seem to make the best therapy dogs (Bueche, 2003). The ultimate goal of the reading programs is to initiate relaxation so that the children can forget about their reading restrictions (Bueche, 2003). In one reading pilot, all of the children who participated improved their reading by at least 2 grade levels over a 13 month period, and some children even improved by 4 grade levels in 13 months (Klotz, as cited in Bueche, 2003). Some dogs are even compliant and gentle enough to allow the children to use their paws as book markers to keep place on the page (Bueche, 2003).

Among the many advantages that animal-assisted therapy and animal-assisted activities can provide, when it comes to working with children, animals foster and enhance an environment of trust, love, and acceptance. According to Nebe (1991), working with animals promotes values and furthers respect for animals which can then be carried over to relations with humans. Communication skills, social etiquette, peer associations, and feelings are all important life lessons that can be acquired through human-animal interactions.

Disadvantages of Animal-Assisted Therapy and Animal-Assisted Activities

Along with the advantages and benefits of animal-assisted therapy and animal-assisted activities, there are also drawbacks or disadvantages. Some of these drawbacks include fear of the animals from both the students and the adult employees, allergic reactions to the animals, cultural variations on how animals are viewed, concerns with sanitation and diseases associated with animals, and concern for the safety of both the animals and the people involved with the therapy and activities.
Fear of animals. Some children and even some adults have a fear of animals. In some areas of the world, canines are respected mainly because they protect people and their belongings and come across to others as vicious animals (Jalongo, Astorino, & Bomboy, 2004). If a child has had previous experiences where they were scared by animals, then it is imperative to offset the incidents with experiences with composed, mild, and sensitive animals (Hart, as cited in Thigpen, Ellis, & Smith, 2005; Jalongo, Astorino, & Bomboy, 2004; Odendaal, as cited in Thigpen, Ellis, & Smith, 2005;). According to Jalongo, Astorino, and Bomboy (2004), the best way to deal with this issue is to not force the matter and instead gradually allow the child with the fear to experience the animal. This strategy will possibly generate an understanding that not all animals, especially dogs, are mean and vicious (Jalongo, Astorino, & Bomboy, 2004). It is important to know of a child’s previous experience with animals in order to decide whether or not it is appropriate to use AAT or AAA (Netting, Wilson, & New, 1987). If a child has an animal phobia, one way to reduce this fear is by having the child watch his/her peers positively interacting with the therapy animal (Bandura, as cited in Jalongo, Astorino, & Bomboy, 2004).

Allergies of animals. When bringing an animal into a school, children and adults with allergies could suffer from the animal dander. Heimlich (2001) recommended that children with allergies be excluded from animal-assisted activities and therapy. Nebbe (1991) claimed that even though some children are allergic to animals, they are still captivated by them. If a therapy animal, such as a dog, is bathed right before a school visit, the dander can be drastically reduced (Jalongo, Astorino, & Bomboy, 2004). Children with allergies need to be assessed by the school and doctor prior to interaction to determine whether it is safe for the child to participate in AAT or AAA (Jalongo, Astorino, & Bomboy, 2004). Another way to alleviate allergy issues is to do demonstrations with the animal either outside or in large rooms (Jalongo, Astorino, & Bomboy,
2004); however, this then takes away from the one-on-one personal interaction. Using alternative animals, such as “pocket pets,” that children are not allergic to may also do the trick (Flom, 2005). At any rate, parents must decide whether to give permission to allow their child who has allergies to participate or not (Jalongo, Astorino, & Bomboy, 2004).

*Cultural variations.* Some cultures, especially in parts of Asia, view dogs as unsanitary and/or irritating (Jalongo, Astorino, & Bomboy, 2004). It is important to understand how families view animals before creating animal therapy/activities programs for their children in a school setting. Jalongo, Astorino, and Bomboy (2004) claimed that even though some cultures do not think that animals, especially dogs, are “worthy of human companionship,” children on the other hand often express a totally opposite response which can be positive and friendly (p. 13). Some cultures see pets as filthy (David, as cited in Thigpen, Ellis, & Smith, 2005) or as a source of food (Barry, as cited in Thigpen, Ellis, & Smith, 2005), even though most U.S. cultures mainly consider pets “loveable” creatures (Thigpen, Ellis, & Smith, 2005).

*Sanitation/Disease concerns.* One of the major concerns with allowing animals into schools and other facilities is the possible spread of zoonotic diseases, which are diseases that are spread from animals to humans (Jalongo, Astorino, & Bomboy, 2004; Thigpen, Ellis, & Smith, 2005). This is more of a concern in hospitals than in schools (Jalongo, Astorino, & Bomboy, 2004); however, it is still considered a possible disadvantage. It has been found that although dogs can carry a large number of diseases, the animals pose minimal risk if conscientious security procedures are followed (Brodie, Biley, & Shewring, as cited in Jalongo, Astorino, & Bomboy, 2004). To prevent the spread of infection, always have anyone who comes in contact with the animals wash their hands before and after interaction, use non-reusable/throwaway pads that the animal can rest on while in the building, make sure the animal has been thoroughly
checked over by a veterinarian for any health issues, and always make sure the animal is fussily
groomed before a visit (Jalongo, Astorino, & Bomboy, 2004). Jalongo, Astorino, and Bomboy
(2004) claimed that the majority of diseases and infections spread by animals can be controlled,
since therapy dogs are required to have regular check-ups and are taught to not lick or scratch
themselves. When an animal does urinate/defecate/vomit accidentally or due to illness in a
school setting, it is the handler’s duty to immediately clean up after the animal (Jalongo,
Astorino, & Bomboy, 2004). Animals that are properly groomed and have a good bill of health
are said to be “as clean as just about anything else around the school environment or the public
spaces in health care facilities” (Jalongo, Astorino, & Bomboy, 2004, p. 11).

Concern for animal and child safety. A serious concern when allowing animals into a
public building for the use of therapy purposes is the safety of the people, especially the children
involved (Jalongo, Astorino, & Bomboy, 2004; Thigpen, Ellis, & Smith, 2005). Concern is also
expressed for animal safety and well-being (Jalongo, Astorino, & Bomboy, 2004; Thigpen, Ellis,
& Smith, 2005).

Worries of the animal biting, scratching, and/or kicking a child or adult is a possible
disadvantage for using animals for therapy/activity purposes (Thigpen, Ellis, & Smith, 2005).
Thigpen, Ellis, and Smith (2005) said that the risk for injury can be addressed if the animals are
evaluated before any session or program, animal handlers are educated about possible problems
that can arise, and the conduct of the clients involved is carefully monitored in order to avoid and
prevent abuse towards the animals involved. Since animal members (canines) of Therapy Dogs
International, Inc. are put through an obedience course and other training procedures, acts of
hostility are rare (Jalongo, Astorino, & Bomboy, 2004). Also, registered therapy dogs are able to
handle situations that would be risky for untrained animals to undertake (Jalongo, Astorino, & Bomboy, 2004).

On the flip side of the issue, the safety and needs of the therapy animals should be addressed as well. The animals should always be able to access food and water, should be offered many breaks, given time to rest, and able to take part in other activities that they like (Granger & Kogan, as cited in Thigpen, Ellis, & Smith, 2005), such as playing fetch, being petted, and running outside. According to Jalongo, Astorino, and Bomboy (2004), dogs that are registered through Therapy Dogs International, Inc. are meticulously assessed, and membership (which includes veterinarian visits) for the animal and handler must be renewed yearly in order to preserve association with TDI, Inc. Counselors, teachers, and psychologists should model correct ways to behave around the animal (such as acting calm and gentle, and not pinching, poking, or teasing the animal) before therapy sessions or activities begin, in order to alleviate animal mistreatment (Jalongo, Astorino, & Bomboy, 2004). Young children who may fear large dogs, who act unpredictably around animals and children with emotional and behavior disorders should be closely supervised when in the presence of therapy animals (Jalongo, Astorino, & Bomboy, 2004). It is also important for the well-being of the animals involved to never put the animals in harm’s way, to always look after them in all situations, and to never over-schedule animals where they could potentially face exhaustion (Jalongo, Astorino, & Bomboy, 2004).

Implementation in Schools

In order for an AAT/AAA program to be successful, the program must be developed with care (Thigpen, Ellis, & Smith, 2005). There are many things that need to be taken into consideration when using animals for therapy and activities while working with children in a setting such as a school (Nebbe, as cited in Nebbe 1991). The following is a list of guidelines
that should be implemented (Nebbe, 1991, p. 367): First, determine who is going to be in charge of the program that will be established before the animal-assisted therapy is integrated as a piece of his/her practice. Second, make sure the principal/director/administrator approves of the program and entirely understands what it entails. The counselor/psychologist should be fully educated about AAT/AAA so that he/she can explain its purpose to others. Understand that the counselor/psychologist is responsible for the animals and those involved and is accountable for anything that happens during the program sessions. Third, recognize which children are not cut out to work with the animal. Some children may be susceptible to mild to severe allergies when interacting with animals, while others may have a fear of animals. This should not result in the abandonment of the animal, but instead it should be a means for adaptation. Fourth, the animal that is chosen should be in good health and up to date on vaccinations and vet visits. Remember that you are a model to children, so concern should always be shown for the animal’s health. Never use wild animals for therapeutic or activity purposes. When an animal dies, be honest about the death and allow the children to grieve. Fifth, never allow the animal to experience stress, and immediately remove the animal when it is uncomfortable. Treat the animal humanely and with respect and never discipline or speak to the animal cruelly. If discipline seems to be required often, then the animal is not cut out to be in schools with children. Sixth, the counselor/psychologist must be comfortable with the animal and be in control at all times. Seventh, do not ever assume that a child knows how to act or behave around an animal. Appropriate behaviors should be modeled to children so that purposeful and accidental harm does not happen to the animal. If a child cannot treat the animal fairly, then the animal should be taken away from the child. Eighth, always be prepared for possible problems and take a preventative approach when implementing the program. Have a safe home such as a kennel
available on site for the animal, prepare for bites or scratches should they occur, have disposable
bags along in case the animal has an “accident,” and make plans for animals that live on site
(such as fish) in case of emergencies. Always be prepared and stay calm; and, finally, clean up
after the animal and be responsible for its actions.

Thigpen, Ellis, and Smith (2005) believe that choosing children who are appropriate for
AAA/AAT is the first step in building a thriving program. They state that the next step is
choosing the right animal that can properly deal with the stress of new situations, can be held or
left with strangers, is willing to be petted and handled by children in awkward ways, and is calm
in situations where many children are hovering around and/or touching it (Thigpen, Ellis, &
Smith, 2005). The final step is dealing with possible threats and risks, such as zoonotic
infections, and making sure that the animal involved is always provided with water, food, regular
breaks, time to rest, and time to do things that it likes to do (Thigpen, Ellis, & Smith, 2005).

It is clear that the benefits of animal-assisted therapy and activities can be very helpful in
many settings, especially in school settings. Children can profit from the use of animals in a
variety of ways including physical benefits, psychological benefits, developmental benefits, and
educational benefits. While there are drawbacks to using animals in schools, if proper steps are
taken and accounted for, the risks can be minimized. School psychologists are educators who
can utilize programs with animals to assist them in working with a variety of student needs.
More information is needed, however, on how school psychologists view the use of animal
therapy and whether or not any of them are currently using animals in their schools.

Two studies conducted in California and Minnesota looked at school psychologists’,
counselors’, and other educators’ knowledge, current use, level of interest, and potential
concerns regarding animal-assisted therapy and activities (Ryan, 2002 & 2000). A study in the
state of Wisconsin, asking questions similar to those that Ryan’s studies explored, was pursued to investigate animal-assisted utilization among a narrower field: school psychology.
Chapter III: Methodology

This chapter provides information about the selection and description of the sample used in the study. The chapter also describes the instrumentation used in the study and the procedures involving data collection and data analysis. Finally, the chapter concludes with methodological limitations.

*Subject Selection and Description*

The study, which was approved by the University of Wisconsin-Stout Institutional Review Board, surveyed 400 school psychologists in Wisconsin randomly selected from the Wisconsin Department of Public Instruction (http://www.dpi.state.wi.us/directories.html). The school psychologist participant sample served all areas of education ranging from early childhood education through the 12th grade.

*Instrumentation*

The survey used in the study was adapted from two similar studies with permission (Ryan, 2000, 2002). While minor modifications were made to the survey, the essence of the survey used in Ryan’s studies remained the same.

*Data Collection Procedures*

The survey consisted of twenty-six questions (Appendix A). The survey looked at respondent information, knowledge regarding the therapeutic benefits of animal-assisted therapy with different populations of people with disabilities and needs, level of interest in the use of animals for therapeutic interventions in schools and animal-assisted therapy/animal-assisted activities in general, and potential concerns related to implementing a program that utilizes animals. The survey also looked at participants’ current use of animals in their schools for therapeutic or non-therapeutic purposes, the frequency of animal use in days, weeks, months,
and/or yearly, and how many years they have been using animals in their schools (if applicable). They were also asked about the different populations of students the animals in their schools serviced and the percentage of time each population was given with the animals (if applicable). Finally, the survey allowed a space for voluntary comments regarding the use of in the schools.

The surveys were returned in self-addressed, stamped envelopes with no identifying information of the school or school psychologist provided, unless the participants chose to do so. The study allowed for anonymous participation; no answers were linked to identities of the school psychologists participating in the study. One complication that arose, however, was that the envelopes were post marked with the name of the participants’ post offices. While all schools were not located directly in that town/city (i.e. Milwaukee), the general vicinity of that mailing location was disclosed to the examiner. To help minimize this complication, the envelopes of all the surveys were destroyed before any data was entered and analyzed.

Data Analysis

The survey data, which were descriptive in nature, were analyzed using SPSS version 14. The analysis yielded frequency counts, percentages, and, when appropriate, means and standard deviations.

Limitations

There were several limitations to this study. The first limitation was that the instrumentation was not piloted after adaptation. The second limitation was the size of the population sampled. While a 55% return rate was achieved (n = 220), a larger sample would have been useful. In addition, the concern of anonymity arose due to city/town names printed on the return envelopes after the post-office marked them for delivery.
Chapter IV: Results

In this chapter, the research questions will be discussed along with the results of the study. First, an item analysis will show the results of the collected data. Then, each research question will be examined looking at individual survey questions. Finally, a summary of the major findings will be discussed.

The purpose of this study was to determine the extent to which school psychologists in Wisconsin are aware of the benefits of animal-assisted therapy/activities, the extent to which school psychologists or their colleagues in Wisconsin schools use animal-assisted therapy activities, and the Wisconsin school psychologists' perceptions as to the barriers of implementing an animal-assisted therapy program or animal-assisted activities in their schools. A survey was sent to 400 randomly selected school psychologists in the state of Wisconsin, and 220 surveys were returned (55% return rate). While Ryan's studies (2000, 2002) mailed surveys to Guidance Departments with attention to school psychologists and school counselors, this study sent surveys strictly to school psychologists.

Item Analysis

The first section of the survey asked about respondent information. One hundred seventy three (78.6%) of the 220 respondents reported working with students at the elementary level. For the middle school level, 120 of the respondents (54.5 %) indicated servicing this area. The high school level was reportedly serviced by 107 or 48.6% of the respondents. Alternative learning center and early learning center service represented 6.4% and 13.6% of the respondents, respectively. Finally, 2.3% or 5 respondents reported working in "other" areas of education (i.e. charter schools, parochial schools, city wide schools etc.) Many of the respondents reported working at multiple levels which accounts for various areas of services provided.
The second section of the survey focused on the knowledge the respondents had regarding animal-assisted therapy and animal-assisted activities.

Table 1

*Knowledge of Therapeutic Benefit in Using Animals With Various Populations*

<table>
<thead>
<tr>
<th></th>
<th>Novice</th>
<th>Amateur</th>
<th>Expert</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of the use of animals in conjunction with various social, emotional, and physical interventions (animal-assisted therapy)</td>
<td>10.5%</td>
<td>85.5%</td>
<td>4.1%</td>
</tr>
<tr>
<td>Knowledge of the therapeutic benefit in using animals with children with Autism</td>
<td>27.7%</td>
<td>66.4%</td>
<td>5.5%</td>
</tr>
<tr>
<td>Knowledge of the therapeutic benefit in using animals with children who have disabilities</td>
<td>10.5%</td>
<td>82.7%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Knowledge of the therapeutic benefit in using animals with children who have a psychological disability</td>
<td>20.0%</td>
<td>74.1%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Knowledge of the therapeutic benefit in using animals with emotionally and/or behaviorally disturbed children/adolescents</td>
<td>19.1%</td>
<td>72.3%</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

The respondents' most common response was a rating in the amateur level in all areas. Twenty-seven percent of the respondents rated themselves as a novice in their knowledge of the therapeutic benefit in using animals with children with Autism. Respondents rated themselves as an expert (6.8%) of their knowledge of the therapeutic benefits in using animals in children who have disabilities and in their knowledge of the therapeutic benefit of using animals with emotionally and/or behaviorally disturbed children/adolescents.
The third section of the survey asked questions about the respondents' interest level regarding the use of animals for therapeutic interventions in schools and their interest level in animal-assisted therapy/animal-assisted activities in general. The respondents reported a mean of 2.07 (1 = very interested, 2 = somewhat interested, and 3 = no interest) regarding their interest in the use of animals for therapeutic interventions in schools. They reported a mean of 1.94 regarding their interest level in animal-assisted therapy/animal-assisted activities in general.

The fourth part of the survey asked respondents to rate potential concerns related to implementing a program utilizing animals in schools, using the five-point scale.

Table 2

*Perceived Barriers Concerning Animal-Assisted Therapy/Activities*

<table>
<thead>
<tr>
<th></th>
<th>Unimportant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygiene/Cleanliness/Disease/Sanitation ($n = 216$)</td>
<td>3.2</td>
<td>17.7</td>
<td>30.0</td>
<td>23.6</td>
<td>23.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal Implications and Liability ($n = 217$)</td>
<td>0</td>
<td>3.2</td>
<td>20.5</td>
<td>30.0</td>
<td>45.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects on Staff/Students Who May Fear ($n = 216$)</td>
<td>.5</td>
<td>8.6</td>
<td>30.0</td>
<td>36.8</td>
<td>22.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allergic Reactions of Students and Staff ($n = 217$)</td>
<td>.5</td>
<td>2.7</td>
<td>15.5</td>
<td>34.5</td>
<td>45.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Upkeep ($n = 216$)</td>
<td>4.1</td>
<td>12.3</td>
<td>25.0</td>
<td>30.0</td>
<td>26.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Harm to Students and Staff ($n = 216$)</td>
<td>1.8</td>
<td>10.5</td>
<td>22.3</td>
<td>30.5</td>
<td>33.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Harm to Animal ($n = 217$)</td>
<td>1.4</td>
<td>12.3</td>
<td>25.0</td>
<td>35.5</td>
<td>24.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Odor ($n = 217$)</td>
<td>12.7</td>
<td>36.4</td>
<td>27.7</td>
<td>16.4</td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance Costs ($n = 217$)</td>
<td>5.0</td>
<td>19.1</td>
<td>26.4</td>
<td>31.8</td>
<td>16.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision of Program ($n = 217$)</td>
<td>1.4</td>
<td>5.0</td>
<td>20.0</td>
<td>37.3</td>
<td>35.0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Percentages based on 5 point Likert Scale
Respondents rated legal implications and liability and allergic reactions of students and staff as the top two barriers rated the most important (45.0% and 45.5% respectively). They rated animal odor with the lowest percentage of 5.5% rating it as most important. These perceived barriers were comparable to Ryan’s findings (2000, 2002) in studies looking at data in the states of California and Wisconsin.

The fifth section of the survey asked respondents to indicate their current use of animals in their schools.

Table 3

*Current Use of Animals in Wisconsin Schools*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently use animals in your school</td>
<td>9.6%</td>
<td>90.5%</td>
</tr>
<tr>
<td>Currently use animals for a therapeutic program in your school</td>
<td>10.5%</td>
<td>89.5%</td>
</tr>
<tr>
<td>Know of a school that uses animals in a therapeutic program</td>
<td>22.3%</td>
<td>77.7%</td>
</tr>
</tbody>
</table>

Of the respondents who indicated “yes” to currently using animals in their schools, 18 indicated that they personally use animals (8.2%), while 3 reported (1.4%) their colleagues use animals in their schools. Overall, 23 respondents indicated either themselves or their colleagues utilize animals in their schools. (There was not a separate space to indicate themselves or colleagues; however, three of them indicated informally on the survey that someone else in their school uses animals, (such as the speech/language pathologist). Twenty-three or 10.5% of the respondents also reported “yes” to currently using animals for a therapeutic program in their schools. The question of whether the respondent knew of a school that utilized animals in a therapeutic program was also asked and 23 (10.5%) indicated “yes” they do know of a school.
Roughly 30 various schools/programs were named, with the Milwaukee Public schools being the most common answer.

The sixth and final portion of the survey asked the respondents, if they indicated that they do utilize animals in their schools, to describe the populations served, the years they have been using animals in their schools, and the frequency of animal use. Respondents indicated animal use in hours per day with a mean of .10, a mean of 1.7 days per week, a mean of .35 days per month, and a mean of 7.2 days per year. The previous data could not be interpreted in a meaningful way due to various reasons, as many of the people who answered “yes” to using animals in their school did not complete the information about frequency of use. Respondents answered they have been using animals in schools with a mean of 3.25 years. For the populations served, of the respondents who did answer the questions, 3.6% use animals with students with Emotional/Behavioral Disabilities, 1.8% use animals with students with physical disabilities, 3.2% serve the Cognitively Disabled population, 3.2 serve students with Autism, 4.5 use animals when working with the General Education population, and 2.7% responded they work with animals when serving “other” types of populations (i.e. Learning Disabilities, Speech and Language, testing and meetings, at-risk, and non-categorical IEP’s).

Finally, respondents were given space to offer comments regarding the use of animal-assisted therapy/activities in schools. Many chose to utilize the space and many comments supported the research on animal therapy. Out of the 34 people would offered comments, 6 of them commented that their school has a policy against using animals in their schools. One person commented that he/she thinks “it’s a great idea; just don’t know how to get started.” Fourteen participants offered further detail about specific programs that either they or others around them are or have implemented. Twelve provided positive feedback, support for, and
good luck wishes in the study of animals in schools. Three people offered advice such as, “staff and students need to be informed as to why an animal is in the building and what they should expect and should or should not do.” All comments written by participants are listed in Appendix C.

Summary

The following is a summary of the research questions explored and an analysis of the data that was collected in order to determine the answers.

Research Question 1. To what extent are school psychologists in Wisconsin aware of the benefits of animal-assisted therapy/activities?

The respondents’ most common response was a rating in the amateur level in all areas. Twenty-seven percent of the respondents rated themselves as a novice of their knowledge of the therapeutic benefit in using animals with children with Autism. Six percent of the respondents rated themselves as an expert of their knowledge of the therapeutic benefits in using animals with children who have disabilities and in their knowledge of the therapeutic benefit of using animals with emotionally and/or behaviorally disturbed children/adolescents.

Research Question 2. To what extent are school psychologists or their colleagues in Wisconsin schools using animal assisted therapy activities?

Of the respondents who indicated “yes” to currently using animals in their schools, 18 indicated they personally use animals (8.2%), while 3 reported (1.4%) their colleagues use animals in their schools. Twenty-three or 10.5% of the respondents also reported “yes” to currently using animals for a therapeutic program in their schools. Fourteen respondents offered comments of specific examples of the utilization of animal therapy in their schools, either by themselves or other colleagues. Some examples of how animals were said to be utilized were:
small animals used in general education classrooms as class pets, equine therapy (horses) at a local stable that works with at-risk students, registered therapy dogs that work with special education students, and guide dogs that help students with physical disabilities.

**Research Question 3.** What do school psychologists in Wisconsin perceive as the barriers to implementing an animal-assisted therapy program or animal-assisted activities in their schools?

Respondents rated legal implications/liabilities and allergic reactions of students and staff as the top barriers rated the most important (45.0% and 45.5% respectively). Six respondents commented that their school has a policy that states animals are not allowed in their schools. They rated animal odor as relatively unimportant, with the lowest percentage of 5.5% rating it as most important.

In summary, the Wisconsin school psychologists who participated in this study showed an interest in animal assisted therapies. They tended to see themselves as amateurs; however, many of them were interested in gaining more knowledge about the topic. They also showed a realistic awareness of the difficulties; as many of them were aware their schools had policies against having animals in their schools. Therefore, the issue at hand is not that there are policies against animals in schools, but rather how to overcome this obstacle.
Chapter V: Discussion

In this chapter, a brief review of the methodology and results are shared. Then, the limitations of the study will be presented. Also, concluding comments and further recommendations will be addressed.

Summary

The purpose of this study was to determine extent to which school psychologists in Wisconsin are aware of the benefits of animal-assisted therapy/activities, the extent school psychologists or their colleagues in Wisconsin schools use animal-assisted therapy activities, and Wisconsin school psychologists' perceptions of the barriers of implementing an animal-assisted therapy program or animal-assisted activities in their schools.

A survey was sent to 400 randomly selected school psychologists in the state of Wisconsin and 220 surveys were returned (55% return rate). The survey from this study was used, with permission and with minor modifications, to look at data regarding animal-assisted therapy/activities in the state of Wisconsin. Similar studies (Ryan, 2000, 2002) used an earlier version of this survey in the states of California and Minnesota.

In this study, the following information was identified: most respondents' rated themselves as amateurs in all areas. Respondents rated themselves as a novice (27.7%) of their knowledge of the therapeutic benefit in using animals with children with Autism. Some respondents (6.8%) rated themselves as an expert in terms of their knowledge of the therapeutic benefits in using animals in children who have disabilities and in their knowledge of the therapeutic benefit of using animals with emotionally and/or behaviorally disturbed children/adolescents.
Of the respondents who indicated "yes" to currently using animals in their schools, 18 indicated personally using animals (8.2%), while 3 reported (1.4%) their colleagues use animals in their schools. Twenty-three or 10.5% of the respondents also reported "yes" to currently using animals for a therapeutic program in their schools.

Respondents rated legal implications and liability and allergic reactions of students and staff as the top two barriers rated the most important (45.0% and 45.5% respectively). They rated animal odor with the lowest percentage of 5.5% rating it as most important.

**Limitations**

Several limitations existed within this study. As previously stated, the first limitation is that the instrumentation was not piloted after adaptation. The second limitation was the size of the population sampled. Also, while a 55% response rate was achieved, it was evident that more data would have been useful to obtain a higher survey return rate. In addition, the concern of anonymity arose due to city/town names printed on the return envelopes after the post-office marked them for delivery.

Another limitation was the instrumentation difficulties that became apparent during the study. Several participants commented on their surveys that question number twenty and twenty-one were basically the same question. The purpose of question twenty, "Do you currently use animals in your school?" was to include all types of animals, (i.e Seeing Eye dogs, classroom pets, visiting pets) while question twenty-one, "Do you currently use animals for a therapeutic program in your school?" was meant specifically for animals used for therapeutic purposes.

In addition, another limitation to the study was that while the researcher was interested in determining whether school psychologists use animals in schools and if colleagues utilize
animals in their schools, it did not provide separate questions regarding colleagues. Questions 20, 21, and 23 through 25, asked about the school psychologist specifically and his or her involvement with animals in the school, (i.e. Do you currently use animals in your school? Do you currently use animals for a therapeutic program in your school?). However, many participants answered those questions for other colleagues or for the whole school in general and not themselves specifically. Many clearly indicated in the margin that other educators in their schools (speech pathologists, general education teachers etc.) utilized animals in their schools, but a few did not, which made it difficult to differentiate between those who understood the question’s purpose and those who did not. The information did provide data on whether or not animals were still being utilized in their schools; however, the data did not tell whether it was by the school psychologist or someone else.

Conclusions

There is limited information available regarding the use of animals in schools. While two studies looking at the use of animal therapy in the states of California and Minnesota were implemented (Ryan, 2002 & 2000), data concerning the use of animal-assisted therapy and activities in schools in the state of Wisconsin was lacking. Several articles and studies address the potential benefits of animal-assisted therapy/activities in general; however, there are few articles available which address the effects of utilizing animals in a school setting. Reading programs are the newest upcoming programs that utilize animals (Bueche, 2003; Thigpen, Ellis, & Smith, 2005); however, when surveyed, most school psychologists in the state of Wisconsin rated themselves as amateurs when asked about their knowledge of animal-assisted therapy in a school setting.
Ryan reported in her 2002 California study, “The majority of respondents rated themselves as amateurs in their general knowledge of pet facilitated therapy across all populations.” In her 2000 study in the state of Minnesota, Ryan reported, “Overall, respondents rated themselves higher than was expected in their knowledge of the benefits of using animals with various groups including the elderly, autistic children, disabled, and severely emotionally disturbed adolescents than their overall knowledge of pet facilitated therapy.” This contrasts with the findings of the Wisconsin study, in which respondents mostly rated themselves amateurs in the area of knowledge about animal-assisted therapy and activities.

In terms of barriers, many respondents wrote informally on their surveys that they are interested in animal-assisted therapy and would like to implement a program; however, their schools do not allow animals in their buildings. Six respondents formally commented that their school has a policy against using animals in their schools. It appears many respondents have hit a roadblock towards implemented an animal-assisted program in their buildings.

The survey data shows that respondents rated legal implications/liabilities and allergic reactions of students and staff as the top two barriers rated the most important (45.0% and 45.5% respectively). These findings are similar to those of Ryan (2000, 2002) who found allergic reactions (50%, 40.2%), legal implications and liability (48.1%, 50.5%) and supervision (43.3%), as the most important perceived barriers by students and staff.

With legal implications being one of highest rated barriers, it becomes difficult for some educators to utilize animals in schools. Educators in schools who are interested in starting a program but are met with barriers such as legal implications and allergic reactions need to know how to address all the major issues related to implementing a program in a school setting. Once they are able to address these issues, educators will be better equipped at offering a more
justified need to utilize animals in schools and are prepared to handle the roadblocks. Nebbe (1991, p. 367) provided a list of guidelines that should be implemented when using animals in schools. A few examples are: determine who is going to be in charge of the program that will be established before the animal-assisted therapy is integrated as a piece of his/her practice; make sure the principal/director/administrator approves of the program and entirely understands what it entails; and recognize which children are not cut out to work with the animal.

Recommendations

The current study extended similar studies (Ryan, 2000, 2002), which drew recommendations that still need future research. First, a revised survey with more clarity and room for respondents to indicate whether they themselves or other colleagues use animal-therapy would be helpful to pinpoint more precise data. Second, a nation survey would obtain more data regarding the knowledge, current use, and perceived barriers related to animal-assisted therapy in schools. Finally, case studies piloting animal-assisted therapy and activity programs in schools can study how effective animals can be; these would be a way to collect and analyze data that others can use to show success rates with students. Solid evidence of the long-term effects of animal therapy in schools is needed to show other schools how positive the experiences can be.

Many responding school psychologists said that they are either interested in learning more about animal therapy or are currently utilizing or have colleagues who are currently utilizing AAT/AAA in their schools. It is apparent that many school psychologists who responded to the survey indicated that their schools do not allow animals. Fear of lawsuits and legal implications in general hinder many from even attempting to start a program with animals. It is suggested that interested parents, teachers, school psychologists, counselors, speech pathologists, and other educators interested in implementing a program collect as much
information on the topic as possible and research the benefits of animal-assisted therapy, research any legal cases related to schools using animals in the past, and examine ways to get started and how to implement the program. These individuals then can present the information to the school boards and administrators on the facts and present the educational benefits and what can be done to prevent perceived barriers. Also, educators from other schools may come in as consultants and describe their success with animals in their schools and ask them to describe what they did to overcome stigmas and barriers.

In conclusion, research shows there are potential benefits to using animals for a therapeutic purpose with children with various needs (Arkow, 1981; Jenkins, 1986; Corson, Corson, & Gynne, 1977; Katcher & Beck, 1983; Katcher & Wilkins, 1994; Levinson, 1971; Marino, 1995; Nebbe, as cited in Jalongo, Astorino, & Bomboy, 2004; Redefer & Goodman, 1989; Thigpen, Ellis, & Smith, 2005). With uncertainty about how to implement a program or when resistance from school boards and administrators arise, the best approach is to learn the facts about the benefits associated with AAT, research the outcome data, and visit professionals who use animals in schools in order to obtain information on how they make animal-assisted therapy successful for their schools' children. The outlook is promising and over time, more schools will come to understand the research and begin to implement an AAT/AAA program of their own.
References


Department of Public Instruction (2007). Other selected WI public school professional staff. Retrieved April 1, 2007 from http://www.dpi.state.wi.us/lbstat/xls/lab_staff_other_profs.xls


Appendix A

Survey: The Current Use of Animals in Wisconsin Schools

I. Respondent Information

1. School- (Please specify grades i.e. K-12, 1-5, 6-8, 7-9 etc.)
   _ Elementary School _Middle School _ High School
   Grades: ________ Grades: ________ Grades: ________
   _ Alternative Learning Center _ Early Learning Center _ Other: ________
   Grades: ________ Grades: ________ Grades: ________

II. Knowledge

As you may know, positive outcomes have been attributed to the use of animals in conjunction with various social, emotional, and physical interventions (animal-assisted therapy/animal-assisted activities). Such approaches have typically focused on physically challenged children or elderly adults. However, animals’ (usually dogs) positive impact in educational settings is increasingly being assessed and validated. Programs employing animals in schools characteristically do so in one of the following three ways:

1. As a facilitator to School Psychologists/School Counselors
2. In an EBD classroom
3. In a Special Education classroom

Please rate your previous exposure to the following information, employing the three-point scale.

1= Novice Have never heard of this before.
2= Amateur Have read about and/or know that information exists in this area.
3= Expert Have knowledge of, and actively seek out information in this area.

2. Knowledge of the use of animals in conjunction with various social, emotional, and physical interventions (animal-assisted therapy)? ......................................................... 1 2 3

3. Knowledge of the therapeutic benefit in using animals with children with Autism?
................................................................. 1 2 3

4. Knowledge of the therapeutic benefit in using animals with children who have disabilities?
................................................................. 1 2 3

5. Knowledge of the therapeutic benefit in using animals with children who have a psychological disability?
................................................................. 1 2 3
III. Interest Level

7. What is your interest level in the use of animals for therapeutic interventions in schools?
   _ Very Interested    _ Somewhat Interested    _ No Interest

8. What is your interest level in animal-assisted therapy/animal-assisted activities in general?
   _ Very Interested    _ Somewhat Interested    _ No Interest

IV. Potential Concerns

Please rate the following, potential concerns related to implementing a program utilizing animals in schools, using the five-point scale.

1= Unimportant
2= Of Little Importance
3= Moderately Important
4= Important
5= Very Important

9. Hygiene/Cleanliness/Disease- General Sanitation………………………………..1 2 3 4 5

10. Legal Implications and Liability (lawsuits)………………………………………..1 2 3 4 5

11. Effect on staff and students who may fear animals……………………………..1 2 3 4 5

12. Allergic reactions of students and staff…………………………………………1 2 3 4 5

13. Animal Upkeep- Walking/Feeding/Cleaning……………………………………1 2 3 4 5

14. Potential harm to students and staff (biting/scratching/other)…………………1 2 3 4 5

15. Potential harm to animal (inappropriate handling and/or abuse)………………1 2 3 4 5

16. Animal Odor…………………………………………………………………………..1 2 3 4 5

17. Maintenance costs (medical/food/supplies/facilities)…………………………..1 2 3 4 5

18. Supervision of program……………………………………………………………..1 2 3 4 5

19. If all of the above concerns were met and dealt with, would you be for or against using animals in your school/classroom/district?
   __ For    ___ Against

V. Current Use

20. Do you currently use animals in your school?
21. Do you currently use animals for a therapeutic program in your school?
   ___ Yes   ___ No

22. Do you know of a school that uses animals in a therapeutic program?
   ___ Yes   ___ No

   If yes, what is the name of the school or school district? ____________________________

If you answered yes to either question 20 or 21, please answer the following questions.
If you answered no, you have completed the survey. Thank you for your time.

23. Please describe the frequency of your use of animals. Please complete all that apply.

   Daily       How many hours on average  ___
   Weekly      How many days per week on average  ___
   Monthly     How many days per month on average  ___
   Yearly      How many days per year on average  ___

24. How many years have you been using animals in your school? ______

25. What population of students do you use animals with in your school? Check all that apply.

   ___ EBD        % of time ___
   ___ Physically Disabled % of time ___
   ___ Cognitively Disabled % of time ___
   ___ Autistic    % of time ___
   ___ General Education % of time ___
   ___ Other: ______ % of time ___

26. Do you have any other comments...regarding therapeutic animals?

Thank you for taking the time to complete this survey.
March 25, 2007

Dear Sir or Madam:

You have been selected among the school psychologists in Wisconsin to participate in a survey regarding the use of animal-assisted therapy/activities in schools. The survey, which has been mailed in this envelope, will take approximately 10-15 minutes to complete. I know everyone is busy and excited for summer so I would like to extend my appreciation to you for taking the time to complete this survey.

Your responses will be used in a study being conducted for the completion of an Education Specialist Thesis project entitled “Furry Therapists: School Psychologists’ Perceptions of Using Animals in Wisconsin Schools.” This study, similar to other studies that surveyed educators in schools in Minnesota and California, focuses on school psychologist perceptions of animal-assisted therapy/activities in school settings as well as their current knowledge, interest level, and any potential concerns regarding the use of animals in schools.

The completion of the survey implies voluntary participation in this study. If at any time you do not feel comfortable with the study you have the right to withdraw your participation. Confidentiality is guaranteed; there will be no identifying information used in this study. Benefits of participating may include increased knowledge and curiosity about animal-assisted therapy/activities. The study may also help school psychologists determine whether or not implementing an animal-assisted therapy program is beneficial to their students. While the risks are minimal, it is possible that psychological stress and/or anxiety may be brought on while filling out the survey if one has a fear or phobia of animals. By completing and returning the following survey you are agreeing to participate in the project entitled, “Furry Therapists: School Psychologists’ Perceptions of Using Animals in Wisconsin Schools.” If you chose to participate, please feel free to utilize the enclosed, self-addressed envelope to return the survey. Again, your participation will remain anonymous; therefore, your answers will not be linked to your identity. In addition, the name and area of your school will remain anonymous.

This study has been reviewed and approved by the University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

Investigator: Erin Schultz M.S.Ed.
715.853.8624, schultzeri@uwstout.edu

Advisor: Barbara Flom Ph.D., L.P.C.
715.232.1343, flomb@uwstout.edu

IRB Administrator
Sue Foxwell, Director, Research Services
152 Vocational Rehabilitation Bldg.
UW-Stout
Menomonie, WI 54751

I want to thank you for taking the time to complete this survey and for your punctual assistance in collecting this information.

Sincerely,

Erin Schultz M.S.Ed.
University of Wisconsin-Stout
School Psychology Graduate Student
Appendix C

Question 27 from the survey: Do you have any other comments regarding therapeutic animals?

Responses:

1. I think it’s a great idea; just don't know how to get started.

2. They have an automatic bond with kids that people just don't have-regardless of how good you are. (I'm automatically "cool" with the kids b/c of Roxy-dog.) Also, it puts the younger kids at ease b/c "I'm Roxy's Mom". The vast majority of people are very supportive. She helps TONS in meetings and testing too!

3. I teach a summer school class about dogs and we learn about how dogs help people. We watch videos called, "Dogs with Jobs" and have learned how they can improve quality of life for visually impaired and autistic individuals. We also had a speaker and her dog visit our class. She volunteers through an organ. (non-profit) called "Pets Helping People" in Milwaukee. She talked about how she takes her retired Greyhound to visit the elderly in nursing homes and how he brightens their days.

4. Good luck. I believe most people would be in favor of this but insurance will be the thing that prevents it from happening.


6. There is a guide dog in the school and horses are used outside of school.

7. Staff and students need to be informed as to why an animal is in the building and what they should expect and should or should not do.

8. Excited that this area is being pursued and hope to have some training in the future for use in my own practice.

9. Interesting idea!
10. Dogs need to be trained in therapy and the population that they will be used with.

11. I think it's a great for therapy outside of school. I don't think our school is set up for using animals (or long term intensive counseling).

12. A wonderful idea.

13. I would love to develop a Service Learning project to train service animals.

14. My school district has stringent rules about animals in classrooms/schools primarily to allergies so its highly doubtful this would be considered.

15. Our school board has outlawed all animals because of allergies.

16. Somewhat outside of school-horseback riding CD/physical handicapped students. Smiles Program

17. Our district has a policy that severely limits the use of animals in schools due to concerns about allergies.

18. The incidences of animals helping out humans in need are too numerous to count. The only major obstacles are the usual logistics of oversight, cost, legalities, etc.

19. Our district policy proibits brining animals to school.

20. Teddy Bears work too- while not the same, its better than nothing. Most can identify with animals.

21. Animals in class: hamster and birds

22. Its always a positive experience for the students.

23. Some teachers have small pets in their rooms: rabbits, guinea pigs etc.

24. My previous school district had a student with a visual impairment who was one of the first students to have a seeing-eye dog in the school setting. We also currently have a teacher
with a visual impairment who uses a dog. Both positive experiences. Could lead way to more...

25. We have lizards, rabbits, and hamsters. I have a certified therapy dog that comes to school (Therapy Dogs International).

26. I personally have allergies and therefore am not interested myself. It's an interesting thought if someone else wanted to pursue this.

27. Good luck. I've seen great benefits with therapy dogs.

28. I think our district has a policy around animals in schools that would prohibit this type of therapy.

29. There is a no animal policy per school board.

30. We had a program in place in MPS- interested psychs were trained to use their dogs as therapy dogs through the WI Humane Society- but MPS stopped our using dogs in schools because of high insurance costs and "risks".

31. Once you have taken care of the liability issues it is a program that has been extremely successful at Logan High. There are more teacher, student, and parent requests for participation than time can meet. Target areas of specific focus and services: attention span, partnership skills, overcome fears, nonverbal communication, friendship skills, leadership and responsibilities, and problem solving.

32. I love dogs and have two myself, however, I have noticed that it can be common for students in urban areas to be quite fearful of them possibly due to a bad exposure. I think before they can be used for therapy some kids need to learn how to tell the difference between friendly and non-friendly ones.
33. I own and train 2 therapy dogs who work with both children and adults with disabilities. They are available to all students in the building. Use them for dog safety. Work with fearful students.

34. We have one pet hamster in the special education classroom.