Therapy Dogs Assisting Those With Autism

Design of a study to examine the effects of therapy dogs on children and adults diagnosed with autism.

Tag words: Companion animals, social rehabilitation, and autism

Authors: Julie M. Fagan, Ph.D., Yung Yung Chan, Courtney Zinna, Dana DeLuca, and Ali Locke

Summary:
The use of animals in assisting people with special needs is gaining acceptance. However, the assessment and success of animal-assisted therapy programs has primarily been based on anecdotal evidence. We have designed a pilot study to determine whether therapy dogs may be beneficial in assisting those with autism spectrum disorder. Interested families wishing to inquire about or voluntarily participate in this free Rutgers University study should go to www.ruffloveus.wordpress.com

Video link: http://youtu.be/xa4Md0jgMjo

Using Animals To Assist in the Therapy of Autism Spectrum Disorders (DD)

Occupational therapy incorporating animals is growing in popularity as more studies find the results of this therapy to be more beneficial than therapy without an animal present. Child developmentalists have adopted a “biocentric perspective”, a belief that children have a natural interest in animals and other nonhuman life in their environments. Following on this belief, some occupational therapists have begun using animals in their therapy sessions with autistic children. There are approximately 44 million pet dogs living in the United States. A study of 68 five year olds found that 42% used pets for emotional support and other studies show that 5-10 year olds who were attached to their pets showed greater empathy towards peers. In 2002, Martin and Furman found that when children with pervasive developmental disorders (PDD) were in the presence of a live dog rather than a stuffed version, they demonstrated a more playful mood, a greater focus, and an increased awareness of their social environment (1),(4).

A study involving 22 children, ages 7-13 with autism receiving school-based occupational therapy in Roanoke, Virginia found that children engaged in a greater use of language and social interaction when therapy sessions involved animals than when the sessions did not include an
animal. The average occupational session included swings, pliable clay, toys, artwork, puzzles and letter magnets, while the sessions involving animals included riding llamas, petting/stroking dogs and rabbits, throwing balls for dogs, training llamas for competition, and giving directions to animals. It was evident that the animal-assisted sessions contained more social interaction than the sessions not including animals (2).

A study carried out by Burrows et al. hoped to describe the patterns of behavior observed between therapy dog, child, and family members after a therapy dog was placed in the household. Using observations and other ethological methods, the group was able to gather data to support the hypothesis that therapy dogs were a beneficial form of therapy for children with autism. The group also found that the dog bridged the social gap between autistic child and his or her siblings by alleviating the social disconnect some families experienced. In this study, seven boys and three girls with autism, ages ranging 4.5-14, with varying degree of motor and communication skills were observed. Parents of the children acted as the primary source of interview. Half of the group was observed for one year and the other five children were observed for six months. Dogs were harnessed to the child by a leash and belt which allowed coordinating walking and motor control. Parents described an overwhelming list of benefits of having a therapy dog. Dogs provided safety for the child, preventing them from walking off the sidewalk or into danger. Children learned to pick up and throw a ball and feed their pet. Parents reported noticing decreased anxiety, diffused anger, increased calmness, and a decrease in the number and severity of tantrums (3).

The most important outcome of this study was the therapy dog’s effect on the family social bond. The dog gave other children in the family a way to relate to their autistic sibling and provided them an opportunity to talk about their brother/sister without referring to autism. In public, families received positive attention rather than negative attention and the stress of the public outing was relieved because the autistic children were calmed by their canine counterpart. Throughout the study, no parent reported a decline in the behavior of their child. The dogs encouraged a normal pattern of living and were a source of support for parents.

A study described by Olga Solomon included five autistic children, four boys and one girl, ranging in ages from 4-14. Two children were considered to have a form of high functioning autism while 3 were considered to have a form of low functioning autism. Once a week a certified handler and therapy dog would visit the child for one to two hour sessions. The results included the specific cases of two children, referred to as Child-one and Child-two. Child-one was nine years old, experienced difficulty staying on any particular task for more than 15 minutes, was distressed by loud noises, and rarely smiled. She had difficulty making friends at school and changes in her environment cause violent outbursts. However, the child had an affinity for nature, insects, and animals. Child-one met with Crystal, an Australian Shepherd. After the first session, she was fully engaged for the entire following sessions and was able to give Crystal simple commands, such as ‘speak’ (despite the loud bark). Child-one began to
interact more with her twin sisters and demonstrated to an unfamiliar peer how to give commands to Crystal. Child-two received Springer Spaniel named Simon. Simon provided Child-two with a structured routine. He woke up every morning to let Simon out of his crate, fed, and walked him. Childtwo wrote stories about Simon in school and felt more included with his family when his sisters played with the dog (5).

A study carried out by Francois Martin and Jennifer Farnum also supported the use of dogs as therapy for children with pervasive developmental disorders, including autism. However, the study also showed some results not portrayed by the previous studies. The study used three conditions including a ball, a stuffed dog, and a live dog. Although children appeared more focused and engaged in conversations about the live dog during their therapy sessions, the children talked less about themselves or the therapist. The child made less eye contact with the therapist when the live dog was around and touched the live dog less when compared to the stuffed dog or ball. ‘Hand flapping’, a negatively stereotyped behavior of PDD, was displayed more when the live dog was present. However, the researchers conducting the study believe the behavior was initiated in response to feelings of excitement when seeing the live dog (4), (5).

Why Might Animals be Beneficial in the Treatment of ASD (DD & YY)

With 44 million pet dogs in the United States, it is evident that pets play a major role in the day to day lives of humans. Benefits of pet ownership include better health, happiness, and a feeling of comfort. Pets promote physical exercise and provide a source of companionship, decreasing loneliness and depression. Children with autism experience feelings of depression, have difficulty communicating and forming relationships. Animals provide a nonjudgmental social outlet for these children. Dogs and other animals have been used as therapeutic aids in hospitals, nursing homes, and rehabilitation centers (7).

In a study conducted by Francois Martin and Jennifer Farnum, ten children with varying types of PDD, including one child with autism, participated in 45 therapy sessions. Three one on one sessions with a therapist were held every week for 15 weeks. The three sessions each consisted of a different condition. For example, the first session that week the therapist would bring a ball, the next session would involve a stuffed dog, and the third session would involve a live dog. The following week, the child would experience all three conditions again, and so on for the 15 week study period. This allowed the child to be its own control, and the therapist could assess which condition had a more therapeutic effect. During sessions with the live dog, children were more focused on the dog, gazed around the room less, and engaged the therapist in conversations about the dog, more than they conversed about the ball or stuffed dog. Also, children laughed more and gave more treats when around the live dog indicating a happier and more playful mood. When around the live dog, children answered a therapist’s question with a related response rather than ignoring the question or making a statement about a completely unrelated topic. This also indicates that the child was more focused and listened better in the presence of the live dog than
the ball or stuffed dog. It is apparent that the live dog engaged the children and focused their energy and attention. These results indicate that a live therapy dog may increase the child’s meaningful social interactions. The child builds a bond with the dog or another animal. The bond is then passed to humans. Therefore the dog acts as a ‘transition object’ (4),(6).

**Human Animal Bond (YY)**

Our research of Animal Assisted Therapy on Autism relies on the interaction between adults, children and the therapy dogs. Few studies have examined how children and adults can benefit from building human-animal bonds. Research done at the College of Veterinary Medicine, Washington State University showed that children with a therapy dog exhibited a more playful mood; they were more focused, and were more aware of their social environments. In this study, children having pervasive developmental disorders were allowed to interact with live dogs and the effectiveness of the experiment was evaluated in terms of both behavioral and verbal dimensions of the children. Their research determined that animal-assisted therapy has its specific benefits and can be used as an appropriate form of therapy (8).

Another research study done at Wright State University on “Pet dogs as attachment figures for adult owners” showed that adults would turn to their pet dogs in times of emotional distress more than to their family members or friends. It was determined that dogs could provide comfort to their owners after attachment bonds were formed between the dogs and the owners. Both studies suggested that children and adults can benefit emotionally from having an animal attachment and showed that therapy dogs play an important role throughout the animal therapy (4).

**Animal-Assisted Therapy: How do they vary with different forms of autism? (CZ)**

There are many different forms of autism, and each fall onto what is called the autism spectrum. Today, the spectrum includes many more forms of autism ranging from high spectrum autism to low spectrum, to CDD (childhood disintegrative disorder), PDD-NOS (pervasive developmental disorder not otherwise specified), and Asperger syndrome, which twenty years ago might have just been considered odd behavior. Most children begin to show signs of autism at a very young age and the behaviors associated with autism vary depending on where a child falls on the spectrum. Children with an autism spectrum disorder are characterized on the spectrum by three main criteria; problems with social relatedness, difficulties with language and communication skills, and how often repetitive motions and interests are exhibited. A child with high functioning autism can have an average IQ, communicate efficiently, and be socially active whereas a child with low functioning autism can be socially inactive, not speak or communicate,
and have a low IQ (mental retardation). These results vary from child to child and each child that falls on the autism spectrum will fall independently from any other (9).

Treatment with therapy dogs has also shown to vary with each and every child. Animal-assisted therapy has proven beneficial for children with all forms of autism on the spectrum, but children with Aspergers, which is a much higher functioning form of autism, have been shown to relate to therapy with animals more efficiently than a low functioning autistic child. Children with Aspergers have a hard time keeping themselves clean, they inherently have bad hygiene. A study done in 2000 by a child psychologist in New Mexico, focused on children with Aspergers between the ages of 10 and 12. The study focused on the relationship between children with Aspergers and dog ownership. The researchers conducting the study were surprised that the self esteem and sensitivity were much higher in the children whose families owned a dog. Therapists also noted that children with Aspergers focused efficiently on tasks such as brushing the dog's teeth and hair, basically making sure that their dog had good hygiene (10). The therapists would then focus this onto the children themselves, explaining that since it was so important to keep their dog healthy that the children should also keep themselves healthy. Many children with Aspergers who owned a dog maintained good hygiene when compared to children who did not. Children with Aspergers also can sense that other children are making fun of them and feel left out. A therapy dog has been proven to help children with Aspergers feel included because now everyone wants to come meet their new furry friend and dogs unlike humans, do not judge (11).

The treatment for children with CDD (childhood disintegrative disorder) is the same as that with Autism Disorder. The two disorders are very similar, but children with CDD slowly progress into losing their communication and motor skills, whereas children with Autism Disorder exhibit signs very early on. A low functioning autistic child can be much more aggressive and usually will have a harder time with therapy sessions, because they are much more sensitive to changes in the environment. Children with CDD and Autism Disorder have difficulty following instructions and staying put in one place. Parents can not leave their children alone for even a second because children with these forms of an autism spectrum disorder like to wander and do not understand that this is a bad behavior and that they are in danger. A study was done with a family whose child was diagnosed with CDD. The child loved to wander away and his parents could never take him shopping without the fear of him running away or getting highly upset because of the restrictions in his movement. Once the child worked with a service dog for a few weeks he no longer wanted to wander away (12). The service dog was trained to abruptly sit down if the child tried to run away and was also trained to guide the child along streets and busy areas much like a Seeing Eye dog. Another common symptom children with these autism spectrum disorders present is constant repetitive behaviors. Studies have proven that a dog can help calm a child down and help him or her focus on the task at hand, by nudging the child and gaining his or her attention. When a parent tries to nudge a child out of their receptive motions, the child tends to get frustrated and upset. A dog distracts the child without making him or her feel self conscious or attacked (16).
Children with PDD-NOS (pervasive developmental disorder not otherwise specified) are considered to have mild to similar symptoms of autism. Many children diagnosed with PDD-NOS range from expressing symptoms much like that of Aspergers to symptoms much like a child with low functioning autism. Children with PDD-NOS usually exhibit self-injurious behaviors (13). They hurt themselves as a form of sensory stimulation and satisfaction. Studies have concluded that service dogs can help stop these injurious behaviors, but that therapy sessions may not be enough. It's good to start with therapy sessions introducing the child to the therapy dog slowly, but many children that self harm themselves need a constant form of distraction. Children with PDD-NOS as with other forms of autism can also exhibit hurtful behaviors towards animals if not shown how to properly treat them (15). Children with PDD-NOS, much like children with Aspergers, follow behaviors taught by their caregiver. This is a great way to show a child how to care for a dog and help them learn new responsibilities and sensitivity. KRC (kern regional center) is an example of an organization that helps children with PDD-NOS learn how to interact with animals (14).

In conclusion, each child diagnosed with an autism spectrum disorder will react differently to therapy. Some children will experience immediate benefits whereas, some children may not be able to accurately focus on the therapy dog and become too highly stressed during sessions. Each form of an autism spectrum disorder is different not just from one another, but each disorder has varying degrees of symptoms in itself.

**Programs Which Utilize Animals To Assist Those With Autism (CZ)**

There are many forms of treatment available for children diagnosed with autism, but this new form of therapy using companion animals is now becoming extremely popular. Many organizations that work with companion animals have come to realize how beneficial animals are to the human psyche. *PATH International* is an organization that uses horses for therapeutic riding. They work with all kinds of disorders including autism. A child with autism can go to a *PATH International* farm and sign up for a riding program where he or she will learn how to not only ride a horse, but how to take care of this new gigantic friend. Activities such as brushing, feeding, bathing, and talking to the horse can help a child with an autism spectrum disorder gain a sense of accomplishment, responsibility, and most importantly confidence that will help remove stress. *PATH International* notes that therapy session results will vary with each child. A child with high functioning autism for example, may seem to progress extremely fast learning to accomplish new tasks in just a few short weeks. A low functioning autistic child can experience difficulty learning new tasks at first and they can also show signs of stress and anxiety at a much higher intensity. *PATH International* works with all forms of autism spectrum disorders, but most families can not own a horse and obviously a horse can not travel around town and to school with a child. Therapy Dogs are a way for children to not just have therapy sessions, but actually own their very own dog (17).
Numerous organizations have developed programs where they use dogs to help a child with an autism spectrum disorder cope with everyday life. Two such programs are AIR Dogs: Paws for Mind and Paws with a Cause (18). Both of these organizations help set up families with a new furry friend that can accompany their child wherever he or she goes. Since many children with autism have trouble focusing in social situations and tend to get stressed very easily in new environments, a service dog is a great companion that can help mediate this anxiety. A trained service dog can signal the child of an important event, such as a smoke alarm and someone at the door. A dog is also a great conversation starter allowing the child to gain confidence when talking to new people. Some people feel more comfortable approaching a stranger that has a dog. The dog can signal to the handler (autistic child) and remind him or her to drop all other processing and focus directly on the sound being made by the dog (19).

Service dogs vs. Therapy dogs (AL)

The terms service dog and therapy dog are often used interchangeably, when, in reality, they have very different meanings. The main difference between the two is that service dogs are protected legally by the Americans with Disabilities Act, whereas therapy dogs are not. Specifically, service dogs have the same access rights as their handler but therapy dogs do not have the right to enter animal restricted areas (although some states do have legislation in place detailing therapy dog rights) (20).

A service dog is defined by the ADA as “any dog that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability” (iaadp.org). To qualify as a service dog, the owner must have a disability defined and recognized by the ADA, the dog must provide that person with a service that improves his/her independence from their specific disability, and the dog must behave in a calm and controlled manner in public situations. Examples of services include guiding dogs, hearing dogs, mobility assistance, grounding and behavior interruption, and alerting of medical episodes (such as seizures). Dogs that provide self-protection or emotional support are not qualified as service dogs. Service dogs are not considered pets since they provide a direct service to their owner to alleviate the disability (22).

Surprisingly, service dogs do not have to be certified or wear special harnesses/vests indicating them as an assistance dog (although individual states and organizations do have certification programs). However, impostering a pet dog as a service dog is a federal offense. Some training centers may follow a set of minimum standards but these are not legally enforced, and anyone with a business license can call him or herself a professional trainer (deltasociety.org). Therefore, the quality of the dog and its training depend on the competency of the organization. Reputable training organizations usually make references to or are members of service/therapy dog societies (such as IAADP or ADI). Some organizations also require employees to hold at
least a college level degree and their trainers to be certified in dog handling (23). Generally, a service dog organization will use shelter dogs, the person’s own dog, or their own breeding stock for the dogs they train. Those that use their own breeding stock will often have a puppy raising program, followed by formal training, and then placement of the dog with a graduate.

Therapy dogs, despite not having the same legal protection as service dogs, provide similar benefits that should not be undermined. Therapy dogs are usually pets that have been trained by their owner through a parent organization to provide a service to others. The main types of therapy dogs include animal assisted therapy (a health-care provider uses the dog to encourage a response from the patient), animal assisted activities (dogs visiting hospitals/nursing homes/etc.), and therapy dog teams (dog/handler team that helps those in recovery programs). Therapy dogs must also meet certain criteria regarding behavior/temperament (at the least) to practice their skills. Therapy dog clubs/organizations are found all over the nation, with many states either having local chapters part of larger organizations (such as the Delta Society, Therapy Dogs International) or their own founding clubs (21).

A point of clarification, the term ‘service dog’ actually falls under the broader term ‘assistance dogs.’ Assistance dogs are classed into 3 categories to include guide dogs (aid those who are visually impaired), hearing dogs (help those with hearing impairments), and service dogs (provide help to those with physical/developmental disabilities). However, the ADA refers to an ‘assistance dog’ as a ‘service dog’ in their definition of assistance dog because the dog is providing a service.

Emotional Support Animals (AL)

Emotional support animals are usually dogs but can be any animal that gives emotional support to its handler. The role of the emotional support animal is to provide the handler with a safe, comforting, judgment-free environment. ESA animals are ‘less trained’ than service animals in that they are not required to know commands for performing specific tasks that a service dog would learn to directly ameliorate the handler’s disability (24). Instead, the emotional support animal provides therapeutic benefits to the handler. The animal is expected to be well-behaved in public settings and to not pose as a threat. Emotional support animals are not placed with just anyone who may have a mental illness; a psychiatrist must recommend it to the patient as an alternative form of therapy that he/she may benefit from. The patient’s doctor can then write a prescription for an ESA. The animal is not covered under the Americans with Disabilities Act, but is allowed fair, non-discriminatory housing with the handler.

Service Dog Organizations (AL)

Many service dog organizations can be found throughout the US. They range in the services they provide, training dogs for people with physical disabilities, mental impairments, and
medical issues. Although each organization may operate under different philosophies of training, they share a common mission of providing clients with a dog that will increase their confidence and independence. Four distinct service dog organizations include 4 Paws for Ability, Northstar Foundation, CCI, and Top Dog. Each one of these schools has a distinguishing feature that sets them apart from others. 4 Paws for Ability does not have an age requirement for child applicants and requires families to fundraise for placement of a dog. Northstar Foundation matches young puppies with the applicant so an early bond can be formed and the puppy can begin to sense the child. CCI is a national organization that places dogs with children and adults having disabilities other than blindness. Top Dog does not have their own breeding stock of service dogs but instead has a certification program that the client enrolls in with his/her dog.

4 Paws for Ability is a service dog organization that specializes in training dogs for mainly children with autism, but recognizes that often times these children may have accompanying disabilities and need a dog that provides more than just the ‘basics’ of an autism support animal. This organization is located in Ohio and uses their own breeding stock of dogs but will accept donated puppies, should they meet their temperament standards. The organization uses Labrador retrievers, golden retrievers, collies, poodles, and papillons. The dogs in the breeding program live with foster families, and females are bred and whelped at the training facility. At 7 weeks of age, the puppies are given to families who volunteer to raise them until they are old enough to enter formal training (25).

4 Paws for Ability has a unique application process in order to be matched with a dog. Each dog has $22,000 invested in it, so, to help cover the expenses, prospective families are asked to raise $13,000 for the organization before they can receive a dog. This process helps spread the word about the organization, raises money to support the dogs in the program, and gives families a sense of having earned their dog. Another unique aspect of this concept is that the wait list for a dog is only as long as it takes the family to raise the money. The organization helps the family with fundraising ideas and promotions throughout this time. After the funds are raised, and the family demonstrates that they can care for the dog, the child receives a service dog from their program. The child who is receiving the dog is encouraged to take part in the required training sessions, although it is also encouraged that the entire family participate as well (25).

The dogs coming from this program are skilled companions and may be taught additional tasks such as seizure alert or hearing ear. The dogs in this program are also taught tracking skills so they can track down the child should he/she ever flee. This is an important skill for the dog to have since many children with autism may become overwhelmed in certain situations and have a tendency to bolt without warning. Many parents fear this aspect of the disorder and live in constant worry that their child will suddenly run away and have something terrible happen. Fortunately, for many children, the presence of the dog discourages them from bolting; the dog serves to ground them in times of sensory overload.
The Northstar Foundation places service dogs with children suffering from serious medical/emotional conditions, with autism accounting for half of their placements. This organization is a smaller group, placing about 10 dogs per year, and is located in Connecticut. This school only uses golden retrievers. The golden retrievers they use come from an outside breeding stock from a genetically reputable kennel that breeds for a social temperament/disposition. Unlike most organizations, the Northstar Foundation places dogs as 6 month old puppies. The reason for this is twofold: it encourages early bond formation between the child and puppy and the puppy is exposed at an early age to stimuli in the child’s environment. It is important to establish a deep bond between the child and dog early on so that the dog can learn to sense/read the child and act appropriately in a given situation (26).

Although early bond formation is beneficial between the child and puppy, this is a very critical period in the puppy’s development. Therefore, the puppy placement is monitored to prevent any problems; the dog’s temperament is constantly assessed for any behavioral issues. The entire family is encouraged to take part in the puppy’s training as a service animal. Each family member is given a specific task, such as walking, grooming, or feeding, to aid in bond formation, however, bond formation is stressed between the child and dog more so than between other family members and the dog. During this training period, the dog is taught specific commands that are tailored to the child’s needs. For instance, many of the dogs in this program are taught to recognize hand signals in case if the child is nonverbal.

Canine Companions for Independence (CCI) is a national organization with the first assistance dog school established. Regions are set up across the US and many states have local chapters. This organization trains dogs for children, adults, and veterans with disabilities other than blindness. Disabilities include hearing impairment, physical, and mental/developmental disorders, such as autism. Graduates are not expected to pay for their dogs. Their working dogs fall into the 4 categories of facility dogs, hearing dogs, skilled-companion teams, and service dogs. Facility dogs work with a handler in a healthcare setting, such as a hospital. Hearing dogs alert hearing-impaired individuals to sounds. Skilled-companion teams are 3-unit teams consisting of the dog, the applicant, and the applicant’s caretaker. In this case, the applicant clearly benefits from the dog but requires the care of another individual. Service dogs are matched with independent individuals who usually have mobility impairments. The dogs learn a base set of commands and then they are built upon in formal training and then tailored to meet the needs of the individual upon placement of the dog (27).

CCI uses their own breeding stock of Labrador retrievers, golden retrievers, and crosses between the two breeds. The puppies are born in the homes of volunteer breeder-caretakers living near the national headquarters in California, and then at 7 weeks old they are shipped across the US to the various regional headquarters. The puppies are then placed into the homes of volunteer
puppy raisers for approximately 18 months, at which time they are sent back to their regional headquarters for formal training and matched with an applicant (27).

Top Dog is a service dog organization located in Tucson, Arizona. The interesting aspect of this school is that they do not have their own breeding stock of dogs; the client must own a dog or be interested in having a dog, in which case the organization will match the client with a dog from a local shelter. To apply for service dog certification from this school, the applicant must go through a rigorous 2 year process. The applicant has 2 interviews, one in the applicant’s home and the other in public. These interviews are assessments of the dog’s behavior in comfortable and strange environments. Dogs must be at least 6 months old and not older than 4 years of age, weigh more than 40 pounds, and be confident in public situations. This criteria is important to maximize the working life of the dog (28).

The certification program is a 2 year commitment that is offered in person and online. The course consists of 3 12-week sessions with a 4-week recess between each class. The classes focus on topics including dog behavior and training methodologies, obedience, and training the dog to meet the client’s specific needs. Toward the end of the program, the dog must pass the ADI public access test. Upon completion of the program, a certification test is administered and successful completion of it entitles the dog to full service dog rights. These rights are valid for 3 years (28).

**Qualities of an Autism Service Dog (AL)**

Service dogs that are trained for people with autism perform tasks similar to guide or hearing dogs, since, like blindness and deafness, autism is a sensory perception disorder. The training between these types of dogs differs in that guide or hearing dogs alert the handler to what is physically in the environment, while autism service dogs also alert the handler to what is physically in the environment but the handler uses this information to prioritize his/her thoughts. An autistic person may be so overloaded with sensory stimuli that he/she cannot prioritize what is the most important aspect of the environment at that point in time. For instance, this person may be sorting through incoming sounds like traffic, a fire alarm, wind, etc. before realizing the fire alarm is going off. Although the person may recognize the significance of the fire alarm, he/she cannot think/act fast enough because of their thought processes to arrive at the conclusion to evacuate. The service dog is trained to alert the person right away to such stimuli, and lead them away if the handler is confused. Autism dogs are also trained to alert the person of a repetitive behavior that he/she may be engaging in. Autism dogs may be trained as well to prevent the individual from running away or to alert someone when the individual has run away (24).

**Should Therapists Give Animals a Try in Treating Autism?** (DD)
Autism Spectrum Disorder is an extreme Pervasive Developmental Disorder (PDD) where those affected display impaired social and communication skills. Children diagnosed with autism can be impulsive, unpredictable, and easily irritated. During social interactions, children are over-responsive or under-responsive. Autistic children also lack motor skills. Praxis, the ability to plan and execute motor sequences, is deficient in children with autism. For families, autism is a deeply personal disorder. The unpredictable behavior of their child may make simple daily activities such as going to school or grocery shopping difficult and stressful. Families tend to experience decreased social interactions and therefore may feel socially isolated. Over the years, there seems to be a trending increase in the number of children diagnosed with autism. According to the Centers for Disease Control and Prevention, in 2008, 1 out of every 88 children was diagnosed with autism compared to 1 in 150 children diagnosed in 2000. The increasing prevalence of the disease requires a greater need for research and the promotion of therapies aimed at developing the social behaviors and communication skills of autistic children.

Traditionally, children with autism seek help from a trained professional, but this does not always help. Service and therapy dogs have been used for years to aid those with disabilities. Companion animals are now being used to assist children with autism. Therapy dogs allow a child with autism to help develop new social skills and confidence in everyday life. Many children with autism are extremely uncomfortable in new situations such as making new friends. Dogs are a great conversation starter.

**Community Action: Establishing Partnerships with the Nonprofit Sector and A Research Institution to Examine Whether Animals Are Beneficial to Those With Autism (CZ)**

Our program will set up families with autistic children all across New Jersey with therapy dogs. A website (www.ruffloveus@wordpress.com) will allow families to locate therapy handler teams in their area and set up their very own free therapy sessions. All the therapy sessions will be completely anonymous, the parent or guardian of the child will just have to fill out an approved ATEC survey. The ATEC survey will be filled out each therapy session and should take the guardian around 30 minutes to complete. All of the handlers can meet online through the website and discuss how their sessions are going and gain ideas for activities to do with their family. Families will also be able to go online and chat with one another about how their sessions are going. The families can stop the sessions at any time if they feel that the therapy is not working or that the sessions are too stressful for the child. The sessions will range in time from 30 to 60 minutes, but time can vary, depending on the child. Activities will also be tailored to each individual child, since every single child will have different strengths and weaknesses. Activities will include things such as petting, brushing, feeding, and playing with the therapy dog. Some activities will prove to be more stimulating for a certain child and not others, so sessions can be altered to fit each child’s preference.
The sessions will expand over six weeks and each week a survey will also be completed by the handler with approved tasks to monitor the child’s progress from week to week. These tasks include things such as rolling a ball and pointing to different objects around the room and noting the child’s responses to each task on a scale. The program aims to assess how a child with an autism spectrum disorder reacts to a therapy dog. We are working with AIR, Attitudes In Reverse, a program that also recognizes how important animals are to mental health. AIR has reached out to people all over New Jersey and has now branched into setting up families with their very own emotional support animals. Tricia Baker, the founder of AIR has started the program Air Dogs: Paws for Minds. They have set up one family with their very own dog, who AIR was able to rescue from a shelter. This dog has changed the lives of not just one person, but an entire family who has noticed amazing improvements in their child's behavior, including decreases in anxiety and depression in just a few months. Tricia Baker has contacted 10 handlers from her own organization and organizations such as Bright and Beautiful and Therapy Dog International which both train therapy and service dogs. The handlers are willing and eager to participate in this study and look forward to working with families.

Outreach to families has been done through various forms of communication such as emails, brochures, and meetings. There are numerous autism organizations in New Jersey. The organizations that have been contacted thus far include:

1) Bright and Beautiful (Through AIR, Main Organization Used For Handler Teams)
2) Therapy Dogs International (Other Main Organization Used for Handler Teams)
3) Autism Speaks (Email)
4) Friendship Circle of Greater Mercer County (Email and in person)
5) The Arc Mercer (Email)
6) Sandi Bongart, Adorn Beauty Center & Spa (Email)
7) Autism NJ (Email)
8) New Jersey Parent Advocates (Email)
9) Nami- National Alliance of Mental Illness (Email and through AIR)
10) Eden Autism (Email)
11) Kidz Connect (Email and Phone)
12) Respite Care (Phone)
13) Association for Science in Autism Treatment (Email)
14) Parents of Autistic Children (POAC) (Email)
15) Canine Companions for Independence (Email)

We are hoping to have at least ten families signed up for therapy sessions, but sessions will start as soon as families are available. This will allow us to have a range of results and also will allow for higher availability among handlers. We also would like several families to work with a stuffed dog instead of a therapy dog, for their first few weeks. This will test how important a live
dog can be to a child with a pervasive developmental disorder. The stuffed dogs are fairly large as well and would be great for a child that is very aggressive or a child that is afraid of dogs. This will allow the child to still get the benefits of therapy, but to start slower and create a less stressful environment for the child. Once the few weeks of therapy are complete with the stuffed dog, the family can then chose to continue therapy sessions with the same handler and the live therapy dog.

Overall, this study hopes to not just prove that children with a pervasive developmental disorder will benefit from interactions with a therapy dog, but that the children will have gained a whole new outlook on life and a new furry friend. After the treatment, formation of secured attachments between the children and the therapy dogs are expected. The children will hopefully be able to maintain a good balance between self and other and also gain the ability to live independently within a normal social circle. The bond formed between a human and dog is everlasting and after therapy sessions have commenced, we can then help interested families find their very own dog to train and keep forever (through programs such as AIR Dogs: Paws for Minds).

**Service Dog Tasks (AL)**

Families that eventually welcome their very own service dog would receive numerous benefits. The service dogs could assist in correcting many of the behaviors characteristic of autism spectrum disorder by responding with specific actions. These include, but are not limited to:

- **Impulsive running:** Dog retrieves individual
- **PICA:** Interrupts behavior
- **Self harming behavior:** Interrupts behavior
- **Night Awakenings:** Alerts parents by barking or climbing into bed with individual
- **Non-verbal:** Offers behavior when person tries to command
- **Social Isolation:** Focus shifts to dog.
- **Fire alarms:** Dog alerts the individual and gets them out
- **Meltdowns:** Dog climbs into lap to calm individual
- **Streets:** Dog will stop individual from walking into street
- **Sneaking out:** Alerts parents by barking
- **Nightmares:** Dog will crawl into bed to calm individual
- **Wandering:** Tracks and finds individual/offers protection
- **Dropped item:** Refuses to move till the item is picked up or retrieves the item
- **Separated from in crowds:** Seeks out person (finds the person the individual was with and was separated from)
- **Overwhelmed or over-stimulated:** Leads individual to exit or a quiet area.
Not noticing alarm clock knock on the door or phone: Nudges and alerts handler to alarm/phone or knocking.

Other tasks may also be trained as well especially if there are multiple conditions. i.e. Seizure alert.

References


Letters to the Editor

Dear (Star Ledger editor),

I wanted to share with your readership how a therapy dog can assist those with Autism Spectrum Disorder. A Mercer County family has recently received their very own therapy dog that has impacted their son’s life in a way that they never could imagine. Children with autism can become very depressed when faced with everyday social interactions that most people find easy. A therapy dog can not only help alleviate the child’s stress, but help the child interact socially with many new friends. Who doesn’t want to run up and pet a cute dog? Not only can a therapy dog help children interact socially, but children can now form an everlasting bond with their new furry friend, which they might not have previously experienced with people. Rutgers University professor Dr. Julie Fagan and student researchers, me included, are conducting a research study in the hopes of determining whether therapy dogs are useful in assisting those with autism. A website has been developed that will allow interested families to sign up for therapy sessions with a therapy dog and handler. These sessions would be completely free, anonymous, and can be stopped at any time if the child/guardian feels uncomfortable. To find out more about this study and to begin therapy dog sessions, log onto: www.ruffloveus.wordpress.com

Sincerely,

Courtney Zinna

Dear Editor, (Asbury Park Press)
My name is Dana DeLuca and I am a student at Rutgers University. Autism Spectrum Disorders have a profound effect on children and their families. Dogs are a respected pet in many households, providing love, affection, and friendship. This bond can be especially meaningful to a child with autism. He or she will not only have a pet but a best friend and a way of socially interacting without feeling judged or uncomfortable.

Does your autistic child show difficulty concentrating or interacting with others? Is he or she withdrawn or depressed? A therapy dog may be able to change your child’s outlook on life in a positive way. I, along with classmates and Dr. Julie Fagan, are interested in the therapeutic effects trained therapy dogs have on autistic children. Children with autism tend to lack self-confidence and social skills. Through a research study, we hope to support that therapy dogs are capable of increasing the child’s confidence and encouraging him or her to be more outgoing and self-assured. Structured weekly therapy sessions with a dog and handler will encourage the child to express him or herself in a proactive way and gain a new, furry friend in the process. These sessions are free of cost and can be stopped at any time. To set up therapy sessions, find out more about the study, handlers, dogs and to become familiar with previous research, please log onto www.ruffloveus.wordpress.com.

Sincerely,
Dana DeLuca

Hi (Home News Tribune)
I am a student at Rutgers University partaking in a research project, and we would like to spread the word to people who may be interested in taking part as volunteers in our study. I was wondering if it would be possible to advertise a blurb along the lines of what I have written below?

Thank you!
Ali Locke

As a student at Rutgers University, I am taking part in a study that explores the benefits of using therapy dogs in the treatment of Autism Spectrum Disorder. Having raised puppies for service dog organizations, I have witnessed the confidence and independence these dogs bring to their handlers, and it never ceases to amaze me. To learn more about this powerful and unique animal/human bond, we would like to extend an invitation to interested families to take part in trial sessions involving therapy dogs as a treatment supplement. Our study involves prospective families of those with a child or adult diagnosed with autism meeting once a week for 5 weeks with a trained handler using either a certified therapy dog or a stuffed dog. Simple surveys are filled out each week by the child/adult’s caretaker to evaluate the session’s effectiveness. All 5 sessions are free of charge, and all surveys are completely anonymous. For more information
about our program and to learn about our volunteer handlers, please visit our website:
ruffloveus.wordpress.com.

Ali Locke