

Four-Hoofed Therapy Machines

“In a world where we are often judged on appearances, where our abilities are overshadowed by our disabilities, the horse does not judge.”

-Therapeutic riding client (Therapeutic Riding 5)

Connor is very alert while he is riding his therapy horse, Tigger. He is able to remember his helper's names, say the shape and color of every cutout he sees hanging on the walls and respond to all requests that are asked of him. He is even able to hold his hands out to his sides like an airplane when he trots and steers his horse through a very difficult maze. The riding session goes great, in fact, a great improvement from last Tuesday's session. However, the moment he dismounts from his horse, Connor becomes a very different child. He acts disoriented, doesn't speak clearly, runs around uncontrollably and cannot concentrate on anything his mother asks of him. He also has forgotten all the names that, a moment ago, he knew so well. He seems very distraught and wants to leave. This is a very common occurrence. Connor is autistic, when he is on a horse, all of his sensory needs are being fulfilled. Conversely, when he dismounts, chaos erupts in his brain. There is a national need of untraditional forms of therapy for people with autism. Hippotherapy and therapeutic riding are the perfect answer for this. Connor is one of the many people suffering from autism who use hippotherapy and therapeutic riding, two forms of therapy that are in national need, to treat their symptoms, La Crosse's Horse Sense for Special Riders and the nationally known North American Riding for the Handicapped Association are programs that helps kids like Connor overcome their disabilities.

Riding horses has a great impact on Autistic peoples sensory integrative disorder. Autism is the third or fourth most common of developmental disabilities, and according to [NARHA Strides Magazine](#), “occurs in approximately 5-15 per 10,000 births” (Brown 1). Children and adults with Autism have a dysfunctional sensory system. This means, “One or more senses are either over- or under-reactive to stimulation” (Hatch-Rasmussen 1). A normal sensory integrative system, according to Texas School for the Blind and Visually Impaired, has “the ability to take in information through senses (touch, movement, smell, taste, vision and hearing), put it together with prior information, memories, and knowledge stored in the brain, and make a meaningful response” (Stephens). People with an over reactive sensory integrative dysfunction do not have the ability to “ignore nonessential sensory information, background noises, or visual information” (Stephens). Conversely, autistic people who are under stimulated must strive and try to collect enough information to make the messages they are receiving make sense. Autistic people are unable to put the information they gain from their senses together because they are either getting too much information or not enough.

People with high end autism (over stimulated) are always aware of things that most people are able to screen-out. They constantly notice things such as a “refrigerator motor, heater fan, distant airplane, etc.” (Stephens). Because they are unable to disregard useless information, their senses are always overloaded. This causes them to seem hyperactive and/or unresponsive. Renee Kendall, an instructor at Horse Sense, says that in an autistic person's world (over stimulated) “Everything is magnified- sound, light, their sight. It would be freaky if you saw everything in such detail.” Kendall also said she has heard of cases where they can see the molecules of air, the different colors in light, and specks of dust floating in the air. All the details are so over exaggerated that it would drive one crazy. However, in an under stimulated world, they can't get all of the sensory information they need and, consequently, are always in search of it. Some autistic people can't even feel if they have been cut or hurt simply because their senses are dull.

There are two main types of horse-assisted therapy, hippotherapy and therapeutic riding. Both strengthen the rider physically and mentally, but approach it in different ways. Hippotherapy, first, does not involve the use of a hippopotamus; ‘hippo’ is actually the Greek word for horse (Central Indiana's Center 3).

(Hippopotamus, therefore, translates to river horse.) So accordingly, hippotherapy is a form of treatment that uses the horse's human-like movements to help a person with developmental and or sensory dysfunctions (Central Indiana's Center 3). In a compilation of articles about hippotherapy, Dismuke-Blakely reveals that, in hippotherapy "The horse influences the client rather than the client controlling the horse." When the horse is influencing the rider, it helps the rider feel the gait of the horse (qtd. in, "Therapeutic Riding" 7). The horse's movement has essentially the same characteristics as a human's stride. It involves "pelvic motion of anterior (forward) and posterior (backward) movement, pelvis rotation and lateral (side to side) pelvis motion" (Hueners). Through these sensations, the rider gains an understanding of how he or she should be moving. So in essence, hippotherapy uses the horse as a machine to work muscles and give sensations to supply the rider with a therapeutic experience. Dismuke-Blakely feels that "Progress made by the client more readily transfers out of therapy and into daily living" and that hippotherapy "Provides a 'non-treatment' setting or atmosphere for the client which is often more comfortable and more easily accepted, particularly with pediatric populations" (qtd. in "Therapeutic Riding" 7). Another reason the horse is a good therapy tool is because it is a "warm mammal that an emotional bond elicits" (Hueners). Riders come to feel extremely safe and secure with their four legged friends.

Therapeutic riding is "a form of therapy" used "to achieve physical, psychological, cognitive, behavioral, and communication goals" (qtd. in "Therapeutic Riding" 3). The rider makes an effort to control the horse (Therapeutic Riding) while at the same time utilizing the hippotherapy aspect of the horse's motions. Riders in a therapeutic riding program tend to work at goals. A goal for a rider can be anything from sitting upright to steering and controlling the horse. "The benefits of horseback riding are as numerous as the types of disabilities and conditions served" (Therapeutic Riding 5). There has been a magnitude of research performed on therapeutic riding; the results were so great that, "The therapeutic qualities of riding are recognized by the American Physical Therapy Association, the American Occupational Therapy Association, and the American Speech-Hearing Association" (Therapeutic Riding 5).

Using therapeutic riding and hippotherapy as a solution to the national need of alternate forms of therapy for people with autism works well for many reasons. First, while on a horse, all of their senses are being stimulated at once, the sensation of the warm horse they are sitting on, the smells, sights, noises, movement, and, yes, even the taste. Riders who are under-stimulated will search for these things, while on a horse they are easy to find because they are all right there. The taste is shown when they sometimes lick the horse and put things (such as pulling out the horse's hair or putting their mouths right on the horse) in their mouth. When all of the strongest information going back to the brain relates to one thing (the horse), it is easier for the brain to get the message of what it should be doing. Renee Kendall said, "Autistic people don't know a 'normal' so if they are able to experience that calmness (when all their senses are working together when they are on a horse) they may strive to make it happen more than their once a week ride" (Kendall). Autistic people are very mobile, and like to be moving around a lot. When they are on a horse, there is nowhere for them to go and so it is easier for them to concentrate. An hour of concentrating on certain skills is really a wonderful thing for autistic people. They can accomplish many things, and never cease to amaze us! Furthermore, the "horses not only assist the riders physically, but they also help them emotionally. They give unconditional love and do not care how the riders look or move. Horses give clients a sense of equality and challenge the rider to function at their best" (Zodtner 2). Beyond that aspect, it's just more fun says Deborah Adams, "We get them out and beyond sitting in a treatment room doing traditional treatments" (qtd. in Florea 2).

Horse Sense for Special Riders (HSSR) is involved with many autism cases like Connor's. Horse Sense for Special Riders is a local program that is fighting the national need of utilizing alternate forms of therapy for Autistic patients to improve their sensory integrative disorder. The program uses the horse as "machine" that mimics the way a human walks. So far, they have been unsuccessful at creating a real machine that can do the same thing a horse can. The HSSR program is therapeutic riding with a twist of hippotherapy.

There are many games and exercises that are done at HSSR to promote healing therapeutic experiences. The riders play many games including, relay races, "Simon Says," "Red Light Green Light," and matching games. They also frequently get to go on trail rides and perform tricks while on their horses, such as "Around the World" and sitting backwards (Joswick 159). The activities they can do while on horses are endless. "Through games and exercises, it is possible to work on a variety of academic skill areas (sequential memory, closure, counting, shapes, etc), as well as body image and self confidence building activities" (Joswick 159). Renee Kendall, an instructor at Horse Sense, says, "Each day is planned with each rider's specific needs and goals in mind" (Kendall). All of the activities are chosen to help the riders physically, mentally, emotionally and any other way possible. Through my own personal experiences at Horse Sense, I have noticed that riding horses gives the disabled a feeling of pride, self-esteem, and self worth. There is no better thrill than sitting on an animal that towers above you, and then controlling it all by yourself! When riders leave HSSR, there is always a smile on each face! Throughout the past sixteen years, HSSR has helped many 'special riders' strengthen themselves mentally and physically and have fun while doing it.

Paula Hueners and Cheryl Cade founded Horse Sense for Special Riders in 1987. Kendall said that Hueners was already working in the school system with disabled children, and, in addition, had a great deal of horse experience when she realized that something was missing from the traditional therapy program and "identified the need for" Horse-Assisted Therapy (Kendall).

Horse Sense for Special Riders is funded through Rider Tuitions, the generosity of donors and, mostly, it is made possible through the "support of our community" (Kendall), and two annual fundraisers (The Chair Affair and Ride-a-Thon). Courtney Beinborn, a fifth grader at Southern Bluffs Elementary School was so touched by what this program has done for her sister, that she has started up a collection called "Cents for Horse Sense" at her school. So far, she has raised over \$200.00! Courtney said that she wanted to help Horse Sense out "partly because I saw their wish list" (they were in need of money to buy items that their allowance didn't cover) "and because it's helped Megan so much." Her sister, Megan, is an autistic rider at Horse Sense, and over the past years has accomplished some amazing feats thanks to her favorite form of therapy, Therapeutic Riding (Beinborn).

North American Riding for the Handicapped Association (NARHA), founded in 1969, promotes horse-assisted therapy in the United States and Canada. There are more than 650 NARHA program centers, "with dozens of new centers initiating new programs and thousands of individuals profiting from these beneficial activities" that serve around 30,000 disabled people (About NARHA). They are also beginning to support and represent recreational riding for people with disabilities such as "equine-assisted psychotherapy, driving, vaulting, competition, and other therapeutic and educational interactions with horses" (About NARHA). Many disabilities are helped through this, but I think that one of the most important is autism. NARHA is doing a wonderful job meeting the national need of using different forms of therapy for autism. Judging by the enthusiasm and rapid growth of these programs, I think this will be a program that sticks around for a long time.

Autism is a very devastating disorder. The people are trapped in a world that more than likely scares them most of the time. Luckily, new Hippotherapy and Therapeutic Riding programs are popping up around the world because more people are starting to realize the national need for these programs. Each time a autistic child is able to be part of, and work well at a riding session, he or she is released from the pressures of their everyday life. Instructors and therapists hope they can somehow realize that they can somewhat control what is happening to them and learn how to screen out useless sensory information. If that isn't able to happen, at least they will be able to have an hour off each week from their over or under stimulated lives.

Works Cited

- About NARHA, Mission Statement. 15 May 2003. NARHA. 28 September 2003.
<<http://NARHA.org/about/default.asp>>.
- Beinborn, Courtney. Personal Interview. 30 September 2003.
- Brown, Hanna May. "Autism and Therapeutic Riding". NARHA Strides Magazine. July 1996. Retrieved 1 October 2003. <http://narha.org/features/tr_autism.pdf>.
- Central Indiana's Center for Hope and Healing. 2001. Children's TherAplay Foundation. 30 September 2003.
<<http://www.childrenstheraplay.org/main.htm>>.
- Dismuke-Blakely, Ruth, MS/CCC-SLP. "Hippotherapy as a Modality for Speech/Language Therapy". Published in the AHA Newsletter. 1995.
- Florea, Linda. "Rescued Horse is Healing Helper; Abby the Horse, Saved From a Life of Abuse will Help Patients with Physical and Speech Therapy". Orlando Sentinel. 14 September 2003, final ed.: K1. Newspaper. ProQuest. Western Wisconsin Technical College, Campus Library. 28 September 2003.
- Hatch-Rasmussen, Cindy, M.A. "Sensory Integration". 1995. 28 October 2003.
<<http://www.autism.org/si.html>>.
- Hueners, Paula. "Re: Autism." E-mail to Mallory Beinborn. 26 September 2003.
- Joswick, Kittredge, McCowan, McParland, Woods, et al. *Aspects and Answers a Manual For Therapeutic Horseback Riding Programs*. Augusta, MI: Cheff Center, 1986.
- Kendall, Renee. Personal Interview. 4 October 2003.
- . Ed. *Therapeutic Riding and Hippotherapy*. Woodruff, WI. Howard Young Hospital Rehab Department. 2 May 2001.
- Stephens, Linda C. MS, OTR/L. "Sensory Integrative Dysfunction in Young Children". 1997. Texas School for the Blind and Visually Impaired. 28 September 2003.
<<http://www.tsbvi.edu/Outreach/seehear/fall97/sensory.htm>>.
- Zodtner, Jessica. Ed. "Hippotherapy: Horses Helping Humans". Pennsylvania: Penn State University, 19 June 2002.
<<http://www.personal.psu.edu/users/j/r/jrz120/Documents/Hippotherapy%20Paper.doc>>.

October 28, 2003