# Providence College **DigitalCommons@Providence**

Social Work Theses Social Work

4-1-2010

## Hippotherapy and Therapeutic Riding: Practicing Social Workers and Undergraduate Social Work Students

Devin Smith Providence College

Follow this and additional works at: http://digitalcommons.providence.edu/socialwrk\_students

Part of the Social Work Commons

Smith, Devin, "Hippotherapy and Therapeutic Riding: Practicing Social Workers and Undergraduate Social Work Students" (2010). Social Work Theses. Paper 59.

http://digitalcommons.providence.edu/socialwrk\_students/59

It is permitted to copy, distribute, display, and perform this work under the following conditions: (1) the original author(s) must be given proper attribution; (2) this work may not be used for commercial purposes; (3) users must make these conditions clearly known for any reuse or distribution of this work.

Hippotherapy and Therapuetic Riding:
Practicing Social Workers and Undergraduate Social Work Students
A control bound on a control of a control to control to a control to a control to a control to the control to
A project based upon an independent investigation, submitted in partial fulfillment of
the requirement for the degree of Bachelor of Arts in Social Work.
Devin Smith
Providence College
Providence Rhode Island
2010

#### **Abstract**

This study attempted to explore, through the use of surveys, what practicing social workers and undergraduate student social workers know about hippotherapy and therapuetic riding. In addition, this study made an effort to examine what the key means of learning participants had when it came to these alternative methods of therapy. The hypothesis that undergraduate social work students would collectively not be familiar with hippotherapy or therapuetic riding and that practicing social workers would have a better knowledge base in this area, was tested through the use of surveys. These surveys were distributed in a handful of undergraduate social work classes and among a convenience sample of social work agencies in the providence area. A total number of 21 surveys were collected and analyzed using the computer program Statistical Package for the Social Sciences (SPSS). Using percentages that were found by creating frequency tables, it was determined that 44.4% of undergraduate social work students had heard of these alternative therapies compared to 41.7% of professional social workers. These findings were not consistent with the predictions. What was consistent with the study's predictions was that practicing social workers and undergraduate social work students indicated their community to be their primary means of learning about hippotherapy and therapuetic riding.

#### Introduction

#### **Problem Formulation**

The area of focus in this study is animal-assisted therapy, which is a goal-directed intervention where animals are used as an integral part of the clinical healthcare treatment process. What will be looked at more specifically will be therapies in which a horse is used; these include hippotherapy and therapeutic riding. Therapeutic riding and hippotherapy are both used as forms of treatment for persons with disabilities; however, it is important to note that they are not synonymous. Hippotherapy is a physical, occupational or speech therapy, which is prescribed by a physician and delivered by a team that includes a licensed, credentialed therapist. It is not a riding lesson where riding form and techniques are taught. Therapeutic riding, on the other hand, is therapuetic horseback riding lessons adapted to individuals with both physical and/or cognitive disabilities. Both of these horseback riding therapies begin with gentle exercises performed on horseback that help increase mobility. These exercises include such things as leaning forward to pet the horse's neck, leaning backwards to pat his rump, and twisting left and right in the saddle while the horse walks. The secret of the success for these therapies, however, is not just the exercises, but rather the rhythmic movement of the horses' walk (Pedigo, 2009).

Intrinsically riding a horse is a beneficial activity for any person, including those whom are challenged with a physical, cognitive and/or emotional disability. It is the

horse's walk, which has a three dimensional swinging motion, which makes horses a living therapy tool for the riders. This is because the horse is able to provide the rider with an experience of motions that are very similar to the motions made when a human person is walking. In addition to this, horseback riding also stimulates muscle, brain and social activity. This is because a rider has to think about what they are doing, and in the case of therapeutic riding in particular even learn commands so they can eventually ride completely independently and socially because they are partaking in an activity that others, including the teachers, enjoy as well.

Both physical and psychosocial benefits have been documented or reported from the use of therapeutic riding and hippotherapy. Some of these benefits include "improving coordination and motor development, while creating a sense of well-being and increasing self-confidence" (Autism Society of America, 2008). It is no secret that physical activity is very important to the overall health of any person. "Physical activity increases a child's ability to cope with stress and anxiety. Self-esteem and building friendships follow closely as another benefit of participation in any activity. Socialization is important to mental health and well-being and can help a child be more self-sufficient and confident" (Bauman, 2005; 6). Therapeutic riding and hippotherapy provide an outlet for children with disabilities, who have a hard time moving around or even just socializing and being around other children in an unstructured or competition focused environment, to release some of their physical energy and feel a sense of accomplishment. For example, a child who cannot walk can sit tall on a horse and ride

through fields. A child who feels different and is unable to do many things without aid can learn to ride a horse independently and even compete.

While there is a substantial amount of research out there supporting the claim that riders do benefit from these therapies in both a physical and psychosocial manner, it is a relatively new therapy and it just recently gaining popularity. The purpose of this study is to explore what professional social workers and undergraduate student social workers know about this alternative method.

#### **Problem Justification**

There are millions of children in the United States with disabilities and numerous programs that have been developed in an attempt to meet the children's needs. For example, children between the ages of 3 to 21 years old, with varying disabilities, make up 13.6 percent of the total enrollment in federally supported programs for the disabled as of 2006-07 (U.S. Department of Education, 2009). In other words, it is based on the total enrollment in public schools, prekindergarten through 12<sup>th</sup> grade. This does not include any of the privately funded programs or the older individuals of this population whom also benefit from both hippotherapy and therapeutic riding. In recent years, therapeutic riding has been gaining popularity and the number of riding centers in North America has been growing along with the number of people who are participating in these centers (Weber, 2005; 1962A-1963A). Because social work is a profession that is dedicated to helping those who are in need of assistance, it is essential that further research be done to determine the effectiveness and cost to benefit ratio of services

provided to these such populations, including those who cannot stand up for themselves due to lack of a voice, confidence, or cognitive ability.

Due to the financial crisis many states, including Rhode Island, are facing today, there is a huge lack of funding for social services. This makes it even more important than ever to be able to provide clients with a list of different and effective therapies being offered so that clients can choose one that they can make work for them financially and personally. This is why people need to be well informed about the different options out there. This is a therapy that can work and part of being a professional social worker is continuously educating oneself on the new and alternative therapies available.

#### Literature Review

## Main Points

"Developmental disabilities (DD) are defined as a diverse group of severe chronic conditions due to mental and/or physical impairments. Individuals with developmental disabilities have difficulty with major life activities including language, mobility, and learning" (Brown & Patel, 2005; 949). Common conditions which fall within the definition of developmental disabilities include autism spectrum disorders, cerebral palsy, mental retardation, and attention deficit hyperactivity disorders. Equine-assisted therapies, such as therapeutic riding and hippotherapy, are just some forms of complementary and alternative treatments that are becoming increasingly utilized by the general public. For many families with children with chronic medical needs and

developmental disabilities, these alternative techniques offer an additional route for treatment other than, or in addition to, traditional medical care.

"Riding a horse can be a gateway to relief of pain, strengthening of muscles, and heightening self-esteem" (Scott, 2005). Whether a horse is used for recreation or therapy, riding a horse has both physical and psychological benefits for the rider. When clients engage in activities on the horse which are enjoyable, they respond enthusiastically to the experience which takes place in a natural, comfortable setting. "The warmth of the animal, the reassuring touch of side-walkers, and soft words of encouragement from an instructor or therapist create a separate world having its own rules and standards of normalcy. In this world, the challenged find new hope and raised expectations" (Scott, 2005).

When an individual takes part in something that is fun and enjoyable, they tend to feel good about themselves. This is because endorphins are released within the body sending a feel good message to the brain. Also when a person accomplishes something that was challenging they often feel a sense of achievement, empowerment and even control over one's own body. "Having control of environment – in this case, the horse – promotes feelings of power, both internal and external" (Scott, 2005), which in many cases are feelings that are foreign for people with disabilities. These positive feelings including self worth and empowerment often lead clients to be more open and partake in social interaction. The American Occupational Therapy Association agrees after a study was done which compared language use and social interaction in children with autism receiving two forms of occupational therapy: standard techniques and

incorporating animals. The "results suggested that the children demonstrated significantly greater use of language and significantly greater social interaction in sessions incorporating animals when compared to sessions using exclusively standard occupational therapy techniques" (Fortney, Sams, & Willenbring, 2006; 271).

Deficits in attention, communication, imitation, and play skills reduce opportunities for children with disabilities, particularly autism, to learn from natural interactive experiences that occur throughout the day. There are many different approaches to help improve these skills, many of which have demonstrated positive outcomes, however, not all children benefit equally from any one approach. Therapeutic riding is the latest in a growing trend of programs which provide therapy via horseback riding and related activities. Although this is a fairly new form of therapy, "many organizations, concerned with the health and activities of the physically and mentally challenged, recognize the therapeutic qualities of riding. These include the American Physical Therapy Association, the American Occupational Therapy Association, Easter Seals, Muscular Dystrophy Association, Multiple Sclerosis Society, Special Olympics, Spina Bifida Association, and United Cerebral Palsy" (Scott, 2005). The director of a newly found riding program called Helping Hands and Hooves, agrees and states that, "recent studies examining programs like Helping Hands and Hooves have been very encouraging. There are all kinds of studies that have shown these programs work not only for physical therapy but for (the students') emotional and social therapy as well. It's amazing to see the progress in some of our students" (Sistrunk, 2007).

One such study investigated the perceived impact of a therapeutic riding program on children with mild to moderate physical and mental disabilities.

Participants of the riding program along with at least one parent were interviewed to gather insight into their views and opinions on the program. "The themes that emerged from these interviews included enjoyment, the child/animal connection, social relationships with volunteers, perceived physical benefits and the social and mental benefits of the program" (Elliott, Funderburk, & Holland, 2008; 21). For example,

Brendan, a 39 year old man with autism loves spending time on the farm and riding. His sister explains that "He loves it, his self confidence increased as well as his flexibility."

She also loves that the experience "has provided him the common ground she had been seeking for her brother" (Sistrunk, 2007).

There are also studies on the effects of horseback therapy on the mental well-being of persons with spinal cord injury. One example being a study reported on in the Archives of Physical Medicine and Rehabilitation. In this study two groups were made, one of which partook in horseback riding and the other group sat on a stool with a rocking seat. Each session lasted 25 minutes twice a week for four weeks and what was found was that the horseback riding "had a positive short-term effect on the subjects' mental well-being" (Baumberger, Hegemann, Kakebeeke, & Lechner, 2007; 1244). This shows the importance of the animal-patient bond that occurs. There is additional research which supports the claim that people who have pets are healthier, mentally and physically. Because of this the practice of taking animals to visit in nursing homes and hospitals has become common place in the modern world. Therapeutic riding

"allows the client to bond with the animal. Social interaction with instructors, therapists, volunteers, other clients, and animals is such an important part of the therapy" (Scott, 2005).

A different study by Anita Scialli (Ph. D.) is based on more of a liner approach took a convenience sample of 64 parents of children with varying disabilities and had them assess their child's improvement in 67 child behaviors resulting from child participation in horseback riding, using a new Horseback Riding Survey. In this survey "behaviors are organized in five Likert subscales, Self-Care, Cognitive School Learning, Physical-Motor, Psychological/Emotional, and Social Communication/Interaction" (Scialli, 2002). The results showed that "behaviors with the greatest improvement are range of motion, mobility, balance, posture, self-esteem, self-confidence, and self-image" also, "the length of time, in months, in horseback riding participation in positively associated with behavioral improvement across all subscales" (Scialli, 2002).

While this study looks at people with varying disabilities as a whole, it is also interesting to see what this type of therapy does for people with specific disabilities.

For example one study, by Bass, Duchowny and Llabre, which evaluated the effects of therapeutic horseback riding on social functioning in children with autism, showed that these children, when exposed to therapeutic horseback riding, "exhibited greater sensory seeking, sensory sensitivity, social motivation, and less inattention, distractibility, and sedentary behaviors. The results provide evidence that therapeutic horseback riding may be a viable therapeutic option in treating children with autism spectrum disorders" (Bass, Duchowny & Llabre, 2009; 1267). The positive outcomes of

therapeutic riding found for children with Autism are centered on the main trouble areas these children face. As noted in the study by Scialli (2002), the benefits children tend to have are based on the problem areas they face. For example, "Mentally retarded children usually have more disabilities that autistic children do. They show significantly greater improvements when compared with autistic children in range of motion and mobility" (Scialli, 2002). In addition to this it is noted that "physically disabled children show significantly greater improvement in self-image than autistic children do" (Scialli, 2002). This could be because a physically disabled person is able to appreciate the fact that on a horse they are in control and can move around in a way they could not on their own. In addition, "when mounted on a big horse, a rider can look down at his world, instead of up, as those in a wheelchair must do" (Scott, 2005). As the founder of a therapeutic riding program puts it, "Exercising the spirit is as important as exercising the body, and the horse provides an enormous boost for people with physical, mental, and emotional handicaps. The confidence and self-esteem that comes from being able to control a powerful, 1,000 pound animal is just immeasurable" (Gatty, 2006).

### **Opposing points**

"Whether a therapeutic practice is 'Eastern' or 'Western,' is unconventional or mainstream, or involves mind—body techniques or molecular genetics, it is largely irrelevant except for historical purposes and cultural interest" (Liptak, 2005). What is relevant is the effectiveness of the therapeutic practice. Take, for example, conductive education. This, much like equine-assisted therapies, focuses on the whole person. It

does this by recognizing physical, social, intellectual, and emotional aspects of learning. Its focus is on functional skills such as dressing, feeding, and walking, it also utilizes the use of a social group which helps motivate individuals to complete tasks. Conductive education recognizes the fact that a damaged brain requires a commitment of significant time and repetition in order to learn new pathways for movement, speech, and mental abilities, which are simultaneously developed. "This is founded on the theory that the child with a motor disability develops and learns in the same way as healthy children do. However, what the healthy child learns through assimilation, the child with cerebral palsy must be taught as a skill" (Becker, 2009). Although it is relatively unknown in the United States, this practice is a mainstream form of therapy used to teach children with motor disabilities throughout Europe, the United Kingdom, Australia, and Canada. Because conductive education can be implemented in many different ways, it is hard to make generalizations from any single program. "Initial results of uncontrolled trials from Hungary were encouraging, although children had been selected for participation in conductive education by their potential for developmental independence and, therefore, were higher functioning with highly motivated families" (Rosenbaum, 2003; S90). Several uncontrolled trials in other studies also showed promising findings, however, results from various controlled groups were mixed. Hippotherapy, on the other hand, "has shown positive results in both controlled and uncontrolled trials" (Liptak, 2005; 5).

"The optimal practice of medicine includes integrating individual clinical expertise with the best available clinical evidence from systematic research" (Liptak,

2005). The care of patients should be based, to the greatest extent possible, on evidence. This means that evidence should exist. For example, "1) the therapy recommended is effective in reducing morbidity, 2) the benefits outweigh the risks, 3) the cost of the treatment is reasonable compared to its expected benefits, and 4) the recommended therapy is practical, acceptable, and feasible" (Liptak, 2005). There are many therapies out there, however, "most are based on personal observations and their usefulness has not been clearly established by well controlled studies" (Patel, 2005; 983). This means that further research is needed for such therapies, of which some include neurodevelopment treatment, body-weight support treadmill training, conductive education, patterning, hyperbaric oxygen therapy and constraint-induced therapy.

Hyperbaric oxygen therapy (HBOT) is breathing 100% oxygen while under increased atmospheric pressure. Conventionally this treatment is used for decompression sickness; severe carbon monoxide poisoning; certain kinds of wounds, injuries, and skin infections; delayed radiation injury; and certain bone or brain infections. Claims about alternative uses of HBOT "that HBOT helps patients with AIDS, arthritis, sports injuries, multiple sclerosis, autism, stroke, cerebral palsy, senility, cirrhosis, Lyme disease, and gastrointestinal ulcers" (American Cancer Association, 2009) Available scientific evidence does not support these claims which is why this treatment cannot be recommended without further investigation.

Patterning is another example of a therapy which lacks sound evidence of its effectiveness. "The patterning treatment involves the patient moving repeatedly in the

manner of the current stage" (Novella, 1996; 6). In other words patients are to mimic the movement of crawling or walking and if they are unable to do this alone they are passively moved by a team of adults. "The purpose of this exercise is to impose the proper "pattern" onto the central nervous system. In the full treatment program, the exercises are combined with sensory stimulation, breathing exercises which are designed to increase oxygen flow to the brain, and a program of restriction and facilitation designed to promote hemispheric dominance" (Novella, 1996; 6). This is because there is evidence, which has accumulated over the years, states that early intervention, interdisciplinary team approach and family focused intervention strategies must all be taken together in order to receive the best possible outcomes from any therapy.

Therapies that do have sound evidence in support of its use are traditional physiotherapy and occupational therapy. "Traditional physiotherapy used in children with cerebral palsy has been shown to improve muscle strength, local muscular endurance, and overall joint range of motion" (Patel, 2005; 979) and traditional occupational therapy "has been shown to be effective in improving and maintaining adaptive fine motor activities" (Patel, 2005; 980). Equine-assisted therapy does have evidence to support its effectiveness in these same areas, however unanswered questions remain. "For instance, it is not clear which subgroups of children with Cerebral Palsy would benefit the most, what 'dose' or frequency of intervention is optimal, what are considered medical therapies to be covered by health insurance, and how costs compare with benefits" (Liptak, 2005). This is why further research as well as

public education is needed in this area. There are continually new treatments becoming available to assist individuals suffering from developmental disabilities. Each of these treatments should be provided as an option for clients to consider when looking for treatments.

## Hypothesis

Due to the relatively new nature of hippotherapy and therapeutic riding, this study hypothesized that undergraduate social work students will collectively not be familiar with these intervention techniques and their benefits. The prediction was that the students surveyed were only likely to have heard of these alternative therapies if they had come across them in their lives outside of school. As for the professional social workers, this study hypothesized that they would have a knowledge base regarding these alternative therapies and their benefits; however their knowledge base would depend upon the relevance these programs had to their field of practice.

## Methodology

Sample

This was a relational study that consisted of a convenience sample comprised of social work undergraduate students attending a medium-sized, private, catholic college, and a medium-sized public college, as well as practicing social workers in or around the Providence area. The sample population was chosen, using both the convenience method and the snowball sampling method, to demonstrate the knowledge practicing social workers and student social workers have regarding alternative therapies involving

a horse. Besides year of graduation and number of years in the practice no other demographic information was gathered. Each participant was given an informed consent form which stated that individuals were not required to participate, and, if they did participate, they could withdraw from the study at anytime without penalty. All individuals participated fully.

## Data Gathering

A comparative study was performed through the distribution of questionnaires to both groups of participants. The two questionnaires were developed as tools of measurement for use in this study (See Appendix 1 & 2). The first instrument (see appendix 1) was designed to measure social work student's knowledge of hippotherapy and therapeutic riding. It consists of six questions and the first two questions focus on demographic information including year of graduation and the population students wish to work with upon graduation. The next three focus on what the participant knows about the two therapies and where they had acquired the information. The final question is found on the back of the questionnaire following a brief educational description of what the two therapies are and asks if the participant would like to know more and if so what. The purpose of this question is to educate the participants about these alternative therapies as well as gain an understanding of whether or not this is a type of therapy people are interested in learning more about. The second instrument (see appendix 2) was designed to measure practicing social workers knowledge of hippotherapy and therapeutic riding. It consisted of seven questions. The first three questions focus on demographic information to get an idea how long the participant has been in the field and with which population they work. The remaining four questions are the same as the questions found in the first instrument.

Data Analysis

Once participants fill out and return these questionnaires, the collected data is analyzed by means of statistical testing. This is done through the utilization of the computer program Statistical Package for the Social Sciences (SPSS). SPSS was used to create frequency tables in order to illustrate how much knowledge people have regarding hippotherapy and therapuetic riding. Using percentages that were found using the frequencies, student's knowledge of these alternative therapies were compared to professional social worker's knowledge of the same thing.

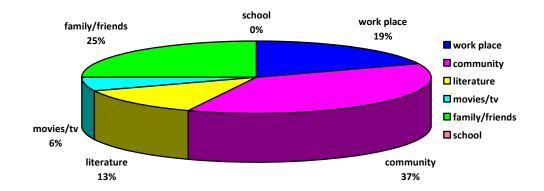
## **Findings**

This research was guided by the lack of knowledge about hippotherapy and therapuetic riding. They are both relatively new alternative therapies that have just recently begun to gain a bit of popularity (Weber, 2005; 1962A-1963A). These therapies do have research to support that they have positive effects on the riders both physically and psychologically. (Scialli, 2002). This study attempted to explore what practicing social workers know about this intervention technique. In addition, social work undergraduate students attending a medium-sized, private, catholic college and a medium-sized public college were also surveyed to inquire about their knowledge in this area. Twenty-one surveys in total were returned. There were twelve surveys returned that were filled out by practicing social workers and the remaining nine that were returned had been completed by undergraduate social work students.

The first research question concerned the relationship between the population a practicing social worker works with and their knowledge of hippotherapy and therapuetic riding. What was found was that the social workers working with populations who could benefit from this program in general did have a consistent knowledge base regarding these alternative therapies through work, trainings, literature and community. Social workers who work with populations who would not typically be candidates for these therapies, on average did not have as great an understanding of the therapies. These findings are consistent with the study's hypothesis.

The second research question compared the knowledge base of practicing social workers with undergraduate social work students. What was found was that 44.4% of undergraduate social work students had heard of these alternative therapies compared to 41.7% of professional social workers. These findings do not support the study's hypothesis. The most popular places people indicated they were getting their information about hippotherapy and therapuetic riding from included community at 37% followed by friends and family at 25%. It was found that the majority of social work students had not heard about these therapies unless otherwise introduced to them through personal experience; family, friends, or in the community. No one indicated school to be where they had heard about these alternative therapies.

Means of Learning about Hippotherapy and Therapuetic Riding



The third and final research question asked whether or not social workers wanted to learn more about hippotherapy and therapuetic riding. The over-whelming majority of practicing social workers said that they would not be interested in learning more about these alternative therapies. However, the majority of students were interested in learning more.

Would you be interested in learning more about hippotherapy or therapeutic riding?

nals		Frequency	Percent
Professionals	Yes	2	16.7
rofe	<mark>No</mark>	<mark>10</mark>	<mark>83.3</mark>
Ц	Total	12	100.0

Would you be interested in learning more about these therapies?

ıts		Frequency	Percent
Students	<mark>Yes</mark>	<mark>5</mark>	<mark>55.6</mark>
Ş	No	4	44.4
	Total	9	100.0

This is not entirely consistent with this study's predictions, but due to the convenience sampling of agencies for practicing social workers to survey it makes sense.

The majority of professional social workers surveyed would have no use for these therapies because of the population in which they serve.

#### Discussion

The purpose of this study was to explore what practicing social workers and undergraduate student social workers at a medium-size, private college and public college know about hippotherapy and therapuetic riding. In addition, this study attempted to examine what the key means of learning participants had when it came to these alternative methods of therapy.

Hippotherapy and therapeutic riding are goal-directed interventions where horses are used as an integral part of the clinical healthcare treatment process. While there is a substantial amount of research out there supporting the claim that riders do benefit from these therapies in both a physical and psychosocial manner, they are relatively new therapies and just recently gaining popularity. (Scialli, 2002) (Bass, Duchowny & Llabre, 2009; 1267). In the sample of undergraduate student social workers and the practicing social workers, no significant difference was found between those who already had an understanding of the therapies and those who did not and their desire to learn more about them. This is probably due to the demanding schedules both student social workers and professional social workers have, especially in the world today with all its economic troubles and cutbacks.

It was hypothesized that professional social workers would have a knowledge base of these specific programs depending on how relative the therapies were to the population with which they worked. Agencies are not going to introduce alternative means of therapies to workers if those therapies are not geared toward helping the population they are helping. The same type of idea was found to be true for students. Undergraduate social work students are taught a general understanding of social work and it is not until they go for their masters that they specialize in a particular area of interest. This explains why students had not heard of this form of therapy unless they had come across it in their everyday lives, which is in support of this study's hypothesis. However, with the rise in diagnosis of autism spectrum disorder in children and the gaining popularity of these therapies I would have expected that more students would have at least heard of the therapies.

In interpreting the present results, readers should consider several limitations to this study. First, only nine third-year undergraduate students from two colleges participated. It may be difficult to generalize these results to all undergraduate social work students. In future studies, a larger sample size should be used to better determine the knowledge base this demographic has on these therapies. In addition, future studies should survey more agencies which work with people with disabilities because the practicing social workers in those agencies are the ones who ought to be well acquainted with therapies aimed at helping this population.

Even with these limitations, however, this study does provide us with some implications for the social work profession. It was found that the majority of people had heard about these therapies in their everyday lives, which is a reminder that disability is prevalent in today's society. Over half of my sample population, that is 63% indicated that they had somehow been affected by these alternative therapies, whether it be a

family member, a friend or just someone in their community. Ethical considerations dictate that social workers conform to principles of best practice while continually searching for ways to improve the quality of life of persons who sometimes have overwhelming obstacles to overcome. In adherence to the ethical principles inherent in responsible social work, practitioners should remain current on, and critically examine, emerging knowledge relevant to the field. Further investigation into how much people know about these therapies and their interest in and or need for them is required in order to acquire support and funding, such as grants, to start up programs and information seminars for schools, agencies and communities expressing interest.

## Appendix 1

## Dear Potential Participant:

I am a Social Work major at Providence College, completing my thesis on the general knowledge surrounding hippo therapy and its benefits in the field of social work. Through this study I hope to gain a better understanding of how much knowledge social workers in a BSW program and professionals in the field may have about this topic area.

This survey is completely anonymous and should only take up a few minutes of your time. There are no known risks associated with the participation in this survey and because of its voluntary nature there is no penalty if you do not wish to participate.

Upon your completion please return the survey directly to me or the individual who handed it to you. Thank you for your time!

Sincerely,
Devin Smith
Undergraduate Social Work Major
dsmith26@friars.providence.edu

1.	What is your year of graduation?
2.	What type of population and age group do you plan to work with?
3.	Are you familiar with the terms hippotherapy or therapeutic riding? YES NC a. If yes, what are they used for?
	b. If no, what would be your best guess as to why they would be used?
4.	Where have you heard this term mentioned? (please check all the apply)
	a. Work place
	b. Community
	c. Literature
	d. Ads
	e. Movies or TV shows
	f. Family or Friends
	g. School
	h. Training, Workshop or Conference
	i. Other(please describe)
5.	Has anyone you know ever partaken in this type of therapy? YES NO

Please answer the following questions to the best of your abilities.

After completing these questions please turn sheet over and answer one final question on the back. Thank you for your time and participation.

Hippotherapy and therapeutic riding are goal-directed interventions where horses are used as an integral part of the clinical healthcare treatment process. Intrinsically riding a horse is a beneficial activity for any person, including those whom are challenged with a physical, cognitive and/or emotional disability. It is the horse's walk, which has a three dimensional swinging motion that makes horses a living therapy tool for the riders. This is because the horse is able to provide the rider with an experience of motions that are very similar to the motions made when a human person is walking. In addition to this, horseback riding also stimulates muscle, brain and social activity.

While therapeutic riding and hippotherapy are both interventions where horses are used, it is important to note that they are not synonymous. Hippotherapy is a physical, occupational or speech therapy, which is prescribed by a physician and delivered by a team that includes a licensed, credentialed therapist. It is not a riding lesson where riding form and techniques are taught. Therapeutic riding, on the other hand, is therapuetic horseback riding lessons adapted to individuals with both physical and/or cognitive disabilities.

6.	Would you be interested in learning more about these therapies? YES			
	a.	If yes, what would you like to know more about?		

## Appendix 2

## Dear Potential Participant:

I am a Social Work major at Providence College, completing my thesis on the general knowledge surrounding hippo therapy and its benefits in the field of social work. Through this study I hope to gain a better understanding of how much knowledge social workers in a BSW program and professionals in the field may have about this topic area.

This survey is completely anonymous and should only take up a few minutes of your time. There are no known risks associated with the participation in this survey and because of its voluntary nature there is no penalty if you do not wish to participate.

Upon your completion please return the survey directly to me or the individual who handed it to you. Thank you for your time!

Sincerely,
Devin Smith
Undergraduate Social Work Major
dsmith26@friars.providence.edu

Please answer the following questions to the best of your abilities.				
1.	What is your job title?			
2.	What population and age group do you work with?			
3.	How long have you been in the Social Work field?			
4.	Are you familiar with the terms hippotherapy or therapeutic riding? YES  a. If yes, what are they used for?			
	b. If no, what would be your best guess as to why they would be used?			
5.	Where have you heard this term mentioned? (please check all the apply)  a. Work place  b. Community  c. Literature  d. Ads  e. Movies or TV shows  f. Family or Friends  g. School  h. Training, Workshop or Conference  i. Other (please describe)			
6.	Has your agency ever recommended either hippotherapy or therapeutic riding for a client? YES NO			
	a. If not, would you? YES NO DOES NOT APPLY			

After completing these questions please turn sheet over and answer one final question on the back. Thank you for your time and participation.

Hippotherapy and therapeutic riding are goal-directed interventions where horses are used as an integral part of the clinical healthcare treatment process. Intrinsically riding a horse is a beneficial activity for any person, including those whom are challenged with a physical, cognitive and/or emotional disability. It is the horse's walk, which has a three dimensional swinging motion that makes horses a living therapy tool for the riders. This is because the horse is able to provide the rider with an experience of motions that are very similar to the motions made when a human person is walking. In addition to this, horseback riding also stimulates muscle, brain and social activity.

While therapeutic riding and hippotherapy are both interventions where horses are used, it is important to note that they are not synonymous. Hippotherapy is a physical, occupational or speech therapy, which is prescribed by a physician and delivered by a team that includes a licensed, credentialed therapist. It is not a riding lesson where riding form and techniques are taught. Therapeutic riding, on the other hand, is therapuetic horseback riding lessons adapted to individuals with both physical and/or cognitive disabilities.

7.	Would you be interested in learning more about these therapies? YES			
	a.	If yes, what would you like to know more about?		

## References

- American Cancer Association , Inc. (2009). Hyperbaric oxygen therapy.

  Retrieved from

  http://www.cancer.org/docroot/ETO/content/ETO\_5\_3x\_hyperbaric\_o
  xygen\_ therapy.asp?sitearea=ETO
- Autism Society of America. (2008). Autism: learning approachescomplementary approaches. Retrieved from http://www.autismsociety.org/site/PageServer?pagename=life\_treat\_approaches
- Bass, M.M., Duchowny, C.A., & Llabre, M.M. (2009). The Effect of therapeutic horseback riding on social functioning in children with autism. *Journal of autism and developmental disorders*, 39(9), 1261-1267.
- Baumberger, M., Hegemann, D, Kakebeeke, T.H., & Lechner, H.E. (2007). The Effect of hippotherapy on spasticity one a mental well-being of persons with spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 88(10), 1241-1248.
- Bauman, J. (2005). Benefits and barriers to fitness for children with disabilities. Retrieved from http://www.ncpad.org/yourwrites/fact\_sheet.php?sheet=205&view=a II
- Becker, K. (2010). How does Conductive education work? Retrieved from http://www.center-for-independence.org/how\_does\_conductive\_education\_work.htm
- Brown, K.A., & Patel, D.R. (2005). Complementary and alternative medicine in developmental disabilities. *Indian Journal of Pediatrics*, 72(11), 949-952.
- Elliott, S., Funderburk, J.A., & Holland, J.M. (2008). The Impact of the "stirrup some fun" therapeutic horseback riding program: a qualitative investigation. *American Journal of Recreation Therapy*, 7(2), 19-28.
- Fortney, E.V., Sams, M.J., & Willenbring, S. (2006). Occupational therapy incorporating animals for children with autism: a pilot investigation. *American Journal of Occupational Therapy*, 60(3), 268-274.

- Gatty, C.M. (2006). Psychological impact of therapeutic riding: a pilot study. North American Riding for the Handicapped Association., Retrieved from http://www.narha.org/PDFfiles/Psychosocial\_Impact.pdf
- Liptak, G.S. (2005). Complementary and alternative therapies for cerebral palsy. *CPNewsletter*, Retrieved from http://www.stronghealth.com/services/childrens/PatientCare/devdisabilities/CPNewsletter/Alternative\_Therapies.pd
- Novella, S. (1996). Psychomotor patterning. *The Connecticut Skeptic*, 1(4),6. Retrieved from http://www.srmhp.org/archives/patterning.html
- Patel, D. R. (2005). Therapeutic interventions in cerebral palsy. *The Indian Journal of Pediatrics*. 72(11), 979-983.
- Pedigo, J. (2009). Both mentally and physically challenged children and adults can benefit from riding therapy. *Horse & Rider*, Retrieved from http://www.equisearch.com/horses\_riding\_training/sports/therapeutic/therapeutic071399
- Rosenbaum, P. (2003). Controversial treatment of spasticity: exploring alternative therapies for motor function in children with cerebral palsy. *Journal of Child Neurology*, 18(1) S89-S94., Retrieved from http://jcn.sagepub.com/cgi/reprint/18/1 suppl/S89
- Scialli, A.L. (2002). Parent perceptions of the effectiveness of therapeutic horseback riding for children with varying disabilities. Retrieved from http://74.125.45.132/search?q=cache:mkPzj0Cc\_qlJ:www.lynnwebs.com/dissertation/DISSERTATION%2520DEFENSE4-18-02.ppt+Parent+perceptions+of+the+effectiveness+of+therapeutic+hor sebackriding+for+children+with+varying+disabilities&cd
- Scott, N. (2005). Special needs, special horses: a guide to the benefits of therapeutic riding. Denton, Texas: University of North Texas Press.
- Sistrunk, B. (2007). Helping hands and hooves: love inspired creation of therapeutic riding program .*Sentinel*, Retrieved from http://www.helpinghandsandhooves.org/Sentinel%201-4-071.pdf.
- U.S. Department of Education, National Center for Education Statistics. (2009). *Digest of education statistics*. Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=64