
*Introduction.* One of the most important tasks of a therapist practicing hippotherapy is to induce "a movement dialogue" between the horse and the client. It takes some time until the client adapts to the movement of the horse. The appropriate movement pattern of the client is built over time. As soon as this happens, we can say that the therapy has a neuro-physiological effect.

*Aim and method.* Our study describes how the increasing experience of the rider changes the cyclic pressure distribution between the rider and the horse. For measurements, the pressure measuring pad (Pliance system, Novel) was used directly on the horse's back. We measured a group of five healthy subjects without earlier riding experience (in a healthy subject we assume normal motor abilities, without the bias of any health deficiency) at the first and sixth sessions of hippotherapy at the walk. In each session the physiotherapist assisted from behind and corrected the posture of each subject.

*Results.* The cycle of pressure distribution in hippotherapy has similar characteristics as the pressures occurring during athletic horse riding. In the first measurement the range of total power is between 568 and 406 N, the maximal pressure varies from 1.31 to 1.84 N m$^{-2}$ and minimum from 0.38 to 0.44 N m$^{-2}$. Six hippotherapy sessions later, the results of the second measurement were in the range of total power between 639 and 453 N, the maximal pressure varied from 1.59 to 2.1 N m$^{-2}$ and minimum from 0.41 to 0.49 N m$^{-2}$.

*Discussion.* The effect of six sessions of training was an increase in forces on the horse's back, which we assume is due to the increased contact between
horse and rider as the excitement and stress of the new situation and movement activity recedes.

Correspondence to Janura, Palacký University Olomouc, Department of Biomechanics and Engineering Cybernetics, Křižkovského 8, 771 47, Olomouc, Czech Republic. miroslav.janura@upol.cz

Fureix, Carole; Pagès, Magali; Bon, Richard; Lassalle, Jean-Michel; Kuntz, Philippe; Gonzalez, Georges (2009).

Abstract: Handling is a crucial component of the human-horse relationship. Here, we report data from an experiment conducted to assess and compare the effect of two training methods. Two groups of six Welsh mares were trained during four sessions of 50 min, one handled with traditional exercises (halter leading, grooming/brushing, lifting feet, lunging and pseudo-saddling (using only girth and saddle pad) and the second group with natural horsemanship exercises (desensitization, yielding to body pressure, lunging and free-lunging). Emotional reactivity (ER) and the human-horse relationship (HHR) were assessed both prior to and following handling. A social isolation test, a neophobia test and a bridge test were used to assess ER. HHR was assessed through test of spontaneous approach to, and forced approach by, an unknown human.

Horses’ ER decreased after both types of handling as indicated by decreases in the occurrence of whinnying during stressful situations. Head movement (jerk/shake) was the most sensitive variable to handling type. In the spontaneous approach tests, horses in the traditional handling group showed higher latencies to approach a motionless person after handling than did the natural horsemanship group. Our study suggests that natural horsemanship exercises could be more efficient than traditional exercises for improving horses’ HHR. (PsycINFO Database Record (c) 2009 APA, all rights reserved) (journal abstract)

Contact Georges, UMR 6552—Ethologie, Evolution, Ecologie, Université Rennes I, 263 avenue du General Leclerc, CS 74205, 35042 Cedex Rennes, France; former email: georges.gonzalez_at_toulouse.inra.fr

Goodwin, Deborah; McGreevy, Paul; Waran, Natalie; McLean, Andrew (2009).

Abstract: The long-held belief that human dominance and equine submission are key to successful training and that the horse must be taught to 'respect' the trainer infers that force is often used during training. Many horses respond by trialling unwelcome evasions, resistances and flight responses, which readily become established. When unable to cope with problem behaviours, some handlers in the past might have been encouraged to use harsh methods or devices while others may have called in a so-called 'good horseman' or 'horse whisperer' to remEDIATE the horse. Frequently, the approaches such practitioners offer could not be applied by the horse's owner or trainer because of their lack of
understanding or inability to apply the techniques. Often it seemed that these 'horse-people' had magical ways with horses (e.g., they only had to whisper to them) that achieved impressive results although they had little motivation to divulge their techniques.

As we begin to appreciate how to communicate with horses sensitively and consistently, misunderstandings and misinterpretations by horse and trainer should become less common. Recent studies have begun to reveal what comprises the simplest, most humane and most effective mechanisms in horse training and these advances are being matched by greater sharing of knowledge among practitioners. Indeed, various practitioners of what is referred to here as 'natural horsemanship' now use techniques similar to the 'whisperers' of old, but they are more open about their methods. Reputable horse trainers using natural horsemanship approaches are talented observers of horse behaviour and respond consistently and swiftly to the horse's subtle cues during training. For example, in the roundpen these trainers apply an aversive stimulus to prompt a flight response and then, when the horse slows down, moves toward them, or offers space-reducing affiliative signals, the trainer immediately modifies his/her agonistic signals, thus negatively reinforcing the desired response.

Learning theory and equine ethology, the fundamentals of the emerging discipline of equitation science, can be used to explain almost all the behaviour modification that goes on in these contexts and in conventional horsemanship. By measuring and evaluating what works and what does not, equitation science has the potential to have a unifying effect on traditional practices and developing branches of equitation.

Correspondence to Goodwin, School of Psychology, University of Southampton, Southampton, SO17 1BJ, UK; d.goodwin@soton.ac.uk

Grubits Freire, Heloisa Bruna.


Correspondence to Grubits Freire, Department of Psychology, Dom Bosco Catholic University, Campo Grande, Brazil.

Abstract: Therapeutic Riding involves people suffering with many kinds of disorders or deficiencies by stimulating self-esteem, self-confidence, developing space orientation, balance, laterality, communication; besides offering physical gains it also favours sensibility, corporeal scheme perception, and socialisation. The horse in the therapeutic context can be experienced as a symbol of primitive illustrations and with this symbolic dimension represents the domain of adverse forces revealing dreams and the horseman's desires. The representation of the horse is linked to imaginative activity and along the History many of them became famous and immortalized in the mythology and artistic manifestations representing characteristics or man’s aspirations.

**Abstract:** Hippotherapy employs locomotion impulses that are emitted from the back of a horse while the horse is walking. These impulses stimulate the rider's postural reflex mechanisms, resulting in training of balance and coordination. The aim of the present study was to assess the changes in magnitude and distribution of the contact pressure between the rider and the horse during a series of hippotherapy lessons. The monitored group, consisting of four healthy women (mean age 22.75 years, mean body weight 59.75 kg, mean height 167.25 cm) without any previous horse riding experience, received five 20 minute-lessons lessons in a three-week period. Hippotherapy was given on a 15-year-old thoroughbred mare. An elastic pad (Novel Pliance System, 30 Hz, 224 sensors) was used for pressure magnitude evaluation. The maximum pressure value was increased (p<.05) in the event of a second measurement (5th lesson). The pressure exerted on the rider upon contact of the rear limbs was higher than upon contact of the front limbs (p<.01). The size of the center of pressure (COP) deviations in the anteroposterior direction reduced (p<.05) with the number of lessons received. With the growing experience of the participant, an increase in pressure occurred on contact of her body and the horse's back as well as in the stability of the COP movement.

Correspondence to Janura, Palacký University Olomouc, Department of Biomechanics and Engineering Cybernetics, Křižkovského 8, 771 47, Olomouc, Czech Republic. miroslav.janura at upol.cz


**Abstract:** Animals that live in stable social groups need to gather information on their own relative position in the group's social hierarchy, by either directly threatening or by challenging others, or indirectly and in a less perilous manner, by observing interactions among others. Indirect inference of dominance relationships has previously been reported from primates, rats, birds, and fish. Here, we show that domestic horses, *Equus caballus*, are similarly capable of social cognition. Taking advantage of a specific "following behavior" that horses show towards humans in a riding arena, we investigated whether bystander horses adjust their response to an experimenter according to the observed interaction and their own dominance relationship with the horse whose reaction to the experimenter they had observed before. Horses copied the "following behavior" towards an experimenter after watching a dominant horse following but did not follow after observing a subordinate horse or a horse from another social group doing so. The "following behavior," which horses show towards an experimenter, therefore appears to be affected by the demonstrator's behavior and social status relative to the observer.

This article examines the recently completed equid ethogram and shows how analogues of social interactions between horses may occur in various human-horse interactions. It discusses how some specific horse-horse interactions have a corresponding horse-human interaction - some of which may be directly beneficial for the horse while others may be unusual or even abnormal. It also shows how correspondent behaviours sometimes become inappropriate because of their duration, consistency or context.

One analogue is unlikely to hold true for all horse-human contexts, so when applying any model from horse-horse interactions to human-horse interactions, the limitations of the model may eclipse the intended outcome of the intervention. These limitations are especially likely when the horse is being ridden. Such analyses may help to determine the validity of extrapolating intra-specific interactions to the inter-specific setting, as is advocated by some popular horse-training methods, and highlight the subsequent limitations where humans play the role of the 'alpha mare' or leader in horse handling and training. This examination provides a constructive framework for further informed debate and empirical investigation of the critical features of successful intra-specific interactions.

Correspondence to McGreevy, Faculty of Veterinary Science, University of Sydney, NSW 2006, Australia; paulm@vetsci.usyd.edu.au


Abstract: In order to determine the effect of therapeutic riding programs on the mental state of horses, the behaviour of 24 horses subjected to varying parameters was observed. The goal was to find out if and to what extent the environmental surroundings, the riding mode and also the rider-clients’ psychological disturbances affect horse behaviour. An ethogram was designed to include the horse’s focus of attention, its sense of well-being and its state of nervous tension. During riding sessions inside a riding hall, the horses paid more attention to the rider-clients than to the environment and they were more composed as compared to outdoor sessions. During controlled riding sessions the horses were more relaxed and less dissatisfied than in uncontrolled sessions. When the clients rode without guidance, the horses focused more on the riders. Furthermore, the study showed that horses were able to differentiate between people according to their particular psychological illness. The results of the study provide riding therapists with point of references and a basic orientation, which can be used to develop therapies designed to achieve the clients’ therapeutic goals, while at the same time ensuring the horse’s well-being.
Meyer, H.


In German; abstract also in English.

Abstract: The following discussion reflects upon ethical aspects of the physical strain and the psychic stress of the horse by its use under a rider. The discussion proceeds from the conviction that human beings and horses are not "made" for one another, so as religious interpretations impute ideologically and with the purpose, to ease conscience of the human beings. The discussion proceeds further more from the conviction, that the seizure initiated and carried out by the homo sapiens is the basis for the use of the horse. The seizure implicates among other things, to carry out the human aims against the dispositions of the horse. That is done by hippagogic skill, but also by force and with the effect of physical strain and psychic stress of the horse as a sentient animal. The in principle avoidable strain and stress of the sentient animal - avoidable by the possible renunciation of riding a horse - is an ethic fact, that needs legitimation in the view of ethically perceiving and reflecting persons. In that legitimation the sort and the extent of strain and stress has to be considered, further more the duration and the happening but once or repeatedly and also the purpose, which shall be achieved by the action of strain and stress done by the human being. The well balanced ethical judgment goes beyond affective impressions provoked in a certain situation. The judgment needs diverse identifications and processes of weighing out. Nevertheless it depends on the ethical attitudes of the individual and it is not the same for everybody. Therefore the rider can't escape the responsibility for his ethical judgment and for his ethical action, regardless how fare he is conscious of that responsibility and how fare he acts in correspondence with that responsibility. The ethics of responsibility here are advocated emphatically against ethics based on sentiments.

Correspondence to Meyer, Am Wiselsbach 22, 52146 Wurselen, Germany.

Nicosia, Dora M. S. li Destri; Bacci, Maria Laura (2009).


In Italian; abstract also in English.

THE FOLLOWING IS THE CABI ABSTRACT. IF YOU DESIRE THE AUTHORS’ ABSTRACT, I CAN SUPPLY.

Abstract: The present work investigated some aspects related with the horse’s involvement animal-assisted therapies and activities (AAT/AAA). These evidences seem to be related with the role of the veterinary practitioner in the therapeutic riding team. Therapeutic riding, in agreement with the most recent psychomotor theories, is a global therapeutic method that considers the whole person as a subject (rather than the object) of the rehabilitation. The human-horse relationship, placed in a specific structured setting, is the central point of the therapeutic intervention. The horse therefore becomes an active component
of the therapeutic programme, on conditions that are recognize, respect and exploit the species-specific and individual features. Several scientific studies have identified the relationship as a potential source of stress for the horse involved in equine AAT/AAA. Based on the present knowledge (on equine biomechanical and mechanisms of action of equestrian activities in the treatment of neuromotor pathologies), it is possible to give some indication about morphological attitudes of animals. Nevertheless, it is more difficult to give some indication about behavioural attitudes. The most important suitability feature is the availability in establishing a positive relationship with humans, showing a correct reactivity and responsiveness to environmental stimuli. In this sense, some factors may be considered to be limiting: management factors (with particular reference to the factors affecting social and biomechanical equine characteristics) and a better knowledge of the learning mechanism, communication theory and application of different kinds of horse language. In conclusion, the outcomes reported offer a clue about the necessity of further research, focused on a definition of the best animal management factors on the basis of their effects, evaluated through behavioural and physiological parameters (yet to be deepened and transmitted to the technicians). Considering what has been highlighted up to this point, it is outlined how the veterinary practitioner is a key figure in AAT/AAA to ensure the preservation of animal welfare. The veterinarian will be able to strengthen the effectiveness of the therapeutic intervention through his/her specific skills, ensuring complete access to the rehabilitative and educational potentialities not available through the mere instrumental use of animals.

Correspondence to Nicosia, Dipartimento di Morfofisiologia Veterinaria e Produzioni Animali (DIMORFIPA), Facoltà di Medicina Veterinaria, Università degli Studi di Bologna, Via Zamboni 33, 40126 Bologna, Italy.

Horsemanship & the Horse: Theses


Abstract: Always Wanted A Riding Experience (AWARE) is a therapeutic equestrian riding center in San Marcos, Texas. The horses living and working at AWARE are integral to the program's success, yet only the instructors and a few volunteers know these amazing animals very well, on either a general species level or an individual basis. Since only a few people have the opportunity to interact and socialize with the AWARE horses often enough to know them, this thesis offers insight into their lives and personalities. What follows is a brief overview of horses in general: their history, their bodies and senses, their places in society, and their unique position in therapy. Readers will also "meet" the instructors who keep AWARE the successful therapeutic center it has become. Finally, an in-depth summary of each horse at AWARE is provided, including each horse's past, life at AWARE, personality, physical characteristics, and
photos. This information is intended for the clients, relatives and friends of clients, instructors, and volunteers of AWARE. It is a spotlight on animals who impact so many lives but are still unknown to people who see and interrelate with them.

Summary available from the website http://ecommons.txstate.edu/cgi/viewcontent.cgi?article=1090&context=honorprog (accessed 29 January 2010).
Equine Assisted Interventions

Equine Assisted Interventions: Articles from Juried Publications

Aschenbach, Lynn (2009).

Abstract: Hippotherapy is currently used by therapists to treat different kinds of disorders, it even becomes more and more popular for speech and language interventions. In spite of this fact there are only a few articles and compositions in German literature. The following article presents selected parts of a concept integrating speech therapeutic principles and strategies into hippotherapeutic interventions with the approach to combine the positive effects of both methods. The main objective is to find an effective treatment for children with speech and language disabilities that also considers individual resources and deficiencies in every part of their development.


Abstract: Therapeutic riding involves people suffering with many kinds of disorders or deficiencies by stimulating self-esteem, self-confidence, developing space orientation, balance, laterality, communication; besides offering physical gains it also favours sensibility, corporeal scheme perception, and socialisation. The horse in the therapeutic context can be experienced as a symbol of primitive illustrations and with this symbolic dimension represents the domain of adverse forces revealing dreams and the horseman's desires. The representation of the horse is linked to imaginative activity and along the History many of them became famous and immortalized in the mythology and artistic manifestations representing characteristics or man's aspirations.

Correspondence to Grubits Freire, Department of Psychology, Dom Bosco Catholic University, Campo Grande, Brazil.

Hecht, Susanne (2009).

Abstract: Therapeutic Riding can be an interesting movement oriented activity for adults with learning difficulties. In this context interviews with adult
persons with mental retardation were made. The main objective was the active inclusion of the target group into the process of research in order to not only to talk about, but also with them. The following article describes the planning and realisation of the user interviews. Furthermore the results are described as well as perspectives for further research.

CORRECTED ENTRY: was under “de Queiroz Marcelino.”


Text in Portuguese; abstract also in English.

Abstract: This research was focused on studying children that have a neuropsychomotor development delay due to prematurity, and have being attended by an interdisciplinary therapy called therapeutic riding, a therapeutic approach that has the horse and its environment as primordial resources. The study was carried through two children from Caxangá Golf & Country Club Nucleus of Equine therapy, their respective families and professionals, who accompany these children in the therapeutic process. The techniques used during the research were the children's sessions observation; interviews with parents and therapists from the institution and other “caretakers.” According to this study, the straight vinculum between child and animal is very important for the children and their family's involvement to the therapeutic process. Also the child, the team and other practitioners interaction in the socialization process is important, as well as the stimulation adequacy of the equine therapy environment by the interdisciplinary team and the family. There have been a child's social-affective improvement aspect that reflects on the family relations.

Correspondence to Marcelino, Universidade Federal de Pernambuco, 2/n Cidade Universitária, Rua Prof. Moraes Rego, s/n. Cidade Universitária, 50750-901, Recife, PE, Brazil, julifons at yahoo.com.br


Abstract: Green Chimneys is a School and Residential Treatment Facility for Students with socio-emotional disorder, located on the North-East Coast of the United States. Within the past 60 years it has earned an international reputation for its innovative interventions. Animal assisted activities and therapy are fundamental core concepts of treatment and interdisciplinary cooperation is a successful key component. Co-treatment has been especially successful within the hippotherapy treatment. Occupational Therapists and Speech-Language Pathologists work hand in hand, using the multi-sensory qualities of the horse
and its unique movement pattern to achieve the students goals in the natural context of the horse barn.


Abstract: Many children with congenital heart disease do not benefit from the experience of regular physical exercise due to overprotective parents and uncertainty on the part of physicians and trainers about the childrens’ physical capacity. This can result in deficits in motor development, body awareness, and coordination, as well as in anxiety, fearfulness about movement, lack of confidence, poor social skills and a restricted range of activities (Sticker 2004; Bjarnason-Wehrens et al. 2007). Therapeutic riding, especially psycho-educational riding/vaulting, but also hippotherapy and riding as a sport for people with disabilities, affect these childrens’ development most positively.


Abstract: Therapeutic riding as a special education intervention has, to date, been offered primarily by free-lance practitioners or by organisations such as schools, psychiatric institutions or centres that support children and young people. To date, it seems that the opportunity of equine assisted early years education has not been recognised and realised. Yet, there is scope for good and simple financing within the area of equine assisted early years (special) education. This paper will sketch current possibilities of putting this model into action and financing it. These were explored via expert interviews at seven centers for early learning in North-Rhine-Westphalia, as part of my masters’ thesis.


Abstract: The goals of treatment for fibromyalgia (FM) are similar to the goals known of therapeutic riding. Methods: Six FM patients (5f, 1m, 45,8 years) participated in 20 therapeutic riding sessions (maximum duration: 30 minutes) during 10 weeks. Before, during and after the intervention the following diagnostic instruments were used: Fibromyalgia Impact Questionnaire (FIQ-G), Short Form-36 (SF-36), state of health questionnaire (Basler Befindlichkeitsskala, BBS), function of joint movement (Bewegungsfunktionstest, BFT) and quality and quantity of drug usage. Results: We found significant changes in pre- / post
comparison of: FIQ-G (p< 0,05), SF-36 (p< 0,05), BBS (p< 0,05) und BFT (p< 0,05).

Weiss, Deborah (2009).  

Abstract (From the chapter) In the 70s, horses began to take the role of "co-therapist" and the horses' special talents are now being written about. New methods are developing all over North America and Europe "Equine Assisted Therapy" has become a viable subgroup of Animal Assisted Therapy. Horses provide a powerful paradox. They are large, strong, fast animals that can quickly become dangerous and they are also vulnerable prey animals. Being carried on the back of a 1,200 pound vulnerable giant can certainly provide access to core personal issues. Partnering Theraplay with Irwin's horse training methods creates a powerful therapeutic tool. I developed the program "Horse Friends" to encompass these two modalities and it has since expanded to include activities from a number of equine trainers. With the encouragement of Dr. Evangeline Munns, who was director of Play Therapy Services at Blue Hills Child and Family Centre in Aurora at the time, I contacted the Ontario Trillium Foundation to see if they would be interested in funding such a venture. They were—and two years later the provincial funding agency had supported 35 children to participate in this pilot project. They continue to support our work and research to this day. The original program still exists under the name "Horse Play" and it is run by Horses At Heart Equestrian Adventures Inc. in conjunction with a number of regional child and family health service agencies.

NOTE: NEED PERMISSION TO USE THIS ABSTRACT -- PsycINFO Database Record (c) 2009 APA, all rights reserved.

Equine Assisted Interventions:  
Articles from Non-Juried Publications

Exceptional Parent

Apel, Laura (2007).  

Abstract: Horses have always been appreciated by humans for their strength, beauty and gentle demeanor. Children, especially, have gravitated toward them and many experience their first horseback riding lesson at a young age. However, horses can play a very different role in the lives of children and adults with disabilities. Through both hippotherapy and therapeutic riding, organizations all over the country are bringing the experience of horse-related therapies to those in need and changing the lives of individuals with special needed and their families.
Exceptional Parent highlights some of the therapeutic riding programs in the USA. The information was supplied by The Right Step Therapy Services LLC (www.rightsteptherapy.com) and The Children's TheraPlay Foundation, Inc.

Hyatt, Sarah (2009).


Abstract: The benefits of therapeutic riding and hippotherapy can be numerous and long lasting for children and adults with special needs. The connection that a child or adult with disabilities can make with a horse is evident in therapeutic riding programs all over the country. In this whimsical essay, Sarah Hyatt, who is the Equestrian Center Director at Heartland Ranch and Arena in Ringgold, GA, offers readers an interesting point of view—the perspective of a Heartland Ranch horse who participates in helping riders with disabilities make a connection with their world, develop physical strength and social skills, and just have fun. Heartland's Development Director, Bobbie Standefer, says Sarah, a lifelong "horse person," was the perfect choice to pen this heartening article since, as Bobbie comments, "I know for a fact Sarah thinks like a horse."

Correspondence to Hyatt, Heartland Ranch LLC, 3201 W 93rd St, Wakarusa KS 66546, USA; heartland66546_at_aol.com; www.heartlandranch.org

Equine Assisted Interventions: Theses


The influence of therapeutic riding and hippotherapy on children with spastic cerebral palsy—parents' perceptions. 2006. 91 pages.

Unpublished thesis (M.S.)—Texas Woman's University, 2006.

Abstract: Parent interviews were used to determine influences of therapeutic riding (TR) and hippotherapy on children with spastic cerebral palsy. Research on the influence of TR and hippotherapy will serve to inform parents of their choices in therapeutic modalities in regard to children with spastic cerebral palsy. Data were collected in the form of qualitative one-on-one interviews. Two parents with children participating in TR and three parents with children participating in hippotherapy were interviewed. Constant comparison method was used to derive meaning units from the first interview transcript and matched against subsequent interviews. Four themes emerged: (a) physical improvements, (b) developing independence, (c) overcoming fears, and (d) differences in barriers and motivations for TR and hippotherapy. Parents perceived that both TR and hippotherapy positively affected their children's psychological and physical aspects of wellbeing. The one apparent difference between the barriers for TR vs. hippotherapy was the cost associated with hippotherapy.

Abstract also in Masters Abstracts International. 45/03 2007 Jun:1481
Publication Number: AAT 1440555; ProQuest document ID: 1292462471


Abstract: Objective. The purpose of this study was to gather accurate information on how equine assisted therapy facilities throughout the United States obtain reimbursement for services. Literature review and interviews of facilities have suggested that these practitioners receive reimbursement from varied sources, including personal funds, outside agencies and insurance companies. This research serves as a reflection of current national practice in the field of equine assisted therapy, and it is hoped that the data gathered will be useful for practitioners in identifying ways to advance these services.

Methods. Researchers developed an online survey to gather data on current practice including the type of services offered, the populations served and the types of reimbursement received for the services provided. Participants were selected nationwide through a website listing and contacted via e-mail with links to the online survey. Participants were asked to complete the online survey within seventeen days. Following the collection period, data was compiled to reflect the nature of reimbursement for specific equine assisted therapies across the country.

Results. The results indicated that in some cases, private insurance companies are reimbursing facilities, while in most states funding comes from private sources.

Conclusion. A majority of equine assisted therapies nationwide are being paid for by consumers’ personal funds, by grants, and by outside agencies. Very few facilities reported private insurance companies providing reimbursement. Further research is recommended to facilitate a greater understanding of current practice and to continue building the body of evidence supporting reimbursement for equine assisted therapy.

Available from the web site www.utica.edu

Development, implementation, and evaluation of a safety training program for therapeutic horseback riding volunteers. 2006. 30 p.; 28 cm.
Abstract: Therapeutic riding is an intervention that uses the recreational pleasures of horseback riding to promote various social, cognitive, emotional, and physical benefits for individual with chronic diseases and disabilities. In addition to an experienced instructor, these riding sessions require volunteers to maintain the client’s safety. The purpose of the project was to develop, implement, and evaluate a safety-training program for volunteers participating in a therapeutic riding program. The program was evaluated using a pretest/posttest, participant verbalizations, and a follow-up survey. The instruction involved 16 volunteers at the Manawale’a Riding Center in Waimanalo, Hawaii. Quantitative and qualitative data supported safety-training education for therapeutic horseback riding volunteers.

Smart, Petal (2005).
Methodological considerations for prospective undergraduate researchers of equine assisted therapy. 2005. 78 p.; 30 cm.

Riding and thriving: promoting health and change through equine assisted therapy. 2005. v, 35 leaves: col. illus.; 29 cm.
Unpublished project (Ed.S.)—James Madison University, 2005.

Swensen, Samantha (2005).
The culture of Rocking Horse Ranch: an ethnographic study of a therapeutic riding program. 2005. 110 leaves: Illus. (some col.); 28 cm.
Presented to the faculty of the Department of Occupational Therapy.

Riedel, Alyson (2009).
Abstract: This thesis addresses the need for a standard of care for horses working in the fields of equine-assisted therapy and educational programming. It begins with a discussion of the horse and its co-evolution with humans and the current roles horses play in a variety of equine-assisted programs. A literature review reveals current debates on what is considered adequate care for horses. In order to obtain statistical information on actual practice, a quantitative survey instrument was designed and distributed to three fields of professionals interacting with horses: horse owners, doctors of veterinary medicine, and equine-assisted programs. Distribution was based mainly in the United States.
The results indicate that professionals working with horses agree on several aspects of basic horse care. From this information recommendations are made for a standard of care for horses working in these programs. Additionally, several suggestions are given for the long range implementation of this standard.

Publication Number: AAT 1462072.
ISBN: 9781109009101
ProQuest document ID: 1674964201


Abstract: Animal-assisted therapy (AAT) and equine-assisted therapy/learning (EAT/L) are innovative techniques in counselling, psychotherapy, mental health, coaching, and other personal growth interventions. Although this field has experienced tremendous growth in the United States, very little is known about its Canadian equivalent. The purpose of this study was therefore to examine the current state of AAT and EAT/L in Canada, by conducting a national, bilingual (English and French) survey of helping professionals who involve animals in their practices. A total of 131 questionnaires were retained for analysis. The results of this study suggest that the field is very diverse, with a multitude of confusing terms and expressions, varying levels of education and training, and disagreement on how different practices are defined, resulting in a fragmented, confusing and inconsistent appearance. Recommendations for the evolution of the field and suggestions for future research are provided.

Available at the website: http://hdl.handle.net/1828/1457 (http://dspace.library.vic.ca:8443/handle/1828/12) (accessed 29 January 2010).


Abstract: In a recent study, the U.S. Centers for Disease Control and Prevention suggests that six out of every 1,000 children have been diagnosed with a developmental disorder, such as autism (Bradley, 2007). The use of a single approach to treat children with autism and other developmental disabilities is inadequate (Sherer & Schreibman, 2005). Considering this finding, the aim of the current researcher is two-fold. First, a critical review of the current status of pet therapy and equine assisted therapy is presented and the strengths and weaknesses of the extant literature are discussed. Second, the researcher sought to examine the potential treatment effects of equine assisted therapy by examining the individual case studies of three children. It was proposed that involvement in an equine assisted therapy program would produce decreased
negative behaviors, increased adaptive skills, and enhanced academic performance of the participants in the home and school environments. Parents and teachers of six students (three experimental, three control) with a developmental disability were asked to fill out measures of behavior, adaptive skills, academic ability, and client satisfaction at two points over the course of ten weeks. Due to the small sample size, general conclusions about the overall efficacy of equine assisted therapy programs could not be made. With regard to the current literature, the results showed that two children in the equine assisted therapy group showed improvements on measures of social skills across parent and teacher measures. Children in the comparison group demonstrated gains on one measure of social skills according to teacher report. Parents reported no significant improvements on measures of social skills for children in the comparison condition. Despite the lack of empirical evidence to support or refute the use of equine assisted therapy for children with developmental disabilities as an outgrowth of this project, the implications for the domain of school psychology are that this project presents a useful model for the school psychologist by which equine assisted therapy and other alternative therapies can be evaluated.


- Publication Number: AAT 3294025
- ISBN: 9780549382980
- ProQuest document ID: 1453194031

### Ventrudo, Theresa (2006).

**Parent's perspective: Is horseback riding beneficial to children with disabilities?** 2006. 113 p. ; illus. ; 28 cm.

**Unpublished thesis (M.S.O.T.)—Touro College, 2006.**

**Abstract:** Benefits children with disabilities receive from participating in horseback riding program from their parent's perspective were examined. Parents of children with various diagnoses and levels of impairment enrolled in a therapeutic riding program or hippotherapy program were surveyed. A questionnaire comprising of both closed and open-ended questions was designed by the researcher and sent to the homes of the parents. 60 families participated in the study. Comparison of the family's responses revealed that parents regard horseback riding as a positive experience for their children with disabilities to participate in. They note improvements in their children's physical, cognitive, social, and emotional skills. The questionnaire was highly useful and provided the opportunity to examine the impact of horseback riding from both an individual and occupational perspective.

Abstract also in *Masters Abstracts International*, 45(1) 2007 Feb:312-312.

- Publication Number: AAT 1438645
- ISBN: 9780542916328
- ProQuest document 1246537131
Hippotherapy

Hippotherapy: Articles from Juried Publications


Abstract: Objective: To investigate the effect of a program of horseback riding therapy on the angular kinematics of the ankle and knee in children with Down's syndrome.

Method: The study group was composed of three male children with a mean age of 7.3 years (± 2.08). The analyses were done individually and the post-test was performed after thirteen treatment sessions. The duration of each horseback riding therapy session was fifty minutes, and the interval between sessions was seven days. The gait analysis was carried out using the Peak Motus™ system.

Results: Statistical differences in ankle joint were observed for all subjects. For knee joint, differences were found at different moments of the cycle, without presenting any observable trend.

Conclusion: Horseback riding therapy produced positive changes in the angular behavior of the ankle and little effect on the knee.

Correspondence to Copetti, Centro de Educação Física e Desportos, Universidade Federal de Santa Maria, Fxa. De Camobi, Km 09, Cidade Universitária, CEP 97105-900, Santa Maria, RS, Brazil; copettif at gmail.com


Abstract: Although there is now some evidence for specific effects of hippotherapy on people with cerebral palsy, these studies fail to provide a comprehensive picture of the effects of hippotherapy. This was the first qualitative study to explore the hippotherapy experience of people with cerebral palsy from a user perspective. The effects of hippotherapy and their context were of particular interest. Seventeen users aged from 4 to 63, with or without their parents, participated in focus groups or individual interviews in six centres in Britain and in Germany. The main effects of hippotherapy, as identified by users and parents, are normalisation of muscle tone, improved trunk control, improved walking ability, carryover effects of hippotherapy to activities of daily living, and increased self-efficacy, confidence, and self-esteem. This study provided unique and new insights into the context in which hippotherapy happens, as well as its effects on
impairment, activity, participation, and quality of life in people with cerebral palsy. The study's findings are integrated with the existing literature on motor learning and pedagogy to try to explain the complex effects of hippotherapy as reported by users and parents. A conceptual framework that illustrates these effects and their interactions is introduced.

Correspondence to Debuse, School of Health Community and Education Studies, Rm C010, Coach Lane Campus West, Northumbria University, Newcastle upon Tyne, NE7 7XA, UK. dorthee.debuse@northumbria.ac.uk.


... Four single-subject case studies were undertaken to explore the potential functional outcomes of using hippotherapy as a therapy treatment tool, with investigation into the impact of a hippotherapy-based therapy treatment program on handwriting.

The children made positive gains towards goals relating to function for school activities and to participation in the community, as well as demonstrating improvements in underlying performance of balance, postural control and fine motor control for handwriting.

The results of these case studies demonstrate positive functional outcomes for the participants, and indicate that hippotherapy may be an effective treatment activity for developing underlying skills for handwriting, as well as for supporting increased participation in the community.

Correspondence to Liddiard, Therapy Focus, 5/1140 Albany Hwy, Bentley, WA 6102, Australia; jane.liddiard@therapyfocus.org.au.


Abstract: The purpose of this study was to examine the immediate effects of a hippotherapy session on temporal and spatial gait parameters in children with spastic cerebral palsy (CP).

Methods: Subjects comprised 9 children with a diagnosis of CP, 6 girls and 3 boys, 7 to 18 years of age. Data for temporal and spatial gait parameters were collected immediately before and after a hippotherapy session.

Results: No statistically significant differences (p< 0.05) were noted in the postride temporal and spatial gait parameter values when compared with the preride values.

Conclusions: This study provides baseline data for future research and useful clinical information for physical therapists using hippotherapy as a treatment modality for children with spastic CP.
Correspondence to McGee, Department of Physical Therapy, University of Central Arkansas, Conway, AR 72035-0001, USA. mmcgee@uca.edu

McGibbon Nancy H.; Benda, William; Duncan, Burris R.; Silkwood-Sherer, Debbie (2009).

Abstract: Objectives: To investigate the immediate effects of 10 minutes of hippotherapy, compared with 10 minutes of barrel-sitting, on symmetry of adductor muscle activity during walking in children with cerebral palsy (CP) (phase I). To investigate the long-term effects of 12 weeks of hippotherapy on adductor activity, gross motor function, and self-concept (phase II).
Design: Pretest/posttest randomized controlled trial plus clinical follow-up.
Setting: Outpatient therapy center.
Participants: Children with spastic CP (phase I: n=47; phase II: n=6).
Interventions: Phase I: 10 minutes of hippotherapy or 10 minutes of barrel-sitting; phase II: 12 weekly hippotherapy sessions.
Results: Phase I: hippotherapy significantly improved adductor muscle asymmetry (P<.001; d=1.32). Effects of barrel-sitting were not significant (P>.05; d=.10). Phase II: after 12 weeks of hippotherapy, testing in several functional domains showed improvements over baseline that were sustained for 12 weeks posttreatment.
Conclusions: Hippotherapy can improve adductor muscle symmetry during walking and can also improve other functional motor skills.
Correspondence to McGibbon, PO Box 647, Green Valley AZ 85622, USA; nhmcgibbon@gmail.com.

Sager, Anja; Drache, Marion; Schaar, Bettina; Pöhlau, Dieter (2008).
Hippotherapy for multiple sclerosis - pilot study assessing effects on balance, spasticity, ability to walk and quality of life. Multiple Sclerosis. 2008 Sep; 14(1) Supplement 1: S151-S151.
Abstract: Background: Hippotherapy is a physiotherapeutic neurophysiological treatment that uses the movement of horses. The oscillating impulses of the three-dimensional equine movement are communicated to the patient sitting upright on the horse’s back.
Objective: To assess the effects of hippotherapy on multiple sclerosis (MS) patients with respect to balance, spasticity, ability to walk and quality of life.
Methods: Single-group, A-B-A experiment with initial, interim and final testing. During the three-month treatment, 16 MS patients came twice weekly to individual thirty-minute hippotherapy sessions. Tests including the Berg Balance Scale (BBS), the modified Ashworth Scale (MAS), the 10-meter walking test and the SF-36 health status questionnaire. The test group comprised 13 female and
Results: Before and after test scores differed significantly or very significantly: difference in BBS scores (p=0.002). Decrease in the subjects’ lower extremity spasticity (p<0.001). Difference in walking speed, measured before and a half hour after hippotherapy (p=0.009). Results of the SF-36 questionnaire showed significant differences in general perception of health status (p=0.003), physical ability to function (p<0.001), physical role function (p=0.007), bodily pain (p=0.046), vitality (p<0.001), social functioning (p=0.009) and physical well-being (p=0.004).

Conclusions: Hippotherapy has positive effects on MS patients with respect to balance, spasticity, ability to walk and quality of life. A long-term study with a larger number of subjects and accompanying control group should be conducted; this is already in conceptual phase.

Correspondence to Sager or Schaar, Institute of Rehabilitation and Sport for the Disabled, German Sport University Cologne, Cologne (Köln), Germany


Abstract: Background: Hippotherapy has become an important therapeutic option in patients suffering from motoric dysfunction. The physiologic basis of this approach is the three-dimensional transmission of the horse’s motion onto the patient’s body. These motion stimuli are believed to exert positive effects on the patient’s postural control systems.

Aim: To test the hypothesis that hippotherapy has both positive short- and long-term effects on gait and posture control of persons suffering from motoric disabilities.

Methods: Twenty-two children and adolescents aged 9.69 +/- 4.01 years (range: 9.69 ± 4.01 years) with motoric dysfunctions were included in a prospective matched control study. In each participant, gait and posture control were investigated on four different occasions (O1 - O4) using the Interactive balance system (IBS; Tetrax Inc., Ramat Gan, Israel) and the portable gait analysis system RehaWatch (Hasomed, Magdeburg, Germany). The dates of gait and posture analysis were defined as follows: O1: immediately prior to first therapeutic riding session (TRS); O2: immediately after first TRS; O3: after the last day of an eight weeks period of daily TRS; O4: seven weeks later after a TRS free interval.

Results: The following parameters were slightly improved (adjusted significance level of p= 0.003) after eight weeks of therapeutic riding: (O1 vs. O3): (1) walking distance (p = 0.009, \( \eta^2 = 0.339 \)); (2) pace frequency (p = 0.007, \( \eta^2 = 0.358 \)); (3) walking speed (p = 0.006, \( \eta^2 = 0.367 \)), and (4) time of attachment (p = 0.007, \( \eta^2 = 0.360 \)). The only short-term effect observed was a significant decrease of the attachment phase (p = 0.002, \( \eta^2 = 0.387 \)). Interestingly, gait
symmetry remained unaffected. Posturography (adjusted significance level of p<0.01) at O1 versus O2 (short-term) showed a significant decrease of the performance of both the visual-nigrostriatal subsystem (p<0.001) and the somatosensory subsystem (p = 0.001). At O1 versus O3 (long-term), the following parameters were sharply decreased: (1) postural stability (p = 0.011), and (2) somatosensory performance (p = 0.011).

Conclusions: In the individuals investigated, an eight weeks series of therapeutic riding did not improve posture control and had only a small positive effect on gait performance. The reasons for these rather disappointing results could have been the low number of therapeutic riding sessions (0.5 sessions per week), and the relatively short duration (30 min) of each session. It remains to be seen, whether a higher density and longer duration of therapeutic riding sessions yields better results.

Correspondence to Schwesig, Martin-Luther-Universität Halle-Wittenberg, Abteilung Sportwissenschaft, 06099 Halle/Saale. Germany; rene.schwesig at sport.uni-halle.de

Hippotherapy: Theses

Breese-Wilkins, Laura (2006).

Therapeutic vaulting: what are the effects of therapeutic vaulting on upper limb coordination of children with developmental disabilities? 2006. vi, 44 leaves; 29 cm.


Encheff, Jenna L.

Kinematic gait analysis of children with neurological impairments pre and post hippotherapy intervention. 2008. Electronic text in PDF format (xiii, 161 p.).


Abstract: Background and purpose. The purpose of this study was to investigate the effects of a ten-week hippotherapy (HPOT) program on several temporal-spatial variables of gait as well as range of motion (ROM) at the trunk, pelvis, and hip joints in all three planes of motion over the stance phase of the gait cycle. Hippotherapy has been used as a tool by therapists for several decades to address functional limitations in patients with neuromusculoskeletal diagnoses, however, more objective measurements and data supporting HPOT as a therapeutic tool to help improve ambulation are needed.

Subjects. Eleven children (6 males, 5 females; 7.9 ± 2.7 years) with neurological disorders resulting in impairments in ambulation and gross motor control in standing participated in this study.

Methods. All subjects were receiving weekly traditional land-based physical or occupational therapy and elected to participate in HPOT for ten weekly sessions instead. Three-dimensional (3-D) gait analyses were performed with each child prior to the first session of HPOT. Data on cadence, velocity, stride length and step width were collected along with data regarding trunk, pelvis, and hip joint ROM. Subjects then participated in ten weekly sessions of
HPOT and a second gait analysis was completed for each subject after completion of the sessions. A series of paired t-tests was performed on the temporal-spatial and kinematic data for each segment. Families of pairwise comparisons were used with the family-wise error rate set at 0.25.

**Results.** Although no statistically significant differences were found from pre to post test for temporal-spatial data, trends in improved cadence, velocity, and stride length were seen. Significant improvements in sagittal plane pelvic and hip joint positions at initial contact (IC) and toe off (TO) phases of the gait cycle were found, and each demonstrated large effect sizes as determined via Cohen's d. No differences in trunk ROM were determined, although trends towards more normal values were observed in all three planes at IC and TO.

**Discussion and conclusion.** The group's improvement in sagittal plane pelvic and hip joint positioning and trends for improvement in trunk position, cadence, velocity, and stride length during ambulation may indicate increased postural control during the stance phase of gait after ten sessions of HPOT.

Abstract also in *Dissertation Abstracts International: Section B: The Sciences and Engineering*. 70(2) 2009 Aug.
Publication Number: AAT 3348334
ISBN: 9781109037364
ProQuest document ID: 1688653631

Forsterling, Trista M (2007).
The effects of hippotherapy on a child with developmental delay. 2007. xiii, 104 leaves : illus., forms ; 29 cm.

Lisenby, Jenna; Spooner, Angela D. (2001).
The effects of therapeutic tricycle riding on gait and endurance for three children with spastic diplegic cerebral palsy. 2001. 137 leaves ; 28 cm.
Unpublished thesis—Pacific University, Forest Grove, Oregon.

Lott, Jennifer (2006).
A mechanized horseback riding simulator as an aid to physical therapy. ©2006. Electronic text in PDF format (91 p.).

**Abstract:** Equine-assisted therapy is a nontraditional form of physical therapy that involves riding horses as a form of rehabilitation. Limited access to these riding programs justifies a need to develop a horseback riding simulator capable of simulating the gaits, bend, and collection of the horse. Research involving the development of horseback riding simulators is limited, but the available research does show promising results in the ability to aid in physical therapy. A two-dimensional model and simulation was developed using MATLAB. Using the results from the simulation, a horseback riding simulator was designed,
fabricated and tested. The physical simulator was capable of simulating a walk, trot, and canter, bend to the left or right, and collection of the gait. The purpose of the testing of the horseback riding simulator was to evaluate the similarity of the physical simulator to the gaits of the data collected from a real horse. The results from the testing are compared with the kinematic data from the MATLAB simulation. The biomechanical effect on the hip flexion angle is also evaluated when the system simulates bend and collection of the horse's back. The motion data was collected using a Vicon system. Four cameras were set up to collect the data from the five reflective markers that were placed on the rider. The kinematic results of the horseback riding simulator were compared to the computer simulation using the measurements of the inclination of the ellipse, the major axis of the ellipse, and the frequency. The results from the hip flexion angles shows that the test that simulated bend only results in a significant increase in the hip flexion angle compared to the tests without bend. Simulated collection does not change the hip flexion angles of the rider. Future work on the horseback riding simulator is needed in order to increase the safety so that a person with a disability would be able to use it as part of their physical therapy. Adaptive programming of the system is also necessary to make the horseback riding simulator more similar to that of a real horse.

Maiden, Samantha (2008). 
Comparison of the effectiveness of the use of hippotherapy versus the physioball as a treatment tool for children with multiple disabilities. 2008. vii, 155 leaves : illus. ; 29 cm.

*Abstract:* Substance and Method of Natural Horsemanship (Pat Parelli) are described and presented in combination with movement-therapeutic approaches of the actual treatment of Anorexia nervosa, Bulimia nervosa and "Binge-Eating"-Disorder. This synthesis results in a horse assisted method of treating patients suffering from eating disorders. Horse-assisted movement-therapy is portrayed by means of concrete examples out of the therapeutic practice. The article ends with a preview of an ongoing evaluation study.


*Abstract:* This study evaluated the effects of therapeutic horseback riding on social functioning in children with autism. We hypothesized that participants in the experimental condition (n = 19), compared to those on the wait-list control (n = 15), would demonstrate significant improvement in social functioning following a 12-weeks horseback riding intervention. Autistic children 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 disorder.

Correspondence to Llabre, Department of Psychology, University of Miami, PO Box 248185, Coral Gables, FL 33124-0751, USA; mllabre at miami.edu.


*Abstract:* In this article, we explore how gender is enacted within human/animal relationships—specifically, between people and horses. Horse cultures can be gendered in several ways, from little girls and their ponies to modern versions of the cowboy. Here, we examine two specific horse/human cultures—traditional “English” riding, and the rise of what is often termed “natural horsemanship” (despite the preponderance of women within it).
Horses themselves, however, play an important role in the way that horse cultures become experienced as gendered. We examine this in relation to Paechter's [Paechter, Carrie (2003). Masculinities and femininities as communities of practice. *Women's Studies International Forum* 26, 69-77] idea of “communities of practice", arguing that the presence and meanings of the animal within particular communities—as well as the human practices—together shape how people experience gender. The presence of horses enables a subversion of dominant gender practices particularly at the localized (private) level, while at the same time enables a reinscription of traditional gender ideals at the global (public) level.

Gender is experienced and expressed through the body; but, in human-horse relationships it is also expressed in conjunction with the body and character of the horse. Horses are not mere props, but rather they are companions who have a profound impact on people's lived experience of gender and how it is expressed corporeally. Continuing to explore the multiple ways gender is experienced within the context of human/animal relationships promises to offer greater insight into the complex workings of gender.

Contact Birke. Anthrozoology Unit, Biology Department, University of Chester, Parkgate Rd., Chester, CH1 4BJ, United Kingdom.

**Froeschle, Janet (2009).**
Empowering abused women through equine assisted career therapy. *Journal of Creativity in Mental Health.* 2009; 4: 181-190.

*Abstract:* Female survivors of domestic violence may experience symptoms of low self-esteem, insecurity, difficulty with problem solving, low self-efficacy, and high anxiety with regard to their economic future. Creative methods are needed to help abuse survivors overcome these factors so they are able to set and attain career goals. Equine assisted therapy has been shown to increased self-esteem, improve self-efficacy, and lower anxiety (Marx & Cumella, 2003). This article discusses an overview of the literature regarding career-related consequences for female survivors of intimate partner abuse, describes equine assisted therapy, and details a creative career counseling method.

Correspondence to Froeschle, 5601 Cedar Springs Trail, Amarillo TX 79119, USA; jefroeschle at msn.com

**Graschopf, Lisa (2009).**

*Summary:* The goal of "Sternalerhof" is to accompany families in exceptional situations holistically. These situations include but are not limited to serious illnesses, disabilities, and traumatic experiences. Although special attention is paid to our young guests, who are chronically and / or critically ill, the Sternalerhof considers itself a rest stop (which is the original meaning of hospice) for all family members. Here they can find peace and strength in order to pursue their walk of life with more confidence. Essential for our work are art therapy, music therapy, and therapeutic work with horses including therapeutic horseback riding.

Abstract: Children of parents with mental health problems are considered to be a high-risk group for the development of mental health problems. They can suffer from emotional and social strains which adversely affect their development. Therefore, they need specific support which takes into account their special circumstances and helps them cope with their lives. One possible intervention, the psycho-educational use of horses, is to be presented here. Especially for people with difficult experiences in relation to attachments, contact with a horse - carefully facilitated by a paedagogue - can be healing. This is because horses are herd animals, and include humans in their highly developed social behaviour. At the same time, the horse constitutes a new point of contact for many children and thus offers alternative possibilities for experience. It is also possible to use horses to open up new perspectives for the affected parent, and even include parent and child.


Abstract: Autism is a prevalent developmental disorder that affects numerous aspects of a child's daily functioning, including but not limited to communication, social interaction, cognitive functioning, motor functioning, and sensation. The many impairments that characterize autism also have the potential to affect a child's volition, defined by the Model of Human Occupation as a child's interests, self-efficacy, and motivation to engage in new activities. The objective of this study was to determine the effects of a 16-week hippotherapy program on the volition of three children with autism. Using the Pediatric Volitional Questionnaire, two occupational therapists rated the three participants' volition at three time points -- before, during, and after the hippotherapy program. Visual analysis of the data using methods derived from single subject design research revealed an increase in participants' volition over time. The study provides preliminary evidence that improved volition may be an important and under-recognized benefit of hippotherapy for children with autism.

Correspondence to Taylor, University of Illinois at Chicago, 1919 W. Taylor St., Chicago, IL 60612 USA; rtaylor at uic.edu
Equine Assisted Mental Health and Learning: Articles from Non-Juried Publications

Beginnings (American Holistic Nurses Association)

Recounts experiences at an equine assisted retreat for breast cancer survivors at a farm near Traverse City, Michigan.
Correspondence to McPhail, Animal Bowen Practitioner Level II; touchahorse at yahoo.com; www.mind-bodyintuition.com

Equine Assisted Mental Health and Learning: Theses

Bordorff Sørensen, Tine (2009).
Unpublished thesis (Bachelor's Project)—Århus University College, 2009.
In Danish. ROUGH TRANSLATION OF TITLE: Riding physical therapy for children with autism in Denmark: a qualitative study of Danish physical therapists who use equine assisted physical therapy for children with autism.

Teachable moments in equine assisted psychotherapy. 2009. vi, 41 leaves: illus. (some col.) ; 28 cm.
Examines and explores a new form of animal assisted therapy (AAT) called equine assisted psychotherapy (EAP).

A quantitative study of the psychosocial benefits of therapeutic horseback riding. 2003. vii, 39 leaves ; 28 cm.

Devine, Julia (2009).
Abstract: This research proposal presents a model for a multiple-baseline single-subject design (n=1) to study the effects of equine assisted psychotherapy on coping resources. Using the Equine Assisted Growth and Learning Association (EAGALA; 2006) model, a mental health professional and equine professional will conduct six equine assisted psychotherapy sessions.
Measurements will be taken before and after the sessions, using the Coping Resources Inventory (CRI) and the Perceived Stress Scale (PSS). Baseline scores will be compared to post-treatment scores. Results will contribute to the growing amount of empirical research concerning Equine Assisted Mental Health (EAMH).

Abstract also in *Masters Abstracts International* 47(6) 2009 Dec.
Publication Number: AAT 1465628
ISBN: 9781109238037
ProQuest document ID: 1818251541

**Fasula, Amber (2008).**

*The human/horse relationship in females as related to the capacity for empathy, absorption, and repression.* 2008.


*Abstract:* This study sought to examine the relationship between humans and horses to the Adlerian concept of social interest. The human/horse relationship was defined by relationship maintenance and intimacy towards horses and favorable attitudes towards horses. Social interest was determined by the capacity for empathy and absorption as well as the tendency to avoid defensiveness and repression. Multiple regression analyses were used to determine the relationship between measures of empathy, absorption, repression and measures of relationship maintenance, intimacy, and favorable attitudes towards horses. Results showed that absorption was significantly related to intimacy with horses; however, other measures of empathy and repression were not significant. Suggestions for future research of the psychological benefits of the human/horse relationships will be discussed.

Abstract also in *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 69(7-B) 2009 Jan.

Publication Number: AAT 3323743
ISBN: 9780549750864
ProQuest document ID: 1583167561

**Foley, Allison Jan (2008).**


*Abstract:* This dissertation is the report of a qualitative study of at-risk and delinquent girls housed in a traditional residential treatment facility, who also participated in an animal-assisted and gender-specific therapy program using horses, outside of the residential institution. To date, no such studies exist examining both the gender-specific and animal-assisted approaches to addressing troubled girls’ needs. The study is guided by Relational Cultural Theory, a theory that focuses on human development primarily through connections with others, which was specifically designed to address the significance of the relational experiences of females. The ethnographic approach
used in this study of girls provides rich data to understand these girls and their experiences in a more comprehensive context.

The program appeared successful in empowering girls and in improving their ability to focus, manage their emotions, and relax. About half of the girls attributed improvements in their behavior to the Horseback Miracles program, and this effect was particularly evident for girls who reportedly developed connected, mutual relationships with the director of the horseback riding program. Overall, the results indicate that the equine program played an important role in girls' lives. It allowed them to distance themselves from the negative institutionalized environment, characterized by disconnected relationships with peers and staff members and by access to negative coping mechanisms (drugs, tools to self-injure, and methods of escape). Thus, it provided girls with a method of resisting the institutionalized identity.

Abstract also in *Dissertation Abstracts International, Section A: The Humanities and Social Sciences*, 69(12-A) 2009 Jun: 4880-A.

Publication Number: AAT 3315784
ISBN: 9780549672555
ProQuest document ID: 1679683201

Gestrin, Deidre N (2009).

*Critical elements in a residential treatment program curriculum for adolescents experiencing trauma symptoms and/or posttraumatic stress disorder.* 2009.


Abstract: This study identifies the critical elements in a curriculum for utilizing equine assisted therapy with traumatized adolescents and involving their families. The study examines the effective counseling methods associated with trauma resolution in adolescents and their families. The study considers how normal adolescent development, as well as trauma, impacts the therapeutic process. These focus areas help identify what must be included in each component of a curriculum; specifically, methods, resources, activities, and outcome measures should be utilized. This study implements surveys to investigate these focus areas. The student researches current programs that work with adolescents and equines through an Internet search and makes direct contact with professionals in the fields of counseling and equine assisted mental health. The outcome of this study results in identifying the key elements of a curriculum for a residential equine assisted therapy treatment program for adolescents experiencing trauma symptoms and/or PTSD and their families.

Abstract also in *Masters Abstracts International* 47(6) 2009 Dec:

Publication Number: AAT 1465390
ISBN: 9781109194722
ProQuest document ID: 1797754591
Equine-assisted therapy for primary school children with physical disabilities: a psychosocial view. 2006. [8], ix, 139 leaves unpaged appendices: illus.; 30 cm.
Also available as an electronic PDF file
Website: http://hdl.handle.net/10019/546 (accessed 4 February 2010)
In English; abstract also in Afrikaans.

Abstract: This study endeavours to understand the psychosocial functioning of primary school children involved in a therapeutic horse-riding program. A qualitative study was done using an exploratory research design. Much research has been documented regarding the physical benefits of equine-assisted therapy. Little research has however been done regarding the psychosocial functioning of children involved in such projects, and in the field of social work, not much research has been conducted to the knowledge of the researcher. This study was thus motivated by the current lack of research in this area and by the desire to discover whether this form of therapy has a place within the social work field. The literature study firstly explored the various physical disabilities that are most commonly encountered in the therapeutic riding world, namely cerebral palsy, spina bifida, muscular dystrophy and epilepsy. The developmental milestones of the primary school child were explored with a view to how these physical disabilities may effect the reaching of these developmental milestones. The concept of rehabilitation psychology was then explored, comparing it with various social work methods, popular theories and perspectives and it was found that there were many overlaps in the two fields. Lastly, the literature study looked at equine-assisted therapy and research that has already been done on this topic. The empirical investigation consisted of case studies on five primary school children from Astra School for the Physically Disabled. A qualitative investigation was done, by means of a focus group held with various key team players in the therapy such as the physiotherapists and riding instructors. Individual interviews were then held with each of the five children. An interview guide was used for both the focus group and the individual interviews. The findings of the investigation were in line with what was found in the literature study, namely that these physically disabled children struggled in reaching their psychosocial developmental milestones. The riding however was shown to have made a significant contribution in the areas of social participation, confidence, self-image, emotional control, discipline and cognitive and educational stimulation in each of the five children concerned. Rehabilitation philosophy and psychology were found to be in line with much of what social work aims to achieve. In light of the fact that equine-assisted therapy was shown to be a viable means of rehabilitation, and therefore a viable means of reaching social work goals with physically disabled clients, recommendations were made in terms of social work practice, social work theory, social work training, social work research and social work policy regarding the physically disabled client.
Helm, Kristy (2009).  
Abstract: The purpose of this project is to qualitatively examine Equine-Assisted Psychotherapy (EAP) as an adjunctive intervention for treating various psychological issues found in women with Eating Disorders (ED). EAP offers clients a new variation to treatment and allows them to be in control of how their therapy progresses (McCormick & McCormick, 1997). This study includes three individual case studies, an examination of the history of using horses in psychotherapy, as well as a detailed description and explanation of how and why EAP may be used in treating ED. Also incorporated are a review and summary of the present literature and research in an attempt to bring awareness to a new and promising treatment for women with ED.  
Abstract also in Dissertation Abstracts International: Section B: The Sciences and Engineering, 70(2-B) 2009 Aug.  
Publication Number: AAT 3344785  
ISBN: 9781109041361  
ProQuest document ID: 1686180851

Hemenway, Robin (2007).  
Effects of horseback riding on depression and self-esteem in adolescent girls. 2007. iii, 171 p.; 23 cm.  
Abstract: Adolescence is a period of many changes, which are accompanied by an increased risk for psychopathology. Rates of depression increase and gender differences emerge, with higher incidence of depression among adolescent girls. Adolescent girls are also at higher risk for loss of self-esteem. Research on the effects of people's contact with pets has investigated the relationships between both pet ownership and depression and ownership and self-esteem, but very few studies have examined the interaction of depression and self-esteem with horseback riding, and no empirical research has been done on the potential protective effects of riding or its utility as a coping mechanism in non-clinical populations. This study used a qualitative design to explore the experiences of 10 non-clinical adolescent girls who were identified as horseback riders. Both phenomenological and grounded theory analyses of the data were used to describe and hypothesize the nature of the relationship between depression, self-esteem, and horseback riding. Three major themes---Competence/Efficacy, Relationship, and Distraction/Escape---were identified as mechanisms by which horseback riding effected depression and self-esteem. Although the effects were generally positive, horseback riding had both positive and negative effects on mood and self-esteem through the functions of Competence/Efficacy and Relationship. Through the function of distracting, relaxing, refocusing and, at times, allowing for reflection and problem-solving in a reduced-stress setting, the Distraction/Escape factor always improved mood and reduced depressive feelings among the girls in this study. The results indicate
that more research is warranted in this area, particularly about the biofeedback-like and physiological aspects of horseback riding. Clinical implications of the results and suggestions for future research are discussed.

Abstract also in *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 2007 Jan; (57-7B): 4133-B
Publication no. AAI 3227367


Abstract: Have you heard the saying, the way to make a small fortune in a horse business is to start with a large one? Each year professionals in the mental health and personal growth fields among others are starting up programs that work with horses. They are part of a newly emerging field that has been developing over the last few years. These professionals are witnessing the benefits that people are receiving from a personal connection with a horse; many professionals refer to the horse as a guide and a healer. The programs are helping adults, children, families, and businesses with their mental, emotional, social issues as well as the development of teaming building and leadership skills.

This project-based thesis reviews literature on the major components of starting a small Equine Assisted Psychotherapy (EAP) and/or an Equine Assisted Learning (EAL) business and explores EAP and EAL businesses already in existence. The thesis investigates the major business components associated with starting a successful EAP and EAL business; a business that can provide professionals in the mental health and personal growth fields an alternative and/or adjunct to traditional therapies and traditional educational teachings. The thesis studies the common issues and challenges usually inherent in operating an EAP and EAL business.

Abstract also in *Masters Abstracts International*, 47(4) 2009 Aug.
Publication Number: AAT 1462067
ISBN: 9781109009057
ProQuest document ID: 1674962341

Ludwick, Julie M (2007).
*Therapeutic riding and art therapy: working with children with special needs*. 2007. v, 79 leaves : illus. ; 29 cm.
Matkovich, Sue (2009).


Abstract: This encapsulation project seeks to encompass, explore, and establish efficacy of techniques and elements that have exhibited proficiency in my work with groups throughout my education at Prescott College. I will evaluate and exhibit techniques I used or practiced in my most valued and least valued trainings, workshops, seminars, internship experiences, and work experiences. The study begins with an exploration of the incorporation of art into the group as a method of creating safety and is followed by a deliberation of the viewpoint of artwork as a tangible venue of expression and metaphorical mirror along with its potential to decrease resistance in the recovery process.

The study continues with a deliberation of the effects of dialectical dilemmas, double binds, and paradigms on the mental health and/or mental illness of family members. As I expose the disheartening reality of dysfunctional familial communication patterns which are prevalent in families of alcoholics and addicts I will reveal the uplifting possibility of eliciting multigenerational recoveries with an integration of methods of mirroring while rolling with resistance and Dialectical Behavioral Therapy. I will then exhibit and display how these powerful techniques come to life in Gestalt Therapy, Motivational Interviewing and Equine Assisted Psychotherapy. The integration of these techniques to form a synergistic recovery system to make the covert elicit, promote positive change by rolling by resistance and providing clients with new ways to communicate, cope with stress, manage distress, and think wisely could move future generations in a new direction of strength and healing.

Abstract also in Masters Abstracts International, 47(4) 2009 Aug.

Publication Number: AAT 1462069
ISBN: 9781109009071
ProQuest document ID: 1674962281


Mental health benefits of therapeutic riding programs. 2009. ix, 135 leaves : illus. ; 29 cm.


Abstract: This study investigated the psychological benefits of therapeutic riding programs. Participants (N=35) consisted of individuals in therapeutic riding and therapeutic skiing programs. Participants completed a questionnaire package assessing their self-esteem, symptoms of anxiety and depression and locus of control prior to treatment and again, approximately three months later, when the session of riding or the season of skiing had ended. Results indicated that both groups of participants showed significant improvements in self-esteem and locus of control as well as a decrease in symptoms of anxiety and depression after treatment. Twenty participants took part in post-treatment interviews, which looked more specifically at program benefits. Both groups revealed that the therapeutic program increased their self-esteem, made them feel better about themselves and provided social benefits. However, participants
in the therapeutic riding program additionally experienced a connection to the therapeutic animal, a sense of community within the equestrian environment and a feeling of prestige and specialness that was associated with being able to ride a horse. Interactions with the therapeutic horse also increased motivation to engage in and remain in treatment. These results demonstrate that therapeutic riding programs can have a beneficial effect on mental health functioning and can provide additional, unique benefits not available in other therapeutic programs. The relationship that is developed with the horse and the intrinsic sense of community that is experienced appears to be particularly important treatment components of the program.

Abstract also in Dissertation Abstracts International: Section B: The Sciences and Engineering, 2009 Jun; 69(12-B); 7822-B.

Dissertation Number AAINR44679

Raiborn, Starla (2009).
Horse medicine: A spiritual orientation to equine assisted activities and therapy. 2009.
Abstract: This capstone project chronicles the author's personal, professional, and spiritual orientation to equine assisted activities and therapy based upon the socially constructed recognition of a collective connection to the horse through Spirit. The author explores nontraditional ways of knowing, universal intelligence, theories of quantum physics, and the nature of the horse to describe a force-free way of working with the horse that demonstrates respect, harmony, and communication with All instead of domination, exploitation, and control.

Abstract also in Masters Abstracts International, 47(6) 2009 Dec.
Publication Number: AAT 1465631
ISBN: 9781109238198
ProQuest document ID: 1818251501

Williams, Sarah Helen (2005).
Riding into therapy: a therapeutic horseback riding program for developing social skills in ‘at risk’ teenagers. 2005. v, 90 leaves; 29 cm.

Straight from the horses’ mouth: a qualitative study of biopsychosocial effects of equine-facilitated therapy: a project based upon an independent investigation. 2007. iii, 64 leaves ; 29 cm.
Sensory Integration theory as applied through Equine Facilitated Psychotherapy with a child diagnosed with autistic spectrum disorder. 2009.  
Abstract: Many professionals in the field of Equine Facilitated Psychotherapy (EFP) and clients claim physical, cognitive, and emotional benefits from participation in EFP. However, their claims are based primarily on anecdotal evidence. With no scientific basis of corroboration, credibility within the scientific and academic community is for the most part non-existent. This lack of credibility results in a deficit in funding for research and program development, which is needed in order to make EFP and related programs viable and accessible for those who would most likely benefit from this type of therapeutic intervention. Therefore, the intent of this study was to explore the theoretical constructs of Sensory Integration (SI), and how by utilizing SI as a theoretical foundation, both researchers and practitioners working in the field of EFP will be able to more accurately conceptualize and relate the positive benefits of EFP to the scientific and academic community, thus allowing for a greater understanding and acceptance of EFP as a viable and effective treatment approach.

This study spans the gap between present EFP practices and subsequent performance-based empirical studies by exploring qualitative findings in the experience of a participant in EFP utilizing Sensory Integration (SI) as a theoretical "bridge."

According to A. Jean Ayres, (1979), "Inner Drive" activation is of the utmost importance, because for an individual to benefit from therapeutic interventions structured to enhance SI, the individual must want to be an active participant in the therapeutic process. Inner drive can be observed in the excitement, confidence, and effort that an individual brings to an activity (Ayres 1972). EFP's main treatment focus is to provide the child with as much environmental stimulation that will require the use of the entire body, all of the senses, and the entire brain in a meaningful way. The child's realization of his own potential becomes self-directing, and the more this can be utilized the greater and faster the neuronal organization. The ultimate goal of treatment, according to Ayres (1979), "Is a child who wants to succeed, can and will direct himself meaningfully, and with satisfaction in response to environmental demands" (p.257).

The qualitative data analysis of this study revealed four major themes: Happiness, Lack of Fear, Self-Confidence, and Bonding. These themes are mutually inclusive with the prerequisite elements of excitement, confidence, and effort. Happiness, for example, underlies the behavior and emotion characterized by excitement. Lack of fear and self-confidence contribute to an overall sense of confidence. Finally, bonding (in-so-far as it reflects a mutuality of experience) drives effort. As in this case, effort leads to a bonding experience that includes love, trust, kinship and a sense of belonging.

Once the prerequisite elements of excitement, confidence, and effort are attained through EFP, the resulting implication is that the child's inner drive has
been activated to the extent that the probability of an increase in sensory integrative functioning is likely.

Abstract also in *Dissertation Abstracts International, Section B: The Sciences and Engineering*, 70(4-B): 2009 Oct; 2592-B–2592-B.
Publication Number: AAT 3356857
ISBN: 9781109130867
ProQuest document ID: 1825731741