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## Equine-assisted psychotherapy as an effective therapy in comparison to or in conjunction with traditional therapies

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EQUINE-ASSISTED PSYCHOTHERAPY AS AN EFFECTIVE THERAPY IN  
COMPARISON TO OR IN CONJUNCTION WITH TRADITIONAL  
THERAPIES

by

KRISTEN A. WILSON

A thesis submitted in partial fulfillment of the requirements  
for the Honors in the Major Program in Psychology  
in the College of Sciences  
and in The Burnett Honors College  
at the University of Central Florida  
Cocoa, Florida

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Thesis Chair: Dr. Erin Murdoch

## ABSTRACT

Mental disorders are a prevalent health issue that has an extensive amount of variability in the quantity of disorders, affected populations, and treatment. There are a multitude of approaches or therapeutic methods used by the mental health community. Although each therapy is valuable in unique ways, each therapy may not be suitable to treat every disorder or client. Traditional approaches, such as talk therapy, are effective for certain individuals, whereas some clients may not respond well to any of the traditional talk therapies. When traditional therapies are not working, a referral can be made for a therapy that might suit the client better. Equine-Assisted Psychotherapy (EAP) is an experiential psychotherapy that has done well not only in assisting typical clients, but also with clients that have had trouble in traditional modes of therapy. This is a collaboration of current works and research in EAP, along with the knowledge base of a current licensed practitioner of EAP. The purpose is to lay out the fundamentals of EAP, which offers a different modality than traditional talk therapies. By crafting a better picture of EAP, perhaps it can kindle further research in its efficacy and guide additional mental health professionals towards this type of therapy.

For my Grandfather who always helped push me towards my dreams, but never got to see me live them.

To my Mother who at the end of everyday is still my biggest fan.

To all my teachers for sharing their knowledge and love of learning while at the same time encouraging my own.

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## **Introduction**

Psychologists, researchers, clinicians, and scholars are well aware of the commonality and prevalence of mental disorders in our own backyards, cities, or countries. In the United States, throughout the duration of any given year, approximately 30% of the adult population is afflicted with a psychological disorder (Beidel, Bulk, & Stanley, 2010). Furthermore, 48% of adults will suffer from at least one disorder, if not more, at some point in their lifetime (Beidel et al., 2010). That being stated, psychological or mental health is a continuing concern that weighs heavily on the minds of those afflicted, their family members, clinicians, and society as a whole.

There are a wide range of terms used by clinicians to describe mental disorders. They include mood disorders, such as depression or bipolar, a variety of anxiety disorders, personality disorders, and a spectrum of autistic disorders, as well as substance abuse. There are currently over one hundred disorders and diagnoses listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), which in 2013 will undergo another revision (American Psychiatric Association, 2012). One can even break down the statistical data further by looking at the most common mental illnesses, the different rates for each disorder, or by considering demographics (e.g., gender, ethnicity, geographical location). Diagnoses originate from diverse factors that may involve age, gender, brain chemistry, genetics, predispositions, childhood environment and trauma (Beidel et al., 2010).

The determination of the cause, classification, and treatment will vary depending on the manner in which the clinician has been trained. Psychoanalytical style focuses on the client's unconscious thoughts and past experiences; the Humanistic approach tries to assist the client



with the present difficulties. Behavioral and Cognitive approaches can be practiced separately or jointly. There are even some treatments that draw upon multiple approaches and theories. For example, one doctor proclaimed that she was a Cognitive Behaviorist that is influenced by Humanistic psychology (Pipher, 1994). The aforementioned approaches, which include the more traditional “talk-therapies,” laid the groundwork that would ignite numerous studies that would then lead to the promising development of more experimental and interactive therapies.

New and more creative therapeutic processes are cropping up to test the status quo of current knowledge, research, and practice. Such exciting endeavors open up new possibilities and ways to reach clients where previous therapy techniques have failed to do so. Current therapies now contain tools that go beyond talk-therapy to help in the treatment of their clients. They are often times utilized in conjunction with the traditional therapies. These new approaches use different types of mediations, such as Art Therapy, Music Therapy, Drama Therapy, or Animal Assisted Therapy. This last category encompasses the use of animals in a wide range of therapeutic practices. The focus of this thesis will center itself around the *Equus ferus caballus*, otherwise known as the modern day horse. Thus when incorporated into psychotherapy, coins the term Equine-Assisted Psychotherapy (EAP).

## **Purpose**

This thesis is a synthesis of current research and knowledge surrounding EAP and will not only offer an evaluation of its process and benefits, but will also strive to encourage more research and practice for this particular approach. Expansion of its use should spawn more

avenues of applications and tools for use by clinicians, as well as enrich the collective body of psychology in its comprehension of the human mind and the methodology to heal it.

## **Method**

A collaboration of current research and texts revolving around EAP, its practice and beneficiaries, derived from databases such as PSYCInfo, Google Scholar, and Web of Knowledge. Inclusion criteria consisted of literature centered on EAP, other equine therapies, general therapies, and specific groups such as adolescents/Veterans/people with Autism Spectrum Disorder and equines. All texts were transcribed in the English language. Data was also gathered from an interview with a licensed clinical psychologist and practitioner of EAP, Dr. Sandra Wise, and from personal communication with Dr. Manette Monroe. Both the transcribed interview and correspondence can be viewed in the Appendix: Personal Communications.

## **Equine-Assisted Psychotherapy**

The horse is an amazing creature that has played a vital role in the world of humankind. The interactions between horses and humans can be seen throughout history and in almost every culture. The earliest and most prominent culture to create a relationship with horse were the Greeks by representing them as mythical beasts, using them as a means of competition and entertainment by chariot races, and through the practice of using the warhorse for battles (White, 2011). One can easily trace those relationships to the modern roles that horse fill, such as the sport of horse racing or the use of mounted police forces. Their roles continue to change as they help humans not only in the physical sense, but also now on a mental plane as well. The integration of horses into therapy for people has existed for a number of years, beginning with the use of therapeutic riding. These are therapies sponsored by the North American Riding for the Handicapped Association (NARHA) (Masini, 2010). A second outgrowth of equine therapy led to the formation of another organization, the Equine Assisted Growth and Learning Association (EAGLA). EAGLA is a nonprofit organization built to aid in various resources for the fields of EAP and Equine-Assisted Learning (EAL) (Schultz et al., 2007; Equine Assisted Growth and Learning Association, 2010). EAGLA offers support such as research and training for psychotherapists who wish to be involved in EAP (Equine Assisted Growth and Learning Association, 2010). NARHA sponsors therapies that make use of riding; EAGLA therapies involve activities that take place on the ground typically without any riding (Masini, 2010).

EAP falls under EAGLA, because in general, activities are ground based. This type of therapy is not pet therapy, not therapeutic riding, nor playing at being a cowboy (Wise, 2012).

It is a psychotherapy practice, but with an over 900lb assistant. The horses are used in an empirically based approach using scientific techniques from the different therapeutic approaches, such as cognitive behavioral, psychodynamic, and various other therapies depending on the therapist (Burgon, 2011; Christian, 2005; Wise, 2012). However, there are a multitude of terms for equine therapies that often confuse people and some terms can be misleading as to what the therapy entails in treating mental disorders. EAP is sometimes mixed with or used interchangeably with Equine-Facilitated Psychotherapy (EFP). While both are psychotherapies, EFP consists of riding and is therefore under the NARHA, but EAP is linked with the EAGLA and is the term and type of psychotherapy studied throughout this thesis (Masini, 2010).

### **Definition**

EAP is commonly intermixed with Equine-Assisted Learning/Equine-Assisted Growth, in which interaction with an equine helps the individual learn more about themselves, or how they interact with others (Masini, 2010; Wise, 2012). Many stables offer these types of growth and learning sessions to individuals, groups, or teams. While such sessions are certainly valid in their own right, clients and even those facilitating the session must understand that without the proper professionals, those with serious mental illnesses such as Post-Traumatic Stress Disorder, Depression, Schizophrenia, or any other psychological disorder, should not be treated there (Wise, 2012). To treat mental disorders and to legitimately label such treatment as psychotherapy, there must be a licensed mental health professional conducting the session.

With EAP, there are three crucial elements needed before adding the client into the mix. As stated previously, there must be a licensed mental health professional present at the session.

There must also be an equine specialist, someone who generally has at least 8,000 hours of hands-on horse training and horsemanship experience (Wise, 2012). Therapists can be dually credited with both a mental health license and be considered an equine specialist; however, typically there are two professionals present for each respective field if not more during sessions (Masini, 2010). The licensed mental health professional ensures that the client receives the proper type of treatment, while the equine specialist ensures the physical safety of the participants as well as the horses during the session. Then, once the equine or equines are specifically selected and determined to be suitable for interacting with clients, an EAP session is ready to begin.

### **Why a Horse?**

What is so special about a horse? Horses are in fact known for interacting with humans with patience, cooperatively, and can be very sociable towards humans (Yorke, Adams, & Coady, 2008). However, there are a multitude of Animal-Assisted Therapies to choose from if a therapist is looking to incorporate animals into their therapy, including pet-therapy for hospital patients, dogs in the psychologists' office, and even therapies involving birds (Fine, 2010). Obviously when considering animals used in therapy, such as dogs, cats, and birds, horses are much larger and can be quite daunting for people not accustomed to their presence. Even the smaller horse breeds can weigh over 900lbs and can literally walk right over a person. Yet even though horses are large creatures, one of the most common remarks made by clients is that the horse made them feel "safe" (Masini, 2010). It is also due to the horse's size that clients are filled with empowerment and encouragement when they manage to successfully interact with their horse (Burgon, 2011; Christian, 2005; Masini, 2010).

There are ample studies documenting the health benefits of owning a dog, from a decrease in anxiety levels to a greater life expectancy (Fine, 2010). Dogs are loyal, playful, fierce companions and always a predator ready for the chasing of squirrels. It is the exact opposite of this last characteristic that makes a horse suited for psychotherapy purposes. Horses' possess additional traits fit for psychotherapy such as their huge size, but even with such size and power this animal is a naturally vulnerable creature (Burgon, 2011). It is this primal factor that psychologists use as a tool for psychotherapy.

### *Prey*

As an animal situated at the lower end of the food spectrum, the only way for this particular prey animal to survive is to be on high alert every waking moment. This explains why horses are so highly attuned to their environment and are ready at a moment's notice to flee (Wise, 2012). Horses not only focus adherently to their surroundings, but on each other as well. Horses are herd animals with an enhanced body communication system for not only predatory danger, but to communicate amongst themselves in the herd to preserve the hierarchy (Burgon, 2011). Whether in the wild or on a ranch, their instinctive nature does not change. They still think and act like prey. It is the horses' handlers' job to quell their fearful nature so they can be safe to ride and interact with people. However, the handler cannot completely erase the core nature of a horse that is continually on high alert waiting for the proverbial lion. This preservation instinct is one of the very reasons that they are able to sense even the most subtle change in a human being's countenance that another human would most likely miss (Burgon, 2011; Wise, 2012).

This hyper-sensitivity towards people is what led the EAP facility *The Eye of the Horse Program* to nickname their equine assistants: “big barometers in brown coats” (Wise, 2012). During a session when the client and horse are together, the horse is analyzing and assessing the situation continually through its visual perceptions. Whereas a human psychotherapist first listens intently to a client’s words while noting some body language, it is the flipside for a horse who examines the body language first and the voice second. These animals are naturally sensitive to body language (Burgon, 2011; Grandin & Johnson, 2005; Masini, 2010; Wise, 2012). This is their primary mode of communication. These are social creatures with a pecking order, so to speak, but their non-verbal cues create a cooperative relationship with one another (Burgon, 2011). In essence, the horse is monitoring the client and is constantly perceiving what an individual may be thinking or feeling and gives a reaction accordingly. Dr. Sandra Wise once stated her equines’ reactions to clients as “immediate, clear, accurate, and non-judgmental feedback” (2012). This non-judgmental and precise “feedback” from the horse is the heart of EAP (Burgon, 2011; Trotter, Chandler, Goodwin-Bond, & Casey, 2008).

While horses are highly sensitive to their environment, they are also quite curious creatures. Grandin eloquently defined curiosity as “the other side of caution” (Grandin & Johnson, 2005, p. 47). For a prey animal the instinct to run at the first sign of danger is a basic survival tactic. However, to ensure survival an animal must know its predator. The horse needs to explore to find the food sources, water, and determine which places hold danger and which do not. If a horse chooses not to explore in an effort to be cautious it will be ill equipped to recognize the signs of potential danger. Being too cautious can be just as dangerous as being too curious (Grandin & Johnson, 2005).

### *The Eyes of a Horse*

There is another reason horses possess a more acute awareness of their environment and those who are in it. Horses are known to be visual thinkers, or spatial thinkers. This means they “think” in pictures and not in abstract ideas like most humans (Grandin & Johnson, 2005). Because they see or notice everything around them, they are able to find food and spy danger from a distance (Grandin & Johnson, 2005). This means that they are highly detail oriented, which is why they are so proficient at reading body language.

Within the human population there is a set group of people who are also visual thinkers. The largest faction of those who are visual thinkers are people with autism. People with autism primarily process thoughts through mental images, which is why they have difficulty with verbal skills; they first have to convert their mental pictures into spoken words (Grandin & Johnson, 2005). Dr. Grandin, a pioneer in the field of animal behavior, has shed new light in her books and research surrounding the connection between visual thinking and autism. One of the greatest assets she brings to her job and theories is the simple fact that she herself is Autistic.

### *Training*

To become licensed mental health professionals, students must go to a college for a number of years, complete mandated hours of practicum, and have to pass test after test. Some states even require schools to be accredited by the American Psychological Association and to pass an exam before a license is issued (reference). The dedication and training involved in becoming a clinician is time consuming and difficult, but the benefits for the student and eventually clients are immeasurable. People would not want a surgeon operating on them to



have only acquired medical skills from a game of Operation. Similarly, it is very important that anyone practicing psychotherapy in any context is a licensed mental health professional.

Whereas the therapist and equine specialist must have certain qualifications in order to fill their positions, the horse is not required to experience formal regimented training, but safety is a key factor in any dealings with animals and especially for ones so large and powerful. Due to the nature of the sessions, a horse with a proper temperament must be chosen. A horse with a calmer temperament will most likely be chosen over a horse that cannot interact safely with humans (Fine, 2010), but with enough curiosity and personality to interact with clients (Wise, 2012). This is for the safety of both the participants and the horses involved in the therapy. The type of client therapy can also determine characteristic needs of the horse. Equine therapies like some therapeutic riding ones need horses that will be completely docile while on a lead for the safety of a rider with disabilities. But for EAP, horses need to be freer to respond to clients (Wise, 2012). Clients receive more honest and clear feedback from horses that are not restricted and are free to respond at will. Horses are certainly taught manners in which to behave such as not biting, kicking, or walking into people for safety reasons.

At the Equine Education Center at Forever Florida, EAP is conducted with a herd of horses that roam freely around the arena or round pen (Wise, 2012). Arenas and round pens are fenced in areas where horses are either trained or perform in shows. Round pens are exactly what they sound like: a circular pen (so that the horse is never cornered), typically smaller than an arena that is used for training. Leads or ropes are not used during therapy sessions. The reason being is so that the horses will give clients feedback that is not forced, is honest, and

allows for different interactions with the horse (Wise, 2012). There are currently over thirty horses at this facility that are trained to be mannerly, but not overly disciplined so that their natural curiosity is not extinguished. The Center, aside from teaching manners and to stay within proper boundaries, does not alter horses' behavior to act in a prescribed conduct for clients. In fact, horses are encouraged to be curious so that they engage with clients in new ways and provide more honest feedback (Wise, 2012). The best actions and reactions from a horse come from its' natural curiosity.

Masini (2010) recounted an episode of an impromptu intervention by a therapy horse. It was a therapy session that almost did not happen as the client, an adolescent girl named Pam, refused to leave her parent's vehicle. To coax the girl out of the car, the therapist brought the horse they were to work with over to her window in an attempt to pique her interest. At their arrival the girl adamantly ignored everyone around her. With no prompting or training from the therapist, the horse poked its head inside the car to snatch the girl's cap right off her head and successfully engaged the previously nonresponsive client. Due to the equine's intervention, Pam not only participated in her session but also came out with a positive experience that lasted until the end of her therapy (Masini, 2010).

### *The Human-Animal Bond*

Various texts, ranging from ancient to modern times, discuss the phenomenon of a human-animal bond. The relationship has been described and theorized about over and over again (Fine, 2010). So, what is this connection that allows animals to become part of the family, fill emotional needs, and give people a sense of safety?

The American Veterinary Medical Association's Committee on the Human-Animal Bond defined it as:

A mutually beneficial and dynamic relationship between people and other animals that is influenced by behaviors that are essential to the health and well being of others. This includes, but is not limited to, emotional, psychological, and physical interactions of people, other animals, and the environment (Fine, 2010, p. 7).

Whether it is a mystic bond or brain chemistry, multiple theories exist and continually crop up. Theories about the human-animal bond range from humans' desire to be closer to nature to a connection similar to that of parents with their children (Fine, 2010). Other theories include the innate reaction to focus attention on animals present in the environment as well as the theory that postulates that animals are a remarkable social support that humans gravitate to (Yorke et al., 2008). Whichever theory or definition is subscribed to, undoubtedly a positive relationship exists between humans and animals, especially domesticated animals that have evolved and interacted with humans for hundreds of years.

Certainly there have been a multitude of studies documenting both physical and psychological benefits pertaining to human and animal interaction (Velde, Cipriani & Fisher, 2005). Some of the most notable benefits are the reduction of heart rates and blood pressure in relation to lowering stress and anxiety felt by clients (Wesley, Minatrea, & Watson, 2009). Aside from projecting a calming effect during sessions animals have also been said to be communication mediators between the client and therapist (Burgon, 2011). A significant

proponent that aids in initiating treatment success in psychotherapy is that of the client-therapist bond (Wesley et al., 2009). This therapeutic alliance is characterized by “mutual liking, respect, rapport, trust, warmth, acceptance, and collaboration” (Yorke et al., 2008, p. 17). The strengthening process of the client-therapist bond comes from several different avenues that animals can provide. The animal offers a starting point in communication, can cause a reduction in the client’s anxiety from being in therapy, and in general clients tend to trust and form attachment to the therapy animal long before the human therapist, which in turn increases the likelihood of the client returning for therapy and reaching the therapeutic goals (Wesley et al., 2009). In a study researching the effects of previous equine-human bonding in relation to recovery of clients with trauma, York et al. (2008) did find that the participants’ depiction of how their own human-equine bonds aided in their recovery simulated some of the effects found in a psychotherapy client-therapist bond that produce healthy adjustments.

An additional facet that a therapy animal can supply that their human counterparts cannot always do is the warmth of the therapeutic touch (Wesley et al., 2009). The solid hand on a shoulder, a hand grasping another as an anchor, or a comforting hug are human interactions that seek to console one another. However, during therapy it is a very complicated matter because while therapists may be inclined to reach out to their clients, there is potential risk involved such as the client not wanting contact, perceived as an invasion of space, or even misinterpreted as a sexual advance (Wesley et al., 2009). These barriers are non-existent for a therapy animal. Horses even have the tendency with those that they have a bond with to initiate physical contact such as nuzzling or licking (Yorke et al., 2008). Just the simple act of hugging, stroking, or even grooming a horse can not only offer emotional support and increase the horse-human bond, but

also help the client develop a sense of empathy towards the horse (Burgon, 2011). The broad shoulders of a horse are perfect to cling to and cry with feelings of safety, comfort, and the sense that the horse is acting as an understanding confidant (Yorke et al., 2008).

### **The Therapeutic Process**

During an EAP session, the general format consists of activities with the horse followed by a discussion of the interactions in relation to the client (Masini, 2010). Activities can range from sitting on sidelines while observing the herd and the hierarchy within it to guiding a horse through an obstacle course or asking it to perform a task (Masini, 2010). Talking while grooming or having the client try to lunge the horse are some other examples of equine activities. Lunging is a training activity for both new horse and riders that has been adapted into equine therapies. In general they can take place in a round pen with the one person standing in the middle with the horse moving in a circular direction. The trainer or client controls the horse's speed and direction with the assistance of a lead and both verbal and non-verbal cues. The end result is that the trainer no longer uses a lead and simply uses body cues that the horse instantly picks up on to move or stop accordingly. Grooming may seem like a simple task, but not only can it be a gateway into discussion with a client, it also helps develop empathy between the client and the horse, as well as instructing the client on how to modify their behaviors in getting the horse to lift their hoof for cleaning (Burgon, 2011; Schultz et al., 2007). This fundamental format of an experiential action with discussions can change easily to include groups, new activities, or modifications of the exercises or discussions (Masini, 2010). The direction of the sessions can also change depending on the basis of the therapist's approach, whether it is cognitive-behavioral, psychoanalytical, or Gestalt (Fine, 2010). All activities, whether

individual or group, are closely observed by staff for not only safety reasons but to also offer encouragement and verbal feedback (Christian, 2005).

Unlike general talk therapy, the inclusion of the horse can offer several advantages over traditional methods. One such advantage is that the horse can perform the function of an “ice breaker” for less verbal clients (Masini, 2010, p. 31). Another can be seen when clients project their own feelings onto the horse, with remarks that the horse is sad, angry, or when observing herd hierarchy might pick out a “bully” horse which a therapist can then direct into a conversation (Masini, 2010). While the horse is physically there, he often acts as a metaphor for some aspect of the client’s life (Burgon, 2011; Trotter et al., 2008). He can represent an individual that the client interacts with, symbolize a current problem or the solution, and even represent the client themselves (Wise, 2012). Whatever the horse stands for or manages to aide in discussions, the therapist is using the equine assistant as a catalyst to bring the client’s issues to the surface to be worked upon (Klontz, Bivens, Leinart, & Klontz, 2007; Wise, 2012;).

The most important key to EAP is that it is an experiential approach that has the client interacting with a living creature (Masini, 2010). As mentioned previously, the horse has a highly sensitive nature and is incredibly attuned to body language. As a result, the horse is continually giving feedback on a client’s motions and emotions. The client will in turn react to the movements and attitude of the horse. In behavioral language the client and the horse are a continuous stimulus and response for each other. This “mirroring” factor is what allows individuals that are unconscious of their behavior not only see it reflected by the horse, but comprehend their behavior and learn to adjust to healthier behaviors (Schultz et al., 2007; Trotter

et al., 2008). This interaction encourages the client to not only talk about an issue, but to also act it out in the round pen and experience a solution (Wise, 2012). For example, if a client has a relationship issue or personality problem with being too shy or too aggressive the dynamics of how they interact with others on a daily basis plays out entirely in the round pen. In Dr. Wise's words, "what happens in the round pen is just a microcosm of what happens in the real world" (Wise, 2012). This gives clients the opportunity to observe and learn about their own behavior to work towards a solution.

## **Beneficiaries of EAP**

EAP is a very versatile psychotherapy both in its format of client sessions and in its ability to reach a large variety of clientele. Using equines in mental health therapies provides the clients with a safe and protected environment to work through things that ail them and facilitates personal growth and development (Trotter et al., 2008). For instance, abuse victims have often times lost the feeling of control and sense of safety. By using an equine modality the client is not only in a protected environment but also can regain that power of control when interacting with the therapy horse and controlling their behavior in a nonviolent manner (Trotter et al., 2008). EAP can be used for people with personality issues, difficulties with boundaries, or communication problems. It also offers therapeutic value to individuals who experienced trauma, such as Veterans or abuse victims, and persons with Autism Spectrum Disorder (Wise, 2012). EAP includes treatment for men and women, adults and children. When clients are initially uncomfortable with the idea of dealing with such a large animal, this often represents fear of both the horse and change (Christian, 2005). By overcoming initial anxiety of the horse and successfully completing the therapy, the client can receive a boosted confidence and self esteem (Burgon, 2011; Christian, 2005). However, if the client in question has such an aversion to horses that it presents a danger to either the client or the horse, a different type of psychotherapy would be better suited (Schultz et al., 2007). Children also have positive outcomes with EAP with age or maturity taken into consideration and their feelings about horses as well (Wise, 2012). The horse's patience, attentiveness, and unique way of listening to others is a strong magnet for children that engages them in therapy (Dingman, 2008).



Clients dealing with substance abuse can experience benefits from having therapy animals interact with them. Wesley et al., 2009 conducted a study assessing therapy animals that led to the discovery that these animals can strengthen the therapeutic bond in which anxiety is diminished, and actually encourage bonding between the client and themselves. In the end, this may be the main factor to cause the client to not only continue therapy, but reach their therapeutic goals (Wesley et al., 2009). During a pilot study program using EAP in a residential treatment facility for substance abuse, the staff observed clients experiencing positive personal growth along with meeting therapeutic goals (Masini, 2010).

EAP is also utilized in therapies targeting eating disorders, through the exercises and discussions that enhance the client's self confidence and awareness so that they are able to relinquish the control that commands the disorder and reach therapeutic goals (Christian, 2005). This particular therapy also works well in helping client's with issues that prevent them from interacting in healthy ways with their peers; for example, such cases would include anger management problems, impulse control, or other problems that arise from issues with social functioning. EAP's multipurpose nature can adapt to most clients needs and disorders; however at this time, EAP is most often used in therapy with those with Autism Spectrum Disorder, adolescents and Veterans with Post-Traumatic Stress Disorder (Wise, 2012).

### **Persons with Autism Spectrum Disorder**

EAP is a therapy that is strongly suited for therapy where verbal communication is a concern and can adapt readily to each type of client. Persons with Autism Spectrum Disorder communicate and think in ways that are different from the general population (Grandin &

Johnson, 2005). This characteristic of autism may at times alienate a human therapist, but allows for a connection with a horse one. Both Autistic persons and animals see the world through the same visual thinking process, which gives them an inexplicable bond (Grandin & Johnson, 2005). Horses offer every single client instantaneous and direct feedback without any critical judgments or bias, which is especially important when dealing with clients who have perhaps felt the stigma of being labeled as a person with a disability. When horses interact with humans, they do not cast a critical eye and from this a relationship free of biasness can be formed (Dingman, 2008).

Clear and honest feedback is one of the fundamental elements because it offers a protected environment for therapy all while practicing another element - body language, or non-verbal communication skills (Wise, 2012). Persons with Autism Spectrum Disorder have a wonderful and fascinating way of thinking in pictures about the world around them. However, this tends to hinder verbal communication skills depending on the severity of the disorder. Even non-verbal forms of communications like a handshake or hug may seem normal, but could startle an Autistic individual. In her book, Dr. Grandine related her experiences and difficulties with the verbal language as a child struggling with being different to a successful Ph.D. During her childhood she was unkindly named "Tape Recorder" by other children (Grandin & Johnson, 2005, p. 18). As an adult she admits that while they were unkind, they were not too far from the mark since with a spatial thinker there is an extra step in communication of taking spatial thoughts and translating them into words. Some of the steps consisted of making "stock phrases" or word choices that she continually used, until she acquired so many phrases that she could rearrange them into different sequences (Grandin & Johnson, 2005, p. 18).

Dr. Grandine may have had difficulties with the verbal language, but she made up for it tenfold with her understanding of animal behaviors; so much so that she is greatly respected and considered a pioneer in her field (Wise, 2012). Her telling of her experiences also serves to show how important a modality like EAP is that uses natural body language as a therapy tool. This allows for the therapy to be directed exclusively on non-verbal social interactions, which can be just as difficult as verbal and even more depending on the severity of the Autism (Wise, 2012). Researchers have found that children diagnosed with Autism Spectrum Disorder show improvements in social interaction when exposed to animal occupational therapy (Bass, Duchowny, & Llabre, 2009). This gives EAP the perfect atmosphere for adolescents and young adults with Asperger's syndrome to concentrate on their social interactions skills and any social deficiencies. Interaction with horses can teach communication skills to children who struggle in communication with other people (Dingman, 2008). Furthermore, Bass et al. (2009) suggested that therapeutic riding may be a therapy that can vastly improve the social functioning of children with Autism Spectrum Disorder. At the same time EAP can be suited for younger children with Autism as they perform repetitious, precise, and concise tasks such as grooming, feeding, or rolling a ball to the horse, all of which can help with communication, empathy and teaching responsibility (Burgon, 2011; Dingman, 2008). In part of a study on EAP conducted by Graves (2011), youth with Autistic Spectrum Disorder did receive benefits from standardized EAP sessions.

### **Adolescents**

Adolescence can be a trying time in a person's life as there can be struggles and adjustments in the process of growing up, breaking away from dependence on parents, and

preparing to enter society. Adolescence can be even further complicated and even maladaptive from experiences such as violence, abuse, family deterioration, and troubles at school (Roberts, 2010). Conflicts with parents arise during adolescence that, while normal, if the conflict exceeds the norm it creates the potential for maladaptive behaviors in regard to social functioning (Cassidy, 2012). With all of those thoughts and issues swirling around in their mind, it is no surprise that adolescents can have difficulties expressing themselves to adults: whether a parent or a therapist. Whether or not adolescents feel inclined to relate their problems to someone of an older generation in some situations an intervention by a therapist can be helpful. The most recent research shows that between 15% and 20% of youths suffer from mild to severe psychopathology and that only 20% to 30% receive any treatment (Roberts, 2010).

The benefit of using equine therapy in interventions with at-risk youth is an expanding field that is showing great promise. Burgon (2011) assessed the experiences of several at-risk youth in a therapeutic riding program (TH) that was associated with the therapeutic modalities of EAP, EAL, and Equine-Assisted Therapy (EAT). The results included the implication that the TH program offered increased self-confidence and self esteem, empathy, communication and societal capability, mastery and self-efficacy in relational that by controlling their behavior they could influence another creature's, and the opportunity of future positive experiences (Burgon, 2011). Another study with at-risk youths that involved equine therapy incorporated the use of Equine-Assisted Counseling (EAC), which is involving horses in the counseling method (Trotter et al., 2008). Trotter et al. (2008) comparatively studied the use of EAC against a school-based counseling intervention termed Kids Connection. The outcome of the study reported evidence

that not only was EAC effective, but also produced better results than treatment from a previously empirically supported counseling intervention.

Sometimes, like Pam who was mentioned earlier, younger clients may be nonresponsive and unwilling to talk with adults (Masini, 2010). Actually Pam had been referred to that particular center due to the fact that traditional therapies had failed to reach her. With EAP, the addition of the horse with its unique characteristics allows barriers to be brought down and alleviate difficulties for a human therapist. In Pam's case neither her parents nor the therapist could encourage Pam to freely respond in a positive manner, yet the therapy horse did. Pam continued her therapy and she made mention that she only participated due to her connection with the horse (Masini, 2010). At another treatment center that relied on the healing power that horses facilitate, it was reported that adolescents who initially refused to speak or cooperate with staff and their peers only began communicating after they built a bond with a horse (Masini, 2010). One common theme among therapies involving horses is that they are a calming agent during sessions, which in turn not only puts the client at ease, but helps to build rapport and trust between clients, the horse, and the therapist (Burgon, 2011).

Frequently, adolescent clients trust the horse long before the therapist and see the horse as a confidant; exactly as one young client mentioned, "you can tell them your secrets" (Burgon, 2011, p. 174). Not only did adolescents state that horses provided a safe source to confide, but that the horse's actual presence surrounded them with an atmosphere of safety (Masini, 2010). Safety in the therapeutic environment is extremely important for adolescents or any client that has experienced some form of violence. Adolescents are not only able to feel safety in a

horse's presence, but tend to show open affection as well as empathy towards the horse; these expressions otherwise may have been stunted, as in with cases of child neglect (Burgon, 2011).

Childhood and adolescence are critical time periods in a person's life. Often what we learn and experience stays with us our entire lives. Unfortunately these events can also include divorce, violence, various levels of abuse, or other factors that can lead to maladaptive behavior well into adulthood (Beide et al., 2010). Graves (2011) tested effectiveness of EAP on severely emotionally disturbed (SED) youth. Like the children with Autism, the SED youth showed a moderate to large effect of EAP; the research also indicated that EAP may have greater potential in therapies with SED youth (Graves, 2011). Schultz et al. (2007) attempted to assess EAP as being a modality for children with a background of experiencing intra-family violence. For testing purposes, they used pre and post-treatment scores from the Children's Global Assessment of Functioning Scale (GAF) to determine whether or not treatment was effective. At the end of the sessions, the participants with backgrounds consisting of physical abuse and neglect showed significantly improved GAF scores (Schultz et al., 2007).

### **Post-Traumatic Stress Disorder**

Due to the noted success of EAP with children and adolescents with backgrounds with violence and the fact that the United States of America has had two recent wars in the past few years, it comes as no surprise that currently the research and use of EAP for Veterans has become increasingly popular (Wise, 2012). EAP can be very useful to Veterans, especially those suffering PTSD, due to the core characteristics of this particular therapy. At the center of EAP is its nature as an experiential type of therapy where the client actually acts out the resolution to

various problems (Masini, 2010). Yet at the same time, it is an indirect therapy that offers clients protection (Wise, 2012). Clients with traumatic backgrounds do not automatically respond well to comforting words or words that push too hard. Creating a situation that causes a client to breakdown negatively can have adverse after effects. The most obvious after effect would be the refusal to return to therapy or a break in the therapeutic alliance. EAP allows clients to work through their current issues as they interact with the horse, while staying protected from a direct confrontation with a therapist alone (Wise, 2012).

There are several avenues of EAP where this indirect experience occurs: primarily with nonverbal communication, using the horse as a metaphor, being able to see how one's behavior through the horse's reactions, and actually experiencing the therapy as it plays out. Trauma is not particularly something a client wants to discuss in great detail, but with a horse, significant communication can occur without a single word uttered. With whatever emotion or memory the client is signaling with his or her body language, the horse in turn is always giving feedback to the client and therapist and so sessions proceed with minimal, if any, verbal language (Wise, 2012). The metaphors that horses may represent for the clients can be formidable tools used to stimulate memories related to the frontlines. They can awaken the individual's own sense of their emotional state, which may have been buried by common coping strategies used by Veterans, such as numbing and detachment (Masini, 2010).

Detachments from one's own emotions or memories are not the only things Veterans with PTSD feel cut off from. Many feel distant from other people (even their loved ones) and this prevents them from having successful intimate relationships with others or the ability to

empathize with others (Wise, 2012). During EAP sessions the Veterans are able to connect and be accepted by another living creature, which can foster a sense of community if used in a group therapy setting (Masini, 2010). Establishing a bond with a horse is only the first step in the client-horse relationship. As the relationship develops, clients can also recover a sense of empathy (Burgon, 2011;Wise, 2012 ). Horses not only bring about changes in a client's emotional relation towards living creatures, but also bring the Veteran a sense of safety and an impression of well-being (Masini, 2010).



## **EAP and Therapy Approaches**

EAP is a product of empirically based therapies and provides the opportunity to fully engage clients whom traditional therapy cannot reach (Wise, 2012). There are a plethora of approaches and therapies closely associated with EAP, such as cognitive-behavioral, psychoanalytical, humanistic, and solution-based therapies (Burgon, 2011). As well as person-centered therapy, EAP can be especially aligned with experiential Gestalt methods due to the inclusion of the use of body language as a therapeutic tool (Schultz, Remick-Barlow, & Robbins, 2007). The type of approach or philosophy used by the psychotherapist during a session is usually based on their previous study of approaches and experience with different therapies (Burgon, 2011).

For instance, Klontz et al. (2007) integrated their own theoretical design into EAP, creating an outgrowth called Equine-Assisted Experiential Therapy (EAET). This is a theoretical framework consisting of techniques from experiential therapy with an approach of humanistic-existential that works to use client's experiences as a therapeutic tool for healthy changes (Klontz et al., 2007). The core therapeutic benefits from this type of EAP were aimed at aiding clients in resolving issues in their life, alleviating mental distress, and changing maladaptive behaviors into healthy ones. At the end of the study the participants showed significant improvement from the pretesting to posttesting and the follow ups in the areas of psychological welfare and a decline in distressing psychological symptoms (Klontz et al., 2007).

Even if a client is responding to a traditional talk therapy, EAP can still be used as a wonderful adjunct to the main treatment. A therapist may refer his or her client to an EAP

program, but the therapist may also participate in the therapy. During the session, the client is not only out of the usual office environment, but is solving his or her problems by acting them out right in front of the EAP staff and their general therapist giving them an excellent new perspective (Christian, 2005). EAP allows the therapist to see exactly how their client acts in the real world and not just what he or she portrays in an office (Wise, 2012).

EAP can also be readily applied to both individualized sessions and group therapy. Whereas individualized therapy can offer privacy, group therapy also has its own set of advantages such as creating an atmosphere of community that some clients' fail to experience in their own lives (Masini, 2010). A multi-person EAP session may consist of a family, a couple, or any other group setting. Not only are clients bonding with the horse and therapist, but with their fellow group members as well by having to accomplish activities by use of effective communication, teamwork, creative and critical thinking. Typically, the group's participants must modify their individual strategies, which encourages novel ways of engaging with the other group members and is usually followed by group discussions that offer unique viewpoints for the rest of the group. An example of a group activity would be having a group try to make a horse walk over a low jump (Trotter et al., 2008). Jumps are ground poles that are situated at different heights for different effects for both training and show jumping. Rules can consist of no verbal communication besides a brief plan before the activity begins and the group cannot physically touch the horse, use food as a bribe, or any halter or leads. Such an activity can not only represent a dilemma in a client's life, but enhance team skills, urge client's to find different solutions, and help with facilitating cooperation and respect within the group (Trotter et al., 2008). In a group EAP session, activities can take place as a group like the previous example or

each member may have his or her own assignment. For instance, a client would try to initiate a join up with a horse. A join up activity is where a client tries to interact with his or her horse while in a round pen, however the horse is free from any restraint. It is the client's task to learn how effectively to use his or her body language to create a bond with the horse and ultimately have them follow after the client without a lead (Burgon, 2011). Often times if a group member is having a difficult time completing his or her task with the horse, other group members will offer support, encouragement, and advice when needed (Masini, 2010). Group therapy encourages learning better communication and social skills to cooperate and operate with other members (Trotter et al., 2008).

### **Additional Benefits over Traditional Talk Therapy**

EAP is a therapeutic model that not only addresses nonverbal communication while forming trusting relationships, but is also designed to tackle confidence, self-esteem, boundary issues, and interpersonal effectiveness for clients. Horses are large enough animals to decide whether or not to follow a client's direction in performing a task. Clients cannot force their horse to do something unwillingly, and the animal may avoid the client altogether if the person's body language and voice are too aggressive (Burgon, 2011; Wise, 2012). For instance, trying to move a horse by pushing will only result in the horse staying in the exact same spot. No matter how hard a person pushes, if the horse is not willing to move, it is going to stay exactly where it is. Trying to force an animal of that size is futile and the same can be said if the client is too intimidated or hesitant in directing the horse to perform an assignment (Masini, 2010). During grooming, cleaning of the hoof with a pick is necessary, but a horse will only pick up its foot if asked to correctly. No matter how hard a person yanks on a leg, unless they use the correct

technique and body language the horse will simply ignore them. This situation can be frustrating and exasperating to clients, especially younger ones, but it serves as an excellent means for the therapist to open up a dialogue about the emotions and a lesson that the horse will respond better if different behavior is used (Schultz et al., 2007). So when that individual is able to adjust his or her body language and tactics either to be less aggressive or in other cases be more assertive, the outcome can turn into an increase of confidence and healthier self-esteem for the client (Christian, 2005).

The healthy environment in which EAP takes place also heightens its therapeutic value (Wise, 2012). These therapies occur outdoors in a nature setting and require clients to get physically involved. It also calls attention to clients' awareness of their psychical selves and their senses (Schultz et al., 2007). Also those afflicted with PTSD, especially Veterans, may encounter anxiety over leaving their home, which leaves them isolated from others. EAP is able to offer an outdoor setting to induce clients into the sun light and encourage more outdoor activities (Wise, 2012). The barn area, with its musty scent of straw and horse can also create a safe haven like atmosphere (Yorke et al., 2008) This setting can set the stage of bringing an awareness of their own safety, how their choices can affect it, and even invokes understanding of the client's position in the world as to how they relate to others in their environment (Schultz et al., 2007).

## **Where EAP is Today**

### **Availability and Affordability**

How accessible is EAP? Truthfully it depends on the location; for instance Florida and Texas have a higher number of EAP and EAL operations than Alabama or Illinois. On the EAGLA website, there is a map that lists all EAP and EAL facilities in their association that are certified by EAGLA so that psychotherapists or potential clients can determine if an EAP center is within their area (Equine Assisted Growth and Learning Association, 2010). This website not only displays locations in North America, but around the world. EAGLA currently has a membership list of over 3,500 practitioners in 41 countries. EAGLA spans over the continents of Africa, North & South America, Europe, Africa, and Australia (Equine Assisted Growth and Learning Association, 2010). An example of an overseas equine therapy program in Australia would be Horses for Hope, which is a treatment facility that uses traumatized horses to facilitate therapy with traumatized clients (Epston, 2011).

Horses are not known for being the easiest animal to care for or the cheapest to maintain. Some facilities are EAP centers solely, whereas others have additional revenue generating activities to offset the cost; however, due to the monetary involvement associated with horses it can be a costly therapy (Burgon, 2011). An example of rates would be at the Equine Education Center, they are currently able to offer EAL services for \$50 per hour and EAP for \$75 per hour. There is already an equine specialist and licensed clinical psychologist on staff, but outside certified therapists also take part in sessions with their clients (Wise, 2012). EAP is generally a short-term therapy that receives quick responses especially from younger clients (Schultz et al.,

2007). Regrettably, due to its novelty and newness, most insurance companies in the United States may not cover EAP. However, EAP is more accepted places such as Canada and European countries; some examples are England, Ireland, Denmark or Germany, where insurance companies offer coverage more frequently perhaps due to different insurance systems (Wise, 2012).

## **Research**

While the field of EAP is growing with great potential there has been little research into its effectiveness, no doubt a sore subject for both EAP therapists and critics (Masini, 2010). Since last year, no randomized clinical studies have been initiated (Wise, 2012). Typically results and any research are based upon staff observations and client surveys that offer insight, but lack weight that systematic research methods can offer (Masini, 2010). Research projects take time to be produced and executed. While a gap in solid research is troubling, it will not always be so. Research on equine therapies are beginning to crop up, such as the studies by Schultz et al. (2007), Trotter et al. (2008), Burgon ( 2011), Graves (2011) have demonstrated. In just this year a study on equine therapy on the treatment of physical and psychological wounds from combat was initiated by the University of Central Florida in conjunction with Heavenly Hoofs, Inc., which is a certified therapeutic horseback riding facility found in Kissimmee, FL and currently is running with a program for Veterans called Horses and Heroes. Seeking to close the research gap of therapeutic riding in reference to its benefits with Veterans, Dr. Manette Monroe and her colleagues sought to conduct a study in equine therapy's efficacy in improving the lives of Veterans. The current pilot study induced pre and post-treatment testing consisting of Beck's Depression Inventory II and Adult Attachment Interview to determine any significant

differences between testing. While the study is in the preliminary stage, Dr. Monroe was able to confirm that for all but one participant the scores on the post-testing of Beck's Depression Inventory II scale significantly improved (Monroe, M., 2012, Monroe to K. A. Wilson, October 16, 2012) . As one of the most recent studies of equine therapies, it demonstrates the growing interest and potential research avenues that can be applied to other equine therapies like EAP.

## **The Future of EAP**

EAP is a special type of therapy that uses one of nature's most beloved gifts, the horse, as a healing agent. What makes it truly special is the way that horses can engage reluctant clients, act as a metaphor, boost self-esteem and confidence, serve as a confidant, and increase one's self awareness (Christian, 2005). EAP can also target problems with social interaction, anger management issues, boundaries, empowerment, and problem-solving skills (Burgon, 2011; Wise, 2012). While the potential is immense, there are many inquiries to be answered by additional research and practice. Potential avenues of research could possibly consist of the different types of equine therapy or the effectiveness for specific clientele groups. A good topic would be to study both a traditional and EAP with the same type of theoretical design and approach to examine the actual effects of incorporating a horse into the therapy.

While EAP is therapeutic to a wide range of clients EAP appears to particularly effective in dealing with clients who at one time or another experienced trauma, or more specifically violence, at the hands of another individual such as abuse, assault, sexual violence, and war. Horses can emit a sense of tranquility and safety so that while clients are working towards their therapeutic goal they do so in what they consider a safe environment. The restoration of empathy and the ability to form new bonds and trust after a violent or traumatic experience are a highly important benefit that a horse can initiate. There are three large areas that I believe EAP will prosper in: both adolescents and women who were involved in traumatic experiences surrounding some form of violence, and clients suffering from PTSD, or more specifically Veterans. While EAP does show promise towards effectiveness for many different clientele, just



like traditional talk therapies it is not suited for every individual. This is especially true if there are medical reasons or the potential client has adverse feelings towards horses.

As the field continues to expand, it increases awareness in the discipline of psychology of its efficacy and provides an alternative for those who are in need of a nontraditional therapy or are looking to learn about themselves and how they interact with the world around them.

Whatever the future holds for EAP, its ability to help clients in its unique way will no doubt be a great asset to the mental health profession.

**Appendix: Personal Communications**

## **Appendix: Interview**

### **Dr. Sandra Wise, a Doctor of Psychology**

Dr. Sandra Wise is a licensed psychologist who has worked in a variety of occupations from private practice, to teaching graduate classes, to conducting workshops. Her client list includes people all ages, persons with Autistic Spectrum Disorder, Veterans with PTSD, people from all different types of life difficulties, as well as a number of years with inmates. Dr. Wise worked for several Colorado prisons and for the Delaware State Department of Corrections as the Director of Mental Health. In the year of 2002 she changed her venue of prisons to a ranching facility to use her foundation of applied behavioral analysis education for the training of horses and cattle. From her experience of being a mental health practitioner and horse trainer she expanded into the world of Equine-Assisted Psychotherapy. Her website, Eyeofahorse.com, promotes her EAP therapy as well as listing her credentials and curriculum vita.

### **Dr. Wise Interview: Friday April 27, 2012 at 12:00pm**

This was an interview conducted between Kristen Wilson and Dr. Wise that was audio recorded and then transcribed. The format began as an overall speech on EAP from Dr. Wise, followed by several specific questions from Kristen Wilson.

**Dr. Wise:** So what are clinical skills, so we define what clinical skills are and those are the skills that you use in being a psychotherapist, and there are several dozen of them and we just go into a discussion of what your clinical skills are.

So it's the ability coming from one's knowledge, practice, and aptitude to do something well.

A skill is something you do. It is not good enough just to know how to do something but you

have to be able to do something it and skills take practice. That's a lot. You have your bookwork, just because you have the knowledge, you've been exposed to it, doesn't mean you can get it done. This is the same thing as horse training actually. So, when you talk about clinical skills we are just talking about being in a clinical setting with persons with problems so that's what clinical skills are being able to engage and do things with a clinical population, people that have problems, not talking about it, not knowing how to do it, but be able to do it.

So basic clinical skills, this is in a medical setting, so that you'll understand what doctors should be able to do, they should be able to communicate, give a physical examine, palpitate things, listening with a stethoscope and so forth. In psychotherapy, what is a clinical skill in psychotherapy? Here's a list of examples of what we can do to in equine assisted work to teach student therapists how to do clinical work in general and how to do equine assisted psychotherapy. List of skills used most relevantly with horses include: you engage the client, facilitate a working relationship, use timing, set your pace of your therapy, stay present with your client, use body language, track and scan your client. This is how we teach people who just want to be good psychotherapists or who want to do equine assisted therapy work to understand those skills. So, clinical skills for psychotherapists they are difficult to put into language so you'll understand how to do them.

In other words, they are difficult to operationalize and actually get a person to understand how you do this thing...engaging the client, let's say. These skills are difficult to standardize and to say this is the way you do it every single time and the only way to do it. They are difficult to

teach how to do it and they are difficult to learn as well as to measure or assess how good you are at them.

So, how do we learn clinical skills, typically in school you get lectures, you engage in role play, then... Yikes! The real thing...you got to go in there with a client. So why is this so scary?

What's the worst thing can happen? You might harm the client and say the wrong thing, you might be incompetent, and that's why it is so scary when thinking of working with a real patient.

Is there a better way to bridge that gap between role play and pretending and doing the real thing, seeing the real client? Could there be a way we could safely and comfortably practice those skills and have fun doing it? Yep, how about an experiential hands-on equine assisted learning model to teach students clinical skills? And how would that be helpful because psychotherapists are worried about what to say and what not to and saying the wrong thing? So, we take out the words because you don't talk to horses and horses do not talk to you and you're fearful of hurting another person, so we take the human being out-of-it and put a horse into it, in a natural setting, so that you can focus on just the process of engaging the client and pacing the therapy and keeping it going at the rate you want it to go, mirroring, using eye contact, using all of those things you can do with a horse just as well as you can do with a person. Though psychotherapy is known as the "talking therapy", talking is not the primary therapeutic element but what really makes psychotherapy work is the relationship. So you can experience the power and explore the pure interaction that defines the therapeutic alignments without worrying about words and the anxiety that comes with thinking you're putting a real client at risk. The horses give you feedback and then you have happy students, happy horses.

This is the part that starts discussing equine assisted therapy. It comes by all different kinds of names and that gets very confusing and so, be sure to point that out. Some people call it EAP, EAL, EFT; all those different names people call it. So this is why there is a lot of confusion as to what it actually is because everybody calls it something different. It's not being a cowboy, it's not therapeutic riding, and it's not pet therapy. So here is a simple definition of it the best way you can think of it is that we are just using the interaction with a horse to facilitate psychotherapy or growth and learning experiences. So it's good to distinguish whether or not you are really doing psychotherapy as you have to have a mental health license person to practice psychotherapy. A lot of stables have programs like this and they call it equine assisted growth or equine assisted learning experiences and that's valid as you don't have to have a licensed psychotherapist there but people need to understand then you shouldn't be treating people with schizophrenia or with severe depression and all of that unless you have a licensed mental health person on staff. This is very important. Okay, so how does it work?

So by definition, if you are talking about EAP, there has got to be a licensed mental health professional & equine specialist, who Dean is with us, has at least 8,000 hours of hands-on horse training experience and horsemanship experience. Then you need your client and a horse. The horse activities, here's an important point, this one means they are integrated into an empirically based treatment approach. This is nothing new. This is no weird kind of a thing. You are taking cognitive behavioral therapy. You are taking psychodynamic therapy and all of these therapeutic approaches that have been proven time and time in again in the literature, in the research, and then you are just putting in a horse in the middle of it. So, this is nothing dramatically new that's never been proven. You are already using an empirically studied approach. You are just adding

a horse. This important to note, because, you will get a negative reaction that says... “This has never been proved!” or “There’s no research on it” and so forth so you say “the basic models that were used are already proved in research”.

The horse serves as a catalyst to allow the clinical issues to surface. All the horse is doing is making your issues come to the surface because you are acting out; you are physically moving and interacting with him. This is an important thing to quote to use...”What happens in the round pen is just a microcosm of what happens in the real world”. You will see that the client or person will act the same way as they do out in the real world. And as a psychotherapist, what goes on in the round pen will help you understand yourself as a therapist because you might be projecting transference some of those terms that you know as a therapist you have to be aware that you are a human being too and those issues will come up from you. The horse acts as a metaphor; he can for the problem, represent someone else in the client’s life, or stand for the solution to a problem that this client is experiencing.

Another important piece that makes this therapy work is that the horse is responding to you and the horse is also reacting to yours and your client’s behavior. And the same thing works for you, as you are responding to the horse and acting in ways for him to respond and so you can say that the client and the horse are a stimulus and a response for each other. There is a “lot of stuff going on there” and so it gives you a lot of fodder or “meat & potatoes” for you to work with as a therapist. You can talk about the different dynamics of the relationship and the most important piece is because you are acting these out you’re experiencing it. The biggest piece that makes

this therapy work is that it is experiential for the therapist and the client, and that just means you are not sitting in an office talking about your problems but you are actually acting it out. If you have a relationship problems, if you have personality problems, were you are a little bit too shy, hesitant and passive or you are too aggressive it will play out right there in front of your eyes as you are acting it out.

And then the whole section on why we use horses and you are aware of most of this Kristen and so we will just hit these topics and you can fluff them out....

Animals of Prey – As horses are animals of prey, they are supremely sensitive to their surroundings for protection and survival...be sure to put this in.

They can detect very subtle things about human beings because they are always looking; always alert, always expecting that something bad is going to happen. And so they give you... (Use these words) immediate, clear, and accurate non-judgmental feedback. This is why they are called in our program “big barometers in brown coats”. I have people look at the eye of the same horse taken just a couple of seconds after each other and with me acting differently in front of him which is why we call it *The Eye of the Horse* is the name of the Psychotherapy Program at the Equine Education Center. Take the information off of this slide about the research and list these points.

They can be specially trained to assist in this type of therapy.

As of last year there has not been randomized clinical studies taken as of year. But this type of therapy is becoming more of a topic for research now. The College of Medicine at UCF is



currently engaging in a large research project with the V. A. Hospital and this might be one of the biggest studies to be done to-date.

So what populations can benefit in other words what kind of clients might be the best to gain some benefits from this type of therapy. Couples, Family relationships – whole families, Veterans, Abuse victims, Perpetrators. People who have trouble with establishing boundaries with people who act as predators towards them can learn to set boundaries because horses are large and intimidating and you can teach victims to learn to set their boundaries. Persons with autism spectrum disorder. Persons with problems in communicating with language often do well with animals. Use quote from Ms. Temple Grandine. Athletes or Athletic teams who need to work on leadership, working together as a team. Law enforcement officers who have to set boundaries who have to get their subjects to comply with the laws whether the officer is trying to arrest them or trying to get them to follow the laws if they are misbehaving in the community. Law enforcement officers can benefit from interacting with the horses to see what skills they personally have in order to get a horse to comply with a command. Team building for various organizations and corporations Anyone seeking a personal growth and learning experience.

Much of the research being done currently is with disabled Veterans. They have done several such programs at the equine center. Veterans with post traumatic stress syndrome disorder could benefit from include:

1<sup>st</sup> point. This therapy is experiential, yet it's indirect. People that have had trauma don not necessarily want you to confront them with it in their face because they can have a very bad response or reaction or breakdown so to speak. So if you use indirect methods with folks that

have been in combat for example, they just think they are playing with horses they don't realize that they are working on their deeper problems so, it is indirect, yet the soldier is still acting it out, but not sitting in an office talking about it.

2<sup>nd</sup> point. The client engages in communication yet there is no talking necessary. A lot of times, people who have been in combat who have post traumatic stress disorder from any kind of trauma really don't want to talk about it. But yet, they can somehow communicate what they want to communicate and get things back from the horse without ever talking about their problem.

3<sup>rd</sup> point addresses the issue of trust, intimacy, bonding, & empathy. This is a problem from combat Veterans, for disabled people who sometimes feel different who feel distance between themselves and others so they can like Temple Grandine's work and bond with animals more easily, feel an intimate relationship, have empathy as to how this other being might feel ...oh, look the horse is scared, the horse is intimidated...where they really couldn't do that with another human being.

4<sup>th</sup> point. It is an outdoor activity that is in a healthy environment and requires physical activity. So many Veterans and disabled persons in general, but people with post traumatic stress disorder are often too afraid to go out and so constantly stay inside and remain isolated. This form of therapy gets the client outside into sunshine and fresh air.

**Kristen:** Effective with Children?

**Dr. Wise:** Have treated as young as ten and with autism. The model can be equally effective with children as with adults. However, because of safety issues as horses are loose with liberty, treating children younger than 6 years old is generally not done and the maturity of the child is taken into consideration as well at the Equine Center.

Horses are free to roam in a large area and halters and ropes/leads are not used. The reason for this is so that the horse can be freely responding to the client. Otherwise, you do not receive enough information from the horse as he is being restricted in his interactions and you would not be able to receive true and honest feedback from the horse. The horse must have the ability to freely choose his actions in response to the client.

**Kristen:** What is the affordability of this type of therapy?

**Dr. Wise:** As of right now for the growth and learning experience it is currently \$50 per hour. If it's individual psychotherapy with a licensed mental health counselor the cost is \$75 per hour. At this time, most health insurance companies do not cover this kind of service and so clients are accepted by practitioners on a customized fee basis with prices ranging from \$50 to \$75 per hour.

**Kristen:** Is it possible for an outside psychotherapist bringing a client to the facility to engage in this kind of therapy?

**Dr. Wise:** Yes, as there would be no need for the center to provide the licensed therapist, this situation would be treated as if the client was receiving a growth and learning experience

**Kristen:** How are appointments made? Are referrals from mental health care providers required?

**Dr. Wise:** No. Anyone may visit the center and learn about the services available and set up an appointment. Appointments may be made by calling the Equine Education Center directly.

**Kristen:** From where do clients come?

**Dr. Wise:** From all avenues, word-of-mouth by former clients, other mental health providers, their website, and universities that the center is associated with.

**Kristen:** Are there other such facilities that provide this type of therapy in the area?

**Dr. Wise:** No. However, there are lots that use horses for a client's for physical therapies. There is no other facility in Central Florida that provides mental health care with free roaming horses at liberty. The center has approximately 30 mannered but not overly disciplined horses as would be required for therapeutic rides. Horses trained to provide therapeutic treatments are taught to exhibit regimented behaviors not suited for psychotherapy as previously discussed and are "robotic" with clients. The Center trains the horses to be mannerly with clients and stay within certain property boundaries but no other changes are made to their behavior. The Center does not alter the natural curiosity horses have or teach them to act in a prescribed way that would be different from his natural bent and this is what makes this a premier facility of its kind. The Center reinforces and encourages curiosity and interactive behavior in a horse. When horses are interested and trying different things, the horses are rewarded.

This type of therapy is becoming better known in the United States as the amount of research continues to grow. This type of psychotherapy is also already widely accepted and practiced in Europe as well as Canada and covered by healthcare providers in those countries.

It has been a slow process to gain acceptance in particularly academics setting due to the cognitive or research projects to be developed, implemented, and carried out. It just takes time. Other approaches widely used today such as cognitive behavioral therapies and Gestalt therapies also started out as ideas that were slightly different from the norm. Quote Temple Grandine as the pioneer in this field and is the one who has brought respectability for this form of psychotherapy among peers.

### **Dr. Manette Monroe, a Doctor of Medicine**

Dr. Manette Monroe is a licensed medical doctor currently employed at the University of Central Florida College of Medicine as both an Associate Dean for Students and an Assistant Professor of Pathology. Dr. Monroe also has a background in horsemanship and strong associations with the equine community. She has also worked in the healthcare sector for Veterans and can be linked with five different VA Hospitals.

### **Dr. Manette Monroe Correspondence**

Below are three emails and an attached IRB form about the pilot study conducted by Dr. Monroe and her colleagues. The first two correspondences are to show that permission to include the team's current research and actual inclusion of the correspondence in this thesis was granted by Dr. Monroe. The last is in regards to the content of the information about the study.

*Email from K. Wilson to Dr. Monroe: Friday, October 12, 2012*

Hi Dr. Monroe,

First let me thank for this great opportunity to see some of your work, it is very much appreciated. I would love to meet with, as I prefer face-to-face communications. Unfortunately I've been scouring my schedule for a good date but I can't seem to find one. I'm actually a regional campus student so I rarely get the chance to get over to the main campus. I also work full time so usually Sundays are my free days. Actually looking at my planner made me realize that really need to drop something cause I'm turning into a hermit. Thankfully I'm at the last stage of my thesis and really have one last final copy to my chair then I'll be done. Feels good :)

Just to give you more information on my thesis is that I investigated whether or not Equine-Assisted Psychotherapy (EAP) was an effective therapy in comparison to or in conjunction with traditional therapies. The purpose of my Honors Thesis was to synthesize the current knowledge, elaborate on the possible future potential, and disseminate this information to the scientific community for further evaluation. I would like to include any information that you feel comfortable with providing about your study, or what you intend in the future in the in my sections about what is going on in the Research and Future EAP. Even if its not exactly EAP from what I read it surrounded equine-therapy and Veterans and I strongly believe that is an area where EAP will flourish. I'm actually in the process of applying to Ph.D. programs that have research in the field of PTSD.

Any information would be helpful no matter how much or small. I also want to make sure that you are comfortable with it being mentioned in a thesis that I intend to publish in a journal and also present at SEPA or SURE. Also if its okay with you the correspondence may be put in an appendices section for reference. If you feel uncomfortable at all or if having information on your study or program published at this time would affect it in way, that is perfectly fine.

Thank you again for your time and help. Enjoy your weekend!

Sincerely,

Kristen Wilson,

President, Psi Chi @ Cocoa

Undergraduate of Psychology

University of Central Florida

*Email from Dr. Monroe to K. Wilson: Friday, October 12, 2012*

Hello Kristen,

I totally understand about being crazy busy! In fact, it will be Monday afternoon before I have any time to address your questions. I will be glad to share what I am doing with you and will

be honored to have my work mentioned in your thesis! I am doing EAP work and I will e-mail you Monday with details!

Have a not too busy weekend!

Mänette Monroe MD MEd

Assistant Dean for Students

Assistant Professor of Pathology

College of Medicine

University of Central Florida

6850 Lake Nona Blvd.

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Orlando, FL 32827

Phone: 407.266.1359

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[manette.monroe@ucf.edu](mailto:manette.monroe@ucf.edu)

<http://www.med.ucf.edu>



*Email from Dr. Monroe to K. Wilson: Tuesday, October 16, 2012*

Hello Kristen!


Monday proved to be quite the day!! I am attaching my IRB submission, as it will give you the best overview of what I am doing. While the results are preliminary, I can tell you that there was a statistically significant improvement in the Becks Depressions Inventory for all but one participant. The qualitative analysis has revealed themes of improved coping skills, greater self-confidence and improved relationships. This cohort is again working with me in advanced sessions. They are being evaluated for residual effects of the first sessions after a 6 month break and what additional changes can be realized with the work we are doing in the next eight week series of sessions. We ended up not doing the post treatment physical examination because all of the participants tested as normal on intake and we would not be able to measure improvements.

Please give me a call or an e-mail to clarify anything.

Thanks!

Mänette Monroe MD MEd

Email attached IRB form from Dr. Monroe to K. Wilson: Tuesday, October 16, 2012

 <p>University of <b>Central Florida</b></p>	<p>Human Research Protocol Template</p> <p>IRB Template Version Date 11/19/2010</p>
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- **If you believe your activity may not meet the definition of “Human Research” subject to IRB oversight, contact the IRB Office prior to developing your protocol**
- **Prepare a document with all of the sections listed below, using the “INSTRUCTIONS: How to Write a Human Research Protocol” document as guidance. If a section does not pertain, indicate with “N/A.”**
- **Note that, depending on the nature of your research, certain sections below may not be applicable. Indicate this as appropriate.**
- **For any items described in the sponsor’s protocol or other documents submitted with the application, you may reference the page numbers of these documents. If you reference page numbers, attach those pages to the Investigator Protocol. Limit attached pages to those referenced in the Investigator Protocol.**
- **When you write a protocol, keep an electronic copy. You will need to modify this copy when making changes to the protocol.**

### **1) Protocol Title**

Efficacy of Therapeutic Horseback Riding for Treatment of Military Veterans with Combat Related Physical and Mental Injuries

### **2) Investigator(s)**

Mänette Monroe MD MEd

Assistant Dean for Students

Assistant Professor of Pathology

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Orlando, FL 32827

Phone: 407.266.1359

Cher Meyers LCSW CFM

President, S.A.D.L.E.S. Therapeutic Riding Program

Director of Equine Services – La Amistad Behavioral Health Services, Maitland, FL,

41025 Thomas Boat Landing Road

Umatilla, FL 32784

Phone 352.267.5616

Mariana Dangiolo MD

Assistant Professor of Family Medicine and Geriatrics

College of Medicine

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Suite 410E

Orlando, FL 32827

Phone: 407.266.1191

### **3) Objectives**

This pilot study will examine the efficacy of an existing nationally certified therapeutic horseback riding program in improving physical and psychological outcomes for self-identified combat injured American military Veterans.

### **4) Background**

Equine assisted therapy is utilized throughout the world to ostensibly benefit persons with many types of physical and psychological disabilities. This type of therapy became initially utilized in Europe in the 1960's and was established in the United States in 1969 with the incorporation of the North American Riding for the Handicapped Association (NARHA). This association has been recently re-named the Professional Association of Therapeutic Horsemanship International (PATH Intl.).<sup>1</sup>

The application of equine assisted therapy to disabled American military Veterans began in 2006 with a pilot program involving the 1st Infantry Battalion, 3rd Infantry Regiment at Fort Myer, Virginia in conjunction with NARHA. Six wounded military Veterans who had served in Iraq and Afghanistan participated in a four week therapeutic horseback riding program.<sup>2</sup> Since that time, PATH Intl. has established the Horses for Heroes™ program. This program is now offered by over 60 PATH Intl. recognized centers in the United States.<sup>1</sup> While there are many centers offering this treatment modality, there has yet to be the identification of clinical best practices for either the civilian or Veteran population.<sup>3</sup>

While testimonials of the benefits of equine assisted therapy are abundant, only scant peer reviewed literature exists. This scholarly work has been primarily focused on the efficacy of equine assisted therapy for the treatment of children with cerebral palsy.<sup>4,5,6</sup> Numerous reports of successes with other populations have been published in the last three decades, ranging from

case studies to opinion statements, but the majority of these publications has lacked the scientific rigor that is the hallmark of evidence based research. <sup>3</sup>

The current pilot study proposes to evaluate the psychological and physical effects of an eight (8) week program consisting of one hour weekly sessions of therapeutic horseback riding on military Veterans. Currently eight (8) American military Veterans who meet study inclusion criteria and have participated in the Vietnam, Iraq or Afghanistan wars are enrolled in these sessions. These Veterans are self –identified as having physical and psychological trauma from their wartime experiences. The participants are surveyed prior to participation in a therapeutic horseback riding program for signs of psychological trauma as a part of the program intake process. A Florida licensed clinical social worker, with experience working with the Veteran population, uses industry standard instruments for the psychological evaluation. A standard, non-invasive neuromuscular examination is conducted by a Florida licensed physician. This testing is utilized to establish a baseline of psychological and physical functioning prior to the beginning of the therapeutic horseback riding sessions. This protocol is utilized as the intake procedure for all participants in the Horses and Heroes Veterans’ therapeutic riding program at Heavenly Hoofs, Inc.

The therapeutic horseback riding sessions will be conducted by Heavenly Hoofs, Inc. at their facility in Kissimmee, FL. These sessions will not be a formal part of the research protocol, as these Veterans will be participating in therapeutic horseback riding whether they consent to participate in this study or not. This center, along with its personnel, is a certified PATH Intl.

therapeutic horseback riding program serving over 2000 clients per year for over twelve years. Standard therapeutic horseback riding practices, as specified by PATH Intl., will be utilized in each of the sessions.<sup>1</sup>

Study participants will be asked to undergo a post-evaluation at the conclusion of the therapeutic horseback riding sessions, consisting of completion of similar psychological instruments and physical examination utilized at the pre-evaluation session, along with a narrative evaluation of the perceived success of the program. These results will be analyzed for statistically significant pre-and post-differences.

It is hoped that this pilot study will identify any statically significant differences in pre- and post-treatment outcomes from participation in a therapeutic horseback riding program for this small sample of Veterans. It is further anticipated that this study will begin the process of identifying clinical best practices for this treatment modality and patient population.

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## **5) Setting of the Human Research**

This pilot study will be conducted in cooperation with Heavenly Hoofs Inc., a Professional Association of Therapeutic Horsemanship International (PATH Intl.) certified therapeutic horseback riding program located in Osceola County, Florida, USA.



The physical address of the site is: 1875 Silver Spur Lane, Kissimmee, FL 34744

## **6) Resources available to conduct the Human Research**

*Demonstrate (e.g., based on retrospective data) a potential for recruiting the required number of suitable subjects within the agreed recruitment period.*

There are more than 45,000 military Veterans in the greater Orlando area. The pilot study cohort will consist of all Veterans who have participated or are participating in therapeutic riding instruction with Heavenly Hoofs, Inc. who meet study inclusion criteria. Currently there are eight (8) eligible participants. Due to the strong response for enrollment in the Heavenly Hoofs Horses and Heroes Program, this number is expected to increase for future studies.

*• Describe/estimate the time that you will devote to conducting and completing the research within the agreed time period.*

This pilot study will be conducted following the completion of the current therapeutic riding sessions for Veterans at Heavenly Hoofs, Inc. These sessions will end on or about May 17, 2012. Completion time for this project is projected to be July 30<sup>th</sup>, 2012.

• *Describe the number and qualifications of your staff, their experience in conducting research, their knowledge of the local study sites, culture, and society.*

Principal Investigator:

Mänette Monroe MD, MEd

Associate Dean for Students University of Central Florida College of Medicine

Assistant Professor of Pathology University of Central Florida College of Medicine

Florida Medical License # ME 103105

Research Experience – See attached CV in Appendix A

Co-Investigators:

Cher Meyers MS, LCSW, CFM

Florida Medical License # SW 1333

President – S.A.D.L.E.S. Therapeutic Riding Program, Umatilla, FL, USA

Director of Equine Services – La Amistad Behavioral Health Services, Maitland, FL, USA

EGALA Certified Equine Facilitated Mental Health Professional

PATH Certified Therapeutic Riding Instructor and Equine Facilitated Mental Health Professional

Research Experience - See attached CV in Appendix A

Mariana Dangiolo MD

Assistant Professor of Family Medicine and Geriatrics University of Central Florida College of  
Medicine

Florida Medical License # ME 100963

Research Experience – See attached CV in Appendix A

Both Dr. Monroe and Ms. Meyers are lifelong horse persons with strong ties to the local equine community. Dr. Monroe has been associated with five VA Hospitals during her career and has worked with Veterans' health care for 13 years. Ms. Meyers currently directs a therapeutic

riding program that has been serving military Veterans for 12 years. Dr. Dangiolo is a board-certified family physician with subspecialty certification in geriatric medicine. She has dedicated part of her career to serving the American Indian and Latino populations and has served as a Medical Director for the Indian Health Center of Santa Clara Valley. All three of the principal investigators are strongly committed to serving the local community and the needs of local Veterans.

*• Describe your process to ensure that all persons assisting with the research are adequately informed about the protocol, the investigational product(s), and their research-related duties and functions.*

The staff of Heavenly Hoofs, Inc. is currently certified by PATH, Intl. to participate in therapeutic riding programs. These persons, though working with the subjects, will be conducting their normal interactions and will not participate in the research protocol. The research will consist of a focused neuromuscular physical examination conducted personally by the principal investigator and the administration of psychological survey instruments by the co-investigator after the subjects have completed their therapeutic sessions.

- *Describe the facilities in which your research will be conducted.*

Heavenly Hoofs, Inc. is physically located at Osceola Heritage Park, 1875 Silver Spur Lane, Kissimmee, FL 34744.

Osceola Heritage Park (OHP) in Kissimmee, Florida is a 120-acre entertainment complex which includes the 10,500-seat Silver Spurs Arena, 60,000-square foot Exhibition Building, Osceola County Stadium (home of the Houston Astros Spring Training,) University of Florida Extension Services, United States Specialty Sports Association (USSSA) Headquarters, and the KVLS Pavilion (Osceola County Fair).

Meeting rooms are available at Osceola Heritage Park to conduct the participant evaluations in a private setting.

Heavenly Hoofs, Inc. has occupied a portion of the available horse stabling for twelve (12) years and utilizes arena space adjacent to the stables to conduct therapeutic horseback riding session.

- *Where applicable, describe the availability of medical or*

*psychological resources that participants might need as a consequence of the Human Research.*

Dr. Monroe and Dr. Dangiolo are licensed physicians in the state of Florida. Ms. Meyers is a licensed clinical social worker in the state of Florida and will be available to all participants for the duration of the pilot study. Referral to appropriate outside providers will be available.

## **7) Study Design**

### **a) Recruitment Methods *[Please include the expected number of participants needed to complete the Human Research.]***

American military Veterans who are currently receiving or have received therapeutic riding instruction with Heavenly Hoofs, Inc. will be recruited to participate in this pilot study. There are currently eight (8) Veterans enrolled in the Heavenly Hoofs Horses and Heroes program, though the pool is anticipated to grow in the next months for future studies.

No advertising or printed materials will be utilized.

Participation in this study will be completely voluntary, with no payment offered.

No biological specimens or tissue samples will be collected.

**b) Inclusion and Exclusion Criteria**

Inclusion:

American military Veterans, male or female, aged 18 to 75 years who are currently receiving or have received therapeutic riding instruction with Heavenly Hoofs, Inc. in Osceola County, Florida.

Exclusion:

Veterans aged less than 18 years or greater than 75 years who are currently receiving or have received therapeutic riding instruction with Heavenly Hoofs, Inc. in Osceola County, Florida.

Non-Veterans who are currently receiving or have received therapeutic riding instruction with Heavenly Hoofs, Inc. in Osceola County, Florida.

**c) Study Endpoints**

The study end point will be July 30, 2012. The currently available cohort of Veterans will be concluding their therapy sessions on or about May 17, 2012. The additional time will be utilized to collect and analyze the data.

**d) Procedures involved in the Human Research.**

*Describe and explain the study design.*

- *Provide a timeline of all procedures being performed, including procedures being performed to monitor participants for safety or minimize risks.*



The study will be conducted from May 2012 to July 2012.

- Potential study participants will be asked for informed consent at their final therapeutic riding session on or about May 17, 2012.
  - Individual appointments will be made for each participant to undergo post-treatment psychological assessment, consisting of administration of the Beck's Depression Inventory II and the Adult Attachment Interview. The participants will also have a post-treatment focused neuromuscular examination. These examinations will be conducted by the PI and co-investigators.
  - Dr. Monroe and Dr. Dangiolo are licensed physicians in the state of Florida. Ms. Meyers is a licensed clinical social worker in the state of Florida and will be available to all participants for the duration of the pilot study. Referral to appropriate outside providers will be available.
- *Provide the overall duration of the research.*
- Participation of the subjects will consist of approximately three hours of testing and interviews.
  - Collection of the data and data analysis is anticipated to be completed within 10 weeks of the time participants complete their final therapeutic riding session.

- *Describe procedures taken to lessen the probability or magnitude of risks.*

There will be minimal risk to participants. The physical examination will convey no more risk than being subjected to a standard physical examination in a physician's office. The psychological surveys being administered are of industry standard and convey minimal risk. In the extremely unlikely event of physical or psychological harm from administering the physical examination and the psychological examination, a licensed physician and a licensed clinical social worker will be available for the duration of the study period.

- *Identify which procedures are being done as part of the Human Research and which are being conducted anyway for other reasons.*

#### Procedures for Human Research

- Post-treatment administration of:
  - Beck's Depression Inventory II
  - Adult Attachment Interview

- Post-treatment evaluation of:
  - Neuromuscular function, utilizing standard non-invasive physical examination procedures.
- Collection of post-treatment narrative assessment of success of the therapy in the subjects' own words.

The participation of the study subjects in the therapeutic horseback riding program will not be a part of the experimental protocol. This study will be examining the before and after effects, if any, from subjects who will be participating in a therapeutic horseback riding program.

Consent will be obtained to access existing intake records from Heavenly Hoofs, Inc. and a comparison will be made with post-treatment evaluations. The experimental protocol will not include any supervision of the horseback riding. The therapeutic horseback riding program will conduct its usual protocol for client intake and therapeutic riding sessions.

- *Describe the source records that will be used to collect data about participants. **(See Appendixes B and C for examples of actual instruments.)***

- Beck's Depression Inventory II
- Adult Attachment Interview

- Neuromuscular function, utilizing standard non-invasive physical examination procedures.

- *Describe what data will be collected including long-term follow-up*

Quantitative and qualitative results from above listed surveys and examinations. No long term follow-up is anticipated.

- *If student/school records are to be used, include a list of specific data to be obtained from the school and note whether it is identifiable at the student level, in accordance with FRPA/PPRA requirements.*

Not Applicable.

- *Describe any plans to conduct audio or video recording of research*

Not Applicable.

**e) Data management**

- *As applicable, describe the following:*

- o *The data and specimens to be sent out or received.*

Not Applicable.

- o *What information will be included in that data or associated with the specimens.*

Not Applicable.

- o *Who is responsible for receipt or transmission of the data.*

Principal investigator, Mänette Monroe MD.

- o *How specimens and data will be transported.*

Data will be transported from the point of collection at Osceola Heritage Park to the UCF College of Medicine campus by the principal investigator, Mänette Monroe MD. Data will be de-identified prior to transport.

- o *The plan to manage the data.*

All information (personal or other) will be de-identified and coded. Only the PI will have access to the code key. The study data will be stored in encrypted files (for digital data) and in locked cabinets (for paper data) in the office of the PI at the UCF College Medicine, 6850 Lake Nona Blvd. Suite 115J, Orlando FL 32827, the office of the PI. Data will be stored for at least five (5) years from the completion of the study.

*o Any procedures that will be used for quality control of collected data.*

Quality control of the data collection will be accomplished by allowing only the PI and co-investigators to administer the study protocol in the post-treatment evaluations. Data will be collected utilizing standardized instruments and physical examination procedures that represent the current state of best clinical practices.

*o The data analysis plan, including any statistical procedures.*

*Provide a power analysis.*

Non-parametric analysis procedures of the data will be utilized due to the small sample size of this pilot study.

The application of a power analysis is not applicable to this type of statistical procedure.

**f) Provisions to monitor the data for the safety of participants (Required when Human Research involves more than minimal risk to participants.)**

Minimal risk to participants, therefore N/A.

**g) Withdrawal of participants**

No circumstances are anticipated to exist that may result in withdrawal of participants without their consent.

**8) Risks to participants**

There will be minimal risk to participants. The physical examination will convey no more risk than being subjected to a standard physical examination in a physician's office. The psychological surveys being administered are of industry standard and convey minimal risk. In the extremely unlikely event of physical or psychological harm from administering the physical

examination and the psychological examination, a licensed physician and a licensed clinical social worker will be available for the duration of the study period. Any risk associated with the therapeutic riding program will be the responsibility of Heavenly Hoofs, Inc. as per the standard protocol required by PATH, Intl. A copy of that waiver is included in the appendix.

#### **9) Potential benefits to participants**

There are no direct benefits for participants participating in this study.

#### **10) Provisions to protect the privacy interests of participants**

Personal health information will be protected per HIPPA protocol for research personnel. Due to the public nature of the study site, no compromise of personal privacy is anticipated from that source.

#### **11) Provisions to maintain the confidentiality of data**

All information (personal or other) will be de-identified and coded. Only the PI will have access to the code key.



The study data will be stored in encrypted files (for digital data) and in locked cabinets (for paper data) in the office of the PI at the UCF College Medicine, 6850 Lake Nona Blvd. Suite 115J, Orlando FL 32827, the office of the PI.

Data will be stored for at least five (5) years from the completion of the study.

## **12) Medical care and compensation for injury**

Not Applicable.

This study will only consist of **ONLY** post-treatment evaluation of participants who are currently receiving or have received therapeutic riding instruction with Heavenly Hoofs, Inc. in Osceola County, Florida. The actual therapeutic horseback riding will be administered under the supervision of Heavenly Hoofs, Inc. and PATH Intl. who have their own participation consent and release process. In addition, all risk for participation in equine associated activities is covered by Florida Statue Title XLV Torts Chapter 773 Equine Activities.

### **13) Cost to participants**

No cost to participants.

### **14) Consent process**

Study participants will have a private orientation session prior to the beginning evaluation sessions with both the Principal Investigator and Co-investigators present. Written consent will be explained, with any questions answered and obtained in this private session.

### **15) Process to document consent in writing**

It is anticipated that this study will be granted Expedited status and the UCF IRB form **HRP-302c: Summary Explanation for Exempt Research (DOC)** will be the appropriate format for obtaining informed consent.

**(See Addendix D for example of consent form).**

**16) Vulnerable populations (Pregnant Women, Minors, Prisoners, Decisionally compromised adults, others)**

N/A

**17) Drugs or Devices**

N/A

**18) Multi-site Human Research**

N/A

**19) Sharing of results with participants**

Any changes in psychological or physical status detected at the conclusion of the study period will be discussed with the participant by The PI and co-investigators. Appropriate referrals, if applicable, will be made at that time.

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