

# **Equine-Facilitated Psychotherapy (EFP) for the Treatment of Trauma**

**Molly DePrekel, MA, LP**

## **Introduction**

Equine-Facilitated Psychotherapy (EFP) can be an effective approach for clients with a history of trauma. This is particularly true for clients with attachment issues, because equines can provide relational attunement as described by Perry (2006). It is the belief of the clinician that clients with a history of Post Traumatic Stress Disorder (PTSD) can find value and healing when working with a qualified mental health professional who partners with equines in mental health therapy

In this clinician's experience building a framework in equine psychotherapy sessions that involves competency-based interventions, mindfulness, cognitive reframes, somatic approaches, play, and attachment work can provide a healing milieu for clients experiencing trauma. Van de Kolk in his work and research often refers clients struggling with trauma to mindfulness based stress reduction; yoga, EMDR, and other movement based therapeutic interventions. (van de Kolk, 2005). Dr. Allen Shore (2001) a leading researcher in attachment and trauma states "I have suggested that an interdisciplinary approach that focuses upon attachment experiences and their effects on regulatory structures and functions can offer us more comprehensive models of normal development" (pg 201).

## **Rational**

As a licensed clinical psychologist working with clients who are survivors of trauma, this clinician believes therapeutic interactions with animals hold value in their healing process. According to Perry (2006), "Beginning the recovery process for relational neglect can start with animals" (pg 38). As a part of the recovery process, EAP sessions can provide clients with a safe

environment to begin to deal with the traumatic events, or series of events, that have shaken their ability to function, and/or feel emotions by creating negative belief systems about their self, others and the world.

According to Perry (2010), when working with children and adolescents it all goes back to regulation, and how a child who has experienced trauma has had the development/biology of their brain altered. If you want the child to get better, you need to be able to help them regulate and calm down so that they can internalize new information and the brain can develop the portions of its functioning that did not develop because of the trauma/neglect. The brain develops from the bottom up. If dysregulation is in a low level of the brain, there are certain interventions that work and if the dysregulation is in a higher level of the brain, you need more unique interventions.

This clinician believes that as researchers and clinicians better understand the brain and the effects of trauma and attunement/misattunement as well as attachment, we can develop quality interventions and define why working with equines may be one prescription for regulating the brain and limbic system. Perry (2010) further states that there are several areas of regulation: Self-Regulation, Somatosensory Regulation, and Relational Regulation. He believes that relational regulation is needed for good milieu work. Pharmacological Regulation is necessary for containment but not change; and medication cannot provide any relational piece. It is Perry's belief that what is needed for healing is proximal rewards and consequences. He believes the best proximal reward is relational. There are numerous ways to best help with these regulation areas. He states other 'forms' of therapy help tremendously - yoga, drumming, martial arts, etc. Animal Assisted Therapy (AAT) is effective because it has a relational element along with a sensory element to help with learning regulation (Perry, 2010).

Movement activities with equines can help with self-regulation and skills to maintain an internal locus of control. For example, moving forward with a goal in mind and knowing where you are going while leading a 1000-pound horse requires some internal locus of control, and increasing that somatic sense for clients can be empowering. Building on that skill and leading without a lead line can teach the concept, ‘If I know where I am going I can lead in my own life.’ According to Van der Kolk (2005), a leading researcher in trauma recovery, movement therapies can provide healing and self-soothing for trauma clients. He further states that mindfulness and centering techniques assist clients in trauma recovery. Equine assisted therapy can play a key role in movement and mindfulness with clients.

### **Description**

During AAT sessions, clients are provided with opportunities to observe the effects of their arousal state on another. Clients practice regulating their own affect in order to regulate the equine’s arousal state and therefore the horse’s behavior. This dynamic form of relational affect regulation teaches clients, in an interactive context, that affect can be modulated. Animal assisted therapy can reduce disruptive behaviors because it creates a culture and a community in which self-regulation and cooperative skills can be practiced again and again. Equine assisted activities and interactions should be designed to support clients in reaching increased levels of intimacy, allow clients to practice managing a wide range of emotions with appropriate affect, and allow influence from others, both human and equine.

As clinicians’ working with clients and equines it is critical they have an understanding of the neurobiology of the brain and the subtleties of the sensory motor systems in the body. Work with equines that calms and soothes the brain and body is necessary to achieve healing and

help and clients stay in their window of tolerance (Ogden, Minton, & Pain, 2007). Also gaining mastery and skills is critical for clients experiencing PTSD.

Working with a large animal that demonstrates fight, flight, freeze and fidget, which many of our clients experience in hyper arousal and hypo arousal states, can provide metaphor, sensorimotor experiences and narrative opportunities for healing. Helping clients expand their window of tolerance and stay grounded and present in the presence of a horse while always allowing challenge by choice gives clients mindful experiences that can give them opportunities to build new neoropathways. Clients with PTSD often lose their access to the prefrontal cortex, which allows for response verses limbic systems reactions. The wise mind of, 'what do I feel, what do I think and then what do I want to do' is often lost when clients are triggered or hyper/hypo aroused. In working with an equine, the client develops an ability to remain connected to the animal during moments of uncomfortable arousal. For example, while leading a horse through a frightening obstacle a client must remain calm and act to soothe the horse (note horse/equine used interchangeably throughout as equines can include donkeys, minis, other) in order to accomplish the task.

### **Case Examples**

In one case a client had a hard time with dissociation and staying present. In sessions she was taught breathing techniques and Tellington Touch™ (2010), ear slides which she did on the horse to help her gain skills to stay present and mindful. She could also have feedback from another living being about her impact and see her ability to help another calm and breathe deeply.

In another case a client who was very quick in movements and presented as very anxious reported the horses moving fast and sometimes leaning away from him when he groomed or

attempted to help bring them in from the pasture. His work involved walking down the barn aisle as he normally presents in the world and then at a slower pace with calmer micro movements and voice tones. He then was asked to notice the horses in each of these instances and he walked up to the clinician and said ‘okay I get it’ adding knew how his teachers must feel with him. In explaining he talked about when the horses backed away in their stalls and had wide eyes as he came through. He saw and felt his impact and wanted relationship so tried another way and the horse’s faces softened and they stuck their heads out to be petted. The intervention then became to work with this young man to take his new found learning back into his everyday life. In this program his teachers came or we had releases so it was important to share information so he could be reminded about the horses and practice with human interactions. He even had a picture of what the horses looked like when he was calm so he could have this picture on his desk and learn on many levels.

Role modeling safe, respectful mindful interactions with equines can help clients feel safe, connected and help build relationships with the clinician and another living being. Clients report to this clinician they feel like they are waking up in the presence of the horses, and one client even reported they knew they could trust me by how they observed my positive, polite, and calm interactions with the horses. Assisting clients to get in touch with their body brains and not just rattle cognitive thoughts is one way equines can be additive in therapy. Often when clients are grooming or doing Tellington-Jones (2010), TTouch for Your Horse body work they will report, ‘I feel better, I like this.’ It is then that the clinician expands this opportunity by saying, ‘tell me about this, where in your body do you feel better, what do you notice?’ Clinicians often have to do some psycho education about sensation and the body and what stored memory the body can hold, as sensory experiencing may be a new concept. Also the information maybe a

helpful explanation and understanding of what clients are experiencing and going through in their own trauma. Teaching breathing, mindfulness, and sensory experiencing to clients can help them gain self-soothing techniques to use away from therapy to deal with symptoms of PTSD. Equines are masters of being in the moment and can be co-therapists in this work of calming, gaining symptom reduction, coping with triggers, letting go and recovery.

Building equine interactions and activities that increase attachment, attunement, competency, mastery, challenge, and cognitive reframes promotes healing. Also teaching self-soothing, skills, management of symptoms, social and emotional learning and involving movement creates a healing environment for clients to recover. In the powerful work of equine therapeutic interactions, creative goal-directed sessions that allow clients to gain skills and self-regulation, and allow for relational regulation, are key. Clients can learn to be self-motivated and change their behavior in a positive fashion. Work with equines can help them to communicate with others in an appropriate manner instead of using punitive methods, and they can gain relationships verses using a 'power over' approach to getting what they want. Often they can share feelings with the equines and just experience mutual gaze by looking into a horse's eye and breathing while practicing calming. Clients can show compassion and nurturance for other living things through energy work of T-touches (hair slides, ear slides) and get feedback when a horse lowers his/her head or other feedback if the horse backs away. This powerful treatment work creates mastery for clients as they gain new skills and knowledge. For clients in trauma recovery they often report not feeling like they have anything to offer or they can't state a lot of positives about themselves. For these clients, giving back to another living being may challenge their cognitive belief of, 'I am unworthy or bad'.

In psychotherapy groups with young women who are sexual trauma survivors, equine partners help bring clients out of their shells. The horses motivate the women to talk, while at the same time soothing them. In this clinician's experience with leading groups in various treatment settings, adolescents, in particular, often find it awkward to connect with group facilitators. However, in the process of developing a relationship with an equine partner, an adolescent is often better able to move beyond initial discomfort and build trusting relationships. Clients can grow in confidence and gain a more positive sense of power in a world where they have historically felt powerless. Often these clients in particular can benefit from gaining self-regulation skills, learning boundaries and assertiveness, developing problem-solving skills, and demonstrating cooperation. All of these can be done with the assistance of an equine partner. In group work with trauma survivors, cooperative riding can be beneficial as peers learn to trust each other, ask for help, seek support, and show empathy and give each other support. The movement of the horse can be incorporated also as clients can learn to breathe and take some risks as they move forward on the horse and in their life.

It may be crucial that clients have opportunities to be on horse back as part of their movement therapy and rebuilding of new neuropath ways that create options other than just reacting. In some mounted work, clients move through cones on the ground in the ring to create bilateral stimulation of the right and left hemispheres of the brain. This is a technique used in trauma models of therapy. This is also used in eye movement desensitization reprocessing (EMDR). This helps clients maintain a less distressed stance and increase emotional regulation as they tell their story of trauma. It is contraindicated and can potentially reimprint trauma to a client if therapists ask a client to talk about the details of the trauma or feed them trauma

questions when they are in a distressed emotional state. This process can reactivate the trauma or hard wire it deeper (McClelland, 2006).

The mechanisms of moving the body and the balance required in riding create increased blood flow in the body, assisting the cingulate which helps regulate a distress response (McClelland, 2010). Clients who have cut off parts of their body felt sense may begin to reconnect while on the back of a horse; the clinician can work with the client to regain sensation while using calming techniques so clients can have a sense of control. When clients have a powerful reaction while riding the clinician can stop the movement and have the client process what is occurring while sitting on the horse or getting off and reconnecting with their feet on the ground.

When trauma occurs early in development, equine facilitated psychotherapy may offer healing. As equines became domesticated, they became especially attuned to changes in affective states of humans. Equines respond to very subtle cues and affect, similar to parent child affect communication and mutual regulation. Horses could offer a corrective emotional experience, reflective dialog, and interactive repair when clients have experienced misattunement, and attachment issues with a parent/caregiver.

These windows of opportunity can then be processed cognitively, somatically, and experientially with the clinician in the presence of the horse or in an office setting. The process of interaction and possibly training or caring for an equine becomes a developmental journey in which inevitable moments of misunderstanding and disruption can be identified and repaired. This interactive repair teaches clients to transition between emotional states and self-regulation. It also can enable clients to experience positive affect following negative experience. For example if an interaction or task is not working, the clinician can help the client find another way

to accomplish the goal or transform the interaction. If an activity needs to stop for safety, frustration, or because it is not working, then petting, play, and other activities can follow the experience. This repair can reinforce that the equine is still a 'good horse,' and client is still a 'good person,' thus increasing frustration tolerance and allowing affect regulation and reconnection to occur (DePrekel & Fredrickson, 2004).

Often it is interpreted that animals provide unconditional love and positive regard. An animal's response to people is contingent on the verbal and mainly non-verbal cues received from the individual. Actions such as eye contact, facial expression, tone of voice, body gestures, and timing and intensity of the person's emotional state effect the animal's response. To work effectively with equines, clients must be aware of their nonverbal impact on the animal. Thus, the animal's behavior and interaction that happens is contingent upon the individual's nonverbal communication skills. In treatment programs we often refer to these interactions as contingent collaborative communication. For example, a client's tone of voice, body posture, and eye contact impacts the client's success in catching a horse in a pasture. Some nonverbal types of communication that can be seen as aggressive, such as stiff body posture, staring, and loud tones, will chase the horse away. Meanwhile, softened tones, indirect eye contact, and fluid body movements will cause the horse to approach. Thus, human/animal interactions provide clients with a less threatening process for developing a congruent sense of self (Fredrickson, 2004).

Well-planned experiences with equines provide opportunities for clients to recognize the signals sent by the equine. Clients are assisted by clinicians in making sense of the signals, such as a horse's head shaking and pawing. The clinician can ask for the client's interpretation or story, and can also help the client to explore reasons for the equine's behavior. These interactions develop the capacity to create an understanding of the mind of others and of the self. The client

recognizes the equine as another unique individual that may behave differently than they do. The client can learn to respond to the animal as a separate entity that they have an impact on, and that can impact them. This learning and concept can then be taken into everyday life as clients can begin to see their impact on those around them and how they let others impact them.

In school based social and emotional learning therapeutic work, some students who barely participate in school and groups eagerly cooperate, maintain positive behavior, and show empathy while in equine assisted social and emotional learning groups. I learn much more about these students in our equine groups than I have ever been able to in a traditional office therapy group. I believe the focus shifts for these teens from being psychoanalyzed to gaining mastery skills, cooperation, and practicing self-control. The horses and interactions become a focal point that unites the groups and allows for cooperative ventures. These equine interactions challenge group members as well as school staff to stay calm, exercise restraint, and play together. All involved in the groups teach and learn from each other.

Another example of the eagerness of the participants to try new things and learn alternative healing is Tellington Touch™. We often go to the participants' program site to conduct work on the first day of the equine group. One of the first days of the program we went to one of the school sites and the group was together only for the second time. They displayed very unfocused, argumentative and disjointed behaviors. My co-facilitator for group was watching the chaos and just picked up the therapy dog that was assisting in group. She put her on a table, and started to teach T-Touch. I watched in amazement as the group became quiet and focused, and many of the students began trying the touches on themselves. One participant who had her head down the entire first hour of group was doing "python lifts" on her leg and "ear slides" as directed. The energy in the whole room became different as students became quiet and

attentive. They watched my colleague demonstrate the touches on the dog, Mariah, and then try the touches on themselves. I was amazed and realized these students were hungry for new ways to relax and relate to one another and eager to try another way of being. We incorporate T-Touch in all our work with clients and also yoga stretches and other body-centered work. The adolescents in these groups respond great and practice the T-Touches on the equines each week of the program. (Note: T-touch should be taught as energy work on animals and oneself rather than on other people).

The following is a quote from one of the school social workers working with teens with persistent mental illness. It relates to relaxation and guided imagery exercises we incorporate into our work with students and clients.

“Yesterday on the way home from Equine the guys were talking about medications and their side effects. One said he had problems getting to sleep at night. The other student told him he should use the imagery relaxation exercise that Molly taught them in group--about the horse and going to a safe place. He said he would try it. The next day he came to my office and said it worked. I thought this is exactly what we wanted—it is carrying over from the barn to real life. YEAH!!” (K. Rice, personal communication, 2005).

One useful concept and framework that is inherent in equine facilitated therapy and interactions is play. The Association for Play Therapy (2010) defines play therapy as: "the systematic use of a theoretical model to establish an interpersonal process wherein trained play therapists use the therapeutic powers of play to help clients prevent or resolve psychosocial difficulties and achieve optimal growth and development." Furthermore play therapy is “the means by which licensed mental health professionals use developmentally appropriate play therapy theories and techniques to better communicate with and help clients, particularly children!”

Some examples of play in equine therapy work could include running in the pasture pretending to be horses (horses should not be in the pasture at the time), picking flowers, whistling from a blade of grass. Having done this exercise with a group of older teen girls I was amazed by their enthusiasm for play and the giggles and laughter from this otherwise serious and dramatic group of young women. At the suggestion of an intern, the play described above was done with a therapy group focusing on trauma recovery. This clinician assumed they would not participate and would think it was a lame activity. The power of play won out and laughter was abundant. Play could involve games with the horses. Other play could involve the seasons of the year. In hot summer, fun and play could include finger painting on the equines or having a sheet on a tolerant equine and making a mural, then washing the horse. In the fall jumping in the leaves, collecting apples for the horses are fun activities; in the winter try cooperatively making a snow labyrinth for the equines to walk through, and in the spring plant horse treats. Often the system of play can only be accessible when clients are able to calm and self soothe and allow themselves to let go and access the creative brain. Imagine and incorporate treatment plans and goals that include play, laughter, and expressive arts.

Expressive arts often allow outlets and healing for clients recovering from trauma. Making horse masks or posters with feelings using horse pictures allows for self-narrative without having a client have to cognitively 'tell' their story again. Many times the projects created can serve as transitional objects and tangibles for clients. These transitional objects can represent the recovery being sought at the barn while clients are going about their daily lives. One client reported that the barn wood sign she painted with a soothing word on it, along with a picture of her therapy horse, hangs above her bed to help with nightmares.

## **Application**

In clinical work, the EFP clinician is always cognizant of how the human-animal connection acts as a catalyst for communication, insight and change. Through their body language, equines give immediate feedback to clients on how they are functioning and handling their feelings. This feedback helps clients learn how to pay better attention to the connection between their body and mind so they can inhabit their body in a new way. Processing this feedback also offers clients insights, which assist them in a more productive and healthier expression of their emotions.

In one group session, for instance, a group member grew quite frustrated when she could not get her equine to follow her without a lead. She became visibly agitated, so we asked her to take a minute and relax before she tried again. As soon as she let out a breath of air and relaxed her body, the equine came up to her and nuzzled her. This gave her immediate feedback on how she processes tension in her body when she gets stressed. Because the equine responded positively to her physical calming “out breath” response, the client was able to reorganize what she did. This gave her and the group a different approach to talk about how she deals with daily frustration and ways that might work better for her. This experience was applied to family work and this client was able to relate differently to her mom and ask for her needs to be met rather than display further angry outbursts and leave the family sessions (DePrekel & Neznik, 2008).

## **Summary**

In treatment for trauma, brain based therapeutic interventions may help alter neuropathways and provide opportunities for clients to try out new behaviors and ways of being in the world. Equine Assisted Interventions can be a treatment option as it is an unconventional experience, and is relationally based. In the brain, what is fed grows, so providing opportunities

for nurturance, helping clients gain sensory input from their environment, the equine, and their own body may help get brain and body memory to create lasting change. Being able to work toward riding and developing balance while directing the horse through micro movements in their own body can be a powerful dynamic for client healing.

In one study involving preteen girls in a YMCA horse program the comments from a focus group of participants showed that the girls felt a sense of protection and power while riding. Comments included “You feel like you’re protected because they’re so big.” “Awesome, cause when you’re on a horse, no one can ever get you” (Krawetz, 1992, pg. 28). Studies are needed that can begin to show how the brain and body is impacted by equine and animal interactions. There have been some studies conducted with school based youth struggling with emotional and behavioral issues over the last 15 years that show some promise of the efficacy of this work. The above-mentioned study showed statistical significance in global self worth was a YMCA equestrian program that worked with preteen and teen girls. The research question was ‘Will learning to ride and care for horses improve the self image and school behavior of 5<sup>th</sup> and 6<sup>th</sup> grade girls with emotional and behavioral problems?’ The domain subscale of global self worth and social acceptance show a statistical significant increase. The three measurements included were the Harter Self-Perception Profile for adolescents, a modification of the Harter Teacher’s Rating scale of Student’s Actual Behavior and an informal focus group interview with participants. Three overall themes emerged during the interviews: relationships developed with the horses, feelings of power and protection, and responsibility (Krawetz ,1992).

In another study comparing equine assisted counseling to school based counseling using the BASC self report found that students achieved statically significance on 5 scales of

increasing positive behavior compared to only 4 subscales with in the school counseling program (Trotter, Chandler, Goodwin-Bond, & Casey, 2008).

Working with clients to positively impact their equine partner is critical in this work. Ttouch energy work and movement such as the T-touch labyrinth walk, positive reinforcement using clicker training and mindful grooming are all interventions clients have reported to this clinician that reinforce their ability to self soothe and cope with stress associated with their mental health issues. Interventions that require assertiveness skills, boundary setting, cooperation and risk taking by the clients provide opportunities for them to try out new behaviors and see options rather than just reacting.

It has been the experience of this clinician that using animal assisted therapy and activities to work with clients is an effective alternative to traditional therapy in an office setting. The opportunity for learning and self-discovery is often accomplished through watching horse-to-horse behavior and then making metaphorical comparisons to human-to-human relationships. In group work, the experiences with the horses provide a shared experience with others that allow for communication regarding emotional states and responses. The process of working with an equine becomes a developmental journey in which clients can practice reflective interactions. Opportunities exist for clients to see the horse as another unique individual that may behave different than they do. This can be the beginning of empathy, and the work becomes having clients respond to the animal instead of reacting. Work with equines also offers opportunities for emotional communication. In working with an equine, clinicians must assist clients to develop an ability to remain connected to the animal during moments of uncomfortable arousal. This is particularly important in working through symptoms of PTSD. For example, when leading

horses through frightening obstacles, group members must work cooperatively or offer support and remain with the horses. Clients must act to soothe each other in order to accomplish the task.

Animal assisted therapy may be the treatment of choice for some people because it provides opportunities for experiences that mimic parenting skills. Animals, particularly companion animals, horses, sheep and other livestock respond to human arousal or emotional states in much the same way that children respond to parental emotional states (Levinson, 1972; Melson, 2000).

Further solid research is needed to understand how and if work with equines has lasting impact on clients with trauma and emotional issues. The research questions this clinician proposes are: Can it be proven that this work alters cellular memory or transforms brain waves/activity? What do clients who seek equine therapy report about their PTSD symptoms before/during/after sessions? And how do we as clinicians promote the calming, peace and serenity clients report they feel in the presence of the equine when they are in other areas of their lives? It will continue to be a journey to bring about healing for clients who suffer and recover from traumatic life altering events, and assisting them in how they relate to these traumas continues to be an honor. It is truly a blessing to partner with animals as co-therapists in this healing and spiritual process.

## Resources

Clicker Training <http://www.clickertraining.com>

DePrekel., M. Cairns Psychological Services [molly@mwtraumacenter.com](mailto:molly@mwtraumacenter.com)

EPONA-<http://www.taofequus.com>

Featherbrookfarms.org

MacNamara., M. MSW Animal Systems: [animalsystems@gmail.com](mailto:animalsystems@gmail.com)

Midwest Center for Trauma and Emotional Healing <http://mwtraumacenter.com>

Neznik., M.K. MSW [kneznik411@hotmail.com](mailto:kneznik411@hotmail.com)

Rector., B. Adventures in Awareness <http://www.adventuresinawareness.net>

Ruiz, M. A. (1997). The Four Agreements: A Practical Guide to Personal Freedom, Hay House

Sensorimotor Psychotherapy Institute <http://www.sensorimotorpsychotherapy.org>

Shapiro F., EMDR. <http://www.emdria.org/>

Shore, A. Affect Regulation <http://www.allanschore.com/>

Tellington Jones, L., Ttouch, [www.ttouch.com](http://www.ttouch.com).

## References

- Association for Play Therapy, (2010). *Play Therapy Defined* Retrieved from:  
<http://www.a4pt.org/ps.index.cfm>
- DePrekel, M. (2005). Working with adolescents in a school-based experiential therapy Group. In *Strides Equine Facilitated Mental Health*. North American Riding for the Handicapped Association.
- DePrekel, M., & Fredrickson, M., (2004). *Animal-assisted therapy for at-risk youth and families*. Conference presentation at the: In Penn Proceedings—Can Animals Help Humans Heal? Animal Assisted Interventions for Adolescents in Mental Health.
- DePrekel, M., & Neznik, M.K., (2008). *Manual: Animal Assisted Therapeutic Group* Self Published.
- Fredrickson, M (2004). Animal-assisted therapy for at-risk youth and families. Conference presentation at the: In Penn Proceedings—Can Animals Help Humans Heal? Animal Assisted Interventions for Adolescents in Mental Health.
- Krawetz (1992). *The effect of Riding Horses On Self Esteem In 5<sup>th</sup> and 6<sup>th</sup> grade girls* (Unpublished Masters Dissertation, University of MN. 1992) available through email: [Molly@mwtraumacenter.com](mailto:Molly@mwtraumacenter.com)
- Levison, B.M., & Mallon, G. (1997). *Pet-Oriented Child Psychotherapy* (2<sup>nd</sup> ed). Springfield, IL: Charles C. Thomas.
- Melson, G. (2001). Companion Animals and the Development of Children: Implications of the Biophilia Hypothesis In Aubrey Fine (Ed.), *Handbook on Animal-Assisted Therapy* (pp 376-382). San Diego CA: Academic Press.
- Ogden, Minton, & Pain, (2007). *Trauma And The Body*. New York: NY. WW Norton.

Perry, B. D., (2006). Applying Principles of Neurodevelopment to Clinical Work with Maltreated and Traumatized Children. In N. Boyd Webb, (Ed.) *Working with traumatized youth in child welfare*. New York, NY: Gilford Press.

Perry, B. D., (2010). *Child Trauma Academy The Impact of Trauma and Neglect on the Developing Child: Focus on Youth in the Juvenile Justice System*. Presented at the Juvenile Justice Coalition in partnership with the Minnesota Department of Education.

Shore, A. N., (2001). The Effects of Early Relational Trauma on Right Brain Development, Affect Regulation, & Infant Mental Health Originally published in: *Infant Mental Health Journal*, 2001, 22, 201-269. Reprinted at [trauma-pages.com](http://trauma-pages.com) with permission of the author. Email: [anschore@aol.com](mailto:anschore@aol.com)

Tellington-Jones (2010) *Tellington Ttouch for your Horse*. Retrieved from:

<http://www.ttouch.com>

Trotter, K.S., Chandler, C.K., Goodwin-Bond, D., & Casey, J. (2008). A comparative study of the efficacy of group equine assisted counseling with at-risk children and adolescents. *Journal of Creativity in Mental Health*, 3 (3), 254-284.

Van der Kolk, B., (2005). Trauma Workshop Mpls. MN. In cooperation with The Minnesota Society of Clinical Hypnosis <http://www.traumacenter.org/>