Equine-Assisted Learning: Healing with Horses

By Dr. Brenda Abbey

Discover the importance of relationships and how key brain research findings in neurobiology relate to Aboriginal Peoples' cultural beliefs about the Horse as a Healer!

Why is Equine- Assisted Learning an increasingly popular adjunct to traditional interventions for high need youth with histories of emotional and behavioural trauma?

I propose to answer this question by integrating some of the key findings in developmental neurobiology with what is already believed about the horse as a healer within the First Nations' cultural context.

Since the Spanish introduced the horse to North America and the First Nations people and communities, the horse has had significant working and ceremonial roles in the culture and lives of First Nations. For some cultures, the horse is identified as having a strong spiritual power and is seen as a "teller of truth". It is believed that the horse will lead the individual in the "right direction" A horse's spirit is believed to be able to assist others in understanding their place in the circle of life.

Much of what has been written is within the broader area of small animal companions and Animal Assisted Therapy but very little literature exists that specifically describes the benefits of Equine Assisted Learning within the context of healing relationships. While there are some similarities to other equine assisted interventions like Therapeutic Riding or EAGALA model group activities, my individualized approach seeks to create learning opportunities for the youth to also develop a relationship with the horse. It seeks to create a unique experiential learning – learning through hand-on experience. The sessions provide opportunities whereby the participant learns about interactions and reactions when involved in direct experiences with the therapy horse. Given the horse's superior intuitive nature, direct interaction is a novel and unique experience for the youth. Dr. Bruce Perry's neurobiology research reveals that learning happens when the brain perceives the experience as new and different.

Being in the prey category, the horse's intuitive nature has evolved as a mere function of survival; it is constantly attuned to its surroundings and the subtle communication within the herd as a response to perceived threat and an ever-changing environment. In this way, horses have been observed to have acute communication skills within their social structures and highly adaptive behavioural responses.

The horse has the ability to respond intuitively to human behaviour which results in immediate feedback from the animal. It is this response ability of the horse that creates opportunities for an Equine Assisted Learning participant to react both cognitively and behaviourally in relation to the cues from the horse. By their intuitive nature and innate sensitivity, my therapy horse can provide me with a window into the participant's personality. During these individualized learning sessions, I am the facilitator and through the horse's capacity to "mirror" non- verbal communication, I have the chance to guide the participant through awareness and potential personal change.

Horses have been identified as nonjudgmental, and as Reichert (1998, p.177) indicates, by possessing this characteristic the horse may be a useful medium in relation to enhancing a "sense of self-esteem and promoting the expression of feelings." Another study by Roth et. al. (2005, p. 375) notes that the interaction with a horse can assist a young person in exploring "feelings, powers of intuition and energy, understandings of self, nature, relationships and communication".

This information has the power to inform our practice of intervention with youth having histories of trauma. The literature supports that opportunities to interact with animals and provide a starting point to explore and develop trust and a relationship with another living creature. McNichlas and Collis (2006, p.69) suggest that "social signals from animals are less complex than from humans and the reduced processing load may permit a greater degree of social understanding and interaction than would be otherwise possible". Specific to the horse, Graham (2007, p.48) writes that "trusting relationships are demonstrated in various interventions that require specific interactions between the horse and the participant such as brushing or caring for the horse." Other equine-assisted interventions have demonstrated an increase in trust/unconditional love and acceptance among participants (Iannone, 2003; Johnson, 2001).

How can this information be applied to the neurodevelopmental-informed approach to our work with maltreated and traumatized children and youth?

From Dr. Bruce Perry's research, we know that the brain is organized in a hierarchical fashion. During development, the brain organizes itself from the bottom up, from the least (brain stem) to the most complex (limbic, cortical) areas. In my work as an educator and child psychologist, I also know that relationships matter. Since much of the brain develops prenatally and early in life, the way we are parented has a dramatic influence on the sequential brain development. Dr. Perry reminds us that an infant's early attachment to a small number of consistent caregivers is critical for healthy brain development. During responsive parenting, the interconnection of pleasure and human interactions is the important neurobiological "glue" that bonds and creates healthy relationships. Attachment is the

memory template for the human to human bond and is profoundly influenced by whether the child experienced kind, attuned parenting or whether they received inconsistent, disrupted, abusive or neglectful care.

Dr. Bruce Perry interprets that these great biological gifts are also biological liabilities for children who have experienced abuse or neglect early in their lives. As the brain is developing from the bottom to the top, the process is influenced by neurochemical transmissions. These form "Super Highways" which are crucial sets of widely distributed neural networks that originate in the brainstem and diencephalon and project to every other part of the developing brain. Due to their wide distribution throughout the brain, impairments can result in organization and functioning of these systems. The organization of higher parts of the brain depends upon input from the lower parts of the brain. In normal childhood development, the patterns of incoming neural activity is regulated and the higher areas of the brain will organize in healthier ways. Children who have experienced prenatal exposure to drugs/alcohol or early childhood emotional neglect/trauma will have dysregulated patterns and the higher areas of their brain will organize to reflect these abnormal patterns. Any efforts to change the systems in the brain must provide the child with experiences that create repetitive activation in the neural systems that mediate the function or dysfunction that is the target of the therapy.

With this in mind, there is a significant problem with the conventional mental health approach to maltreated children. Ordinary clinical interventions often provide experiences that target higher level regions of the brain. Many of the maltreated children's problems are related to disorganized or poorly regulated networks originating lower in the brain.

One recurring observation about resilience and coping with trauma is the healing power of healthy relationships. This powerful positive effect of healthy relational interactions on the individual is at the core of relationally based protective mechanisms that help us thrive and survive following trauma and loss. This capacity to benefit from relational interactions is in turn derived from our individual developmental experiences.