How Equine Therapy Works with Autism: A Language Without Words

Intervention texts have explained how human bonding with animals creates a platform for social gains, which can later translate to bonding with other people. This is so effective, it was named a best practice for working with Native American/First People youth in crisis (TIP 61, 2008). Although adolescents in therapeutic programs have shown significant gains in attachment security, and feeling loved and supported by therapy animals (Balluerka, et al., 2014), those with trait ASD physiology live deeper within, and need physical healing before they can reach out to others.

What the Research Says

For the past 20 years, studies of horse and rider were predominantly successful in documenting physiological gains in children with cerebral palsy. Lightsey & Krenck (2022) explain that successful intervention is due to the horse's movement is much like the human gait, but also state the "interaction between the children with cerebral palsy and the horse is deemed to be the main enabler of the successful rehabilitation" (p. 51).

Children with cerebral palsy and those with autism showed gains in mobility, socio-cognitive and daily participation in a horseback intervention, which lasted at least six months (Conroy, Evans, Butler-Moburg, et al., 2020). The horse's stride is shown to provide a specific vibration which has a profound effect on children with ASD in go/no-go trials. This is postulated to be an effect of the up and down motion, creating harmonic vibrations which stimulate a parasympathetic response (Ohtani, Kitagawa, Mikami, et al, 2017). Children with ASD and co-occurring disorders such as hyperactivity or anxiety showed even more gains from a riding intervention vs. barn activity with

horses, as measured by falling cortisol levels (Karvonen, 2022). Horseback riding in particular stimulates the system to improve coordination, balance and motor functions (Ohtani, et al., 2017). Equine-assisted trials have correlated with gains in social ability and decreased sensory sensitivity in those with ASD—with Ward, Whalon, Rusnak, et al. (2013) concluding that integration of mind-body is key to improved function and social ability.

Trigg, Thompson, Smith, et al. (2016) suggest the human-animal bond is energetically and biologically driven--as co-regulation occurs through the energy field, bringing calm across all species. Research also shows that simple body movement can induce large changes in the brain. New neuron growth and neuroplasticity, especially occurs during multi-sensory and multi-motor activities (Biscontini, 2016). Brehm (2014) also notes integration of nervous system with endocrine and immune functioning—changing the brain and emotions. Fallon (2022) shows war Veterans with PTSD have been assessed via pre-post interventions with activities such as herd observation, ground exercises and group obstacle course. Gains in PTG (post-traumatic growth-- including less startle and other nervous system reactions) were found in those veterans who described non-verbal connection with the horse in which they remained “in the moment”, and where presence with the nonjudgemental *other* helped fill them up (spiritually).

Equine Assisted Therapy

The role of the animal has evolved from co-therapist, attachment figure, loving partner, family, stress buffer, service which results in therapeutic gain for people (Balluerka et al, 2014; Palmer, 2020), to non-verbal spiritual coach who connects in the quantum field (Erickson, Fisher, Woelk, 2016; Blinka, Wilson-Harris, 2016). There have actually been a myriad of theories governing

animal-assisted therapy since 1969 (Balluerka et al, 2014), the most current being that improvement in physiological domains give rise to social functioning through multi-modal stimulation which horseback riding provides, into a whole person integration effect (Borgi, Loliva, Cerinos, et al. 2016). These are examples of how equine exercises can create and reinforce new sensory processing pathways in the brain. Integration of body-mind systems (motor and sensory pathways) is a necessary goal for those with ASD. Although equine therapy literature reviews have revealed no credible evidence of improvement in children with ASD, if we look to the statistics, they do show consistent improvement in motor skills and sensory integration (Lanning, Baier, Ivey-Hatz, et al., 2014). Researchers have mischaracterized the outward signs of autism which change through horseback programs; social signs will be the last evidenced in those with ASD.

Many dots have been connected through researching the vagal nervous system—a system secondary to the central nervous system which affects our fight, flight and freeze responses. One of the best ways to heal the vagal system is through energetic vibration, or presence with another—a “being with”.

In conclusion, those with autistic (trait) physiology are seated deeper inside themselves—the physical healing of systems needs to occur before they can surface to reach out (socially). Integration of bodily systems creates a foundation upon which to build a life, including social ability, forward thinking (lack of perseveration, etc.) and goal-making. Researchers have constantly mischaracterized the outward signs of autism as ones which can be changed through participation or attention. We now know more about healing the vagal system—some of the best ways being through rhythm, movement, and co-regulation (Porges, 2025): A language without words.

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