

Equine Assisted Activities Benefit Special Populations in Occupational Therapy Practice

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Equine assisted activities are a common therapeutic approach used with disabled individuals for relaxation, developing muscle tone, coordination, confidence, and overall well-being. Integrating horses into health care is a debate within the community due to a split belief in the effectiveness of support and treatment stemming from integrating horses. How can horses be incorporated into occupational therapy practice as a positive treatment?

One therapeutic approach, equine-assisted occupational therapy, is a service in which horses interact with humans to produce positive results by the clients. As reported by Ball, Ball, & Kirkpatrick (2013), an occupational therapist and medical professors, published in *Occupational Therapy Now*, horses have been used for healing purposes since the fifth century BC and became modernized for therapeutic uses in the 1950s (p.9). There is a known positive correlation between horses and humans. Winston Churchill once said, “There is something about the outside of a horse that is good for the inside of a man” (as quoted in Govender, Barlow, & Ballim, 2016, p.31). Horses can be incorporated into therapy sessions and are open to a wide range of ages and purposes. According to Murphy, Wilson, & Greenberg (2017), clinical occupational staff and professors, published in *Journal of Experiential Education*, the stature and compatibility to humans that horses possess allow them to improve individual’s self-esteem and decrease anxiety (p.367).

There are a couple of different well-known forms of equine assisted therapy; however, they all have similar underlying purposes in occupational therapy. Incorporating horses into occupational therapy provides a multitude of positive effects on disabled individuals. As stated by medical doctors from the School of Medicine at University of Ioannina, published in *American Journal of Physical Medicine & Rehabilitation*, the goals of hippotherapy are to improve posture, balance, mobility, walking energy and physical disabilities (Stergiou, Tzoufi,

Ntzani, Varvarousis, Beris, & Ploumis, 2017, p. 718). Riding horses provides multi-dimensional movement that constantly changes sensory input and stimulates the client's spine and central nervous system, thus correcting movement patterns (Govender, et al., 2016, p. 32). According to article "With Hippotherapy, The Horse Provides The Therapy" written by Lucchesi (2016), horses take one hundred steps a minute and every movement pushes the pelvis forward, therefore 35 minutes of riding is equal to 3,000 repetitions (p.1). The movement of such a large animal has great effects on the improvement of core strength in humans as well as many other factors.

Acknowledged by Naumann & Penning (2014), occupational therapist and student from Queen's University with PhDs, published in *Occupational Therapy Now*, hippotherapy uses the horse itself for treatment and is specifically provided by a rehabilitation professional who leads the horse handler and therapeutic riding instructor (p. 22). This therapy focuses on the movement of the horse while health professionals address impairments, limitation of functions and disabilities. (Stergiou, et al., 2017, p. 718). Hippotherapy is often misunderstood, however, there has been a recent interest due to its impact on physical aspects. Hippotherapy intervention can be utilized to increase postural tone, mobilization of spine and pelvis, and improving motor planning performance (Govender, et al., 2016, p. 32). Therapists should take into consideration the magnitude of positive effects that hippotherapy has on their clients.

Therapeutic riding is another form of equine-assisted occupational therapy. One way in which therapeutic riding differentiates from hippotherapy is by it only requiring a therapeutic riding instructor. (Naumann, & Penning, 2014, p. 23). This therapy does not require as much specialized training and pleasure stems from participating in a meaningful activity, which increases the quality of life. There is a unique, indescribable bond created between the human and the horse. Additionally, it can be healing to individuals that lack motor functions which are

characterized by a wide-range of conditions including neuromuscular diseases, neuromotor, developmental and physical disabilities, and physical activity is beneficial to individuals lacking motor functions because they are prone to irregular muscle tone, less control of muscles, incoordination, and poor reflexes. (Stergiou, et al., 2017, p. 717). Populations that benefit from therapeutic riding include individuals of all ages with conditions such as cerebral palsy, developmental disabilities, multiple sclerosis, mitochondrial disease, autism spectrum disorder, sensory processing disorder, down syndrome and cerebrovascular incidents. (Ball, et al., 2013, p.9). Their strength in their core muscles as well as balance and coordination are improved through this process. Equine-assisted therapy has recently become more popular however it is not being applied regularly by occupational therapists due to advanced training being required and lack of facilities offering therapeutic riding. (Naumann, & Penning, 2014, p. 23).

Similar to how therapeutic riding is beneficial those with occupational therapy needs, equine-assisted occupational therapy is beneficial to a variety of populations as well. However, individuals diagnosed with autism spectrum disorder typically see vast improvements. Those on the spectrum lack social interaction abilities and engaging with horses results in significant improvements. As children with autism get older, their opportunities and services become limited. Individuals diagnosed with autism face barriers such as transition into adulthood as well as a lack of support systems, which leads to occupational isolation (Naumann & Penning, 2014, p. 22). During this stage of their life, autism individuals feel isolated and lonely because the environment tends to turn away from them. Excluding autism individuals from many aspects of life worsens their ability to socially interact. Equine therapy is known to show improvements of deficits in physical, cognitive, psychological, communitive and social areas. (Naumann & Penning, 2014, p. 22). As noted by professors and a graduate student with PhDs at the University

of Alberta in Canada, published in *American Journal of Occupational Therapy*, Equine Assisted Occupational therapy focuses on the idea of implementing purposeful activities such as saddling, grooming, and riding (Lambias et al., 2016, p.1). Skills that are learned while interacting with the horse are then utilized in other environments and helps their engagement in other activities.

Equine therapy gives autistic children the boost of confidence they need to carry skills they learn in therapy into other parts of their life. Interacting with horses is therapeutic to ASD children by regulating their sensory assimilation and arousal deficits through movement and speed (Lambias, et al., 2016, p.2 ).

Furthermore, equine-assisted learning has a beneficial impact on individuals that suffer with emotional complications. Disabled individuals that have inhibited motor functions struggle with emotional development (Stergiou, et al., 2017, p. 717). Emotional development is a key factor in healthy development within the youth population. As claimed by Frederick, Ivey, & Lanning (2015), published in *Community Mental Health Journal*, equine-assisted interventions are applied into therapy with adolescence struggling with substance abuse, behavioral issues, attention deficit disorder, eating disorders, abuse, depression, anxiety, relationship issues, and communication (p. 810). Receiving equine therapy is not only healing but it provides the clients and their families hope for a better future. A client that is difficult to work with in traditional settings may have more success in equine assisted therapy due to the increased self-esteem and confidence they receive from controlling the movement of such a large animal (Frederick, et al., 2015, p. 810). It is important for therapists to be knowledgeable about the effects that equine activities have on depression since their clients are likely be inclined to be depressed because of their debilitating condition.

It is also beneficial for occupational therapists to have knowledge of a horse's physical makeup. The physical characteristics and stature of horses have undeniable positive contributions to clients receiving equine-assisted occupational therapy. The multidimensional movement of the horse stimulates the patient's spine and nervous system, which has shown improvement in balance, posture and coordination. Participating in meaningful activities is one of the core matters that occupational therapy focusses on. By engaging in activities with horses, the overall well-being of disabled individuals increases. Not only has equine therapy shown improvements in physical aspects, but emotional as well. Most research on equine therapy in occupational therapy has shown nothing but positive feedback. Further investigations should be conducted to determine the underlying factors as to why equine therapy is not being used more often. However, it is believed that the lack of awareness of equine therapy leads to a small percent of occupational therapist utilizing this intervention due to a variety of barriers such as lack of knowledge, limited training, logistic barriers and cost (Govender, et al., 2016, p. 34). These barriers can be overcome by more families sharing their stories about their experiences with equine therapy and inspiring others to check it out. Organizations for disabilities should broadcast local centers offering equine-assisted occupational therapy and accept donations. These donations can be used to help the less fortunate families that may not have insurance and cannot afford therapy. Additionally, occupational therapists should become educated about the plethora of disabilities and conditions that horses have the capability of improving. Although there has been a recent interest in equine therapy, not enough professionals in the occupational field are taking advantage of this resource.

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