

THE EFFECT OF EQUINE-ASSISTED ACTIVITIES ON CHILDREN'S DEVELOPMENT (SHORT REVIEW)

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Abstract: *The influence of animals on children is very significant, within which the role of horses is highlighted. Children's early love of animals greatly develops their personality, and handling and caring for them also affects the behavior of young people. In order to prepare a research, a short overview of horse-assisted activities that support the physical and psychological development of healthy children and children in need of development was prepared based on the literature. Horse therapy has been used for a long time, but its value and effects have only recently begun to be appreciated.*

Keywords: *animal assisted activity, hippotherapy, physical development, mental problems, therapeutic methods*

INTRODUCTION

During therapy with animals, the positive qualities of animals are used for various mental, physical and psychological problems of people. Several species of animals can help, such as: dogs, cats, parrots, hamsters, horses, etc. This topic is important because with our lifestyle today, we have become alienated and distanced from the value and importance of nature. While we are faced with more and more stimuli in the fast-paced world and we cannot spare time for anything, many people forget how important an animal can be and how much of a stress-relieving effect it has in everyday life. We specifically focus on horse therapy, as our main goal is to show how important a helping companion can be, even for several children and adults alike.

Equine therapy uses the knowledge of horses, riding and working with horses for rehabilitation, education, skill development and the relief of several psychological problems. Any kind of activity with a horse has several positive effects. The children's personality development and communication skills improve by being part of a community, they have to communicate with the instructors and their peers, and of course with the horses as well. Imagination, learning and humility, which we think is natural, but it may not be the case in all cases. Working with horses can't be boring, they are given tasks that are personalized, and thus they go through a lot of development. In the case of juveniles, movement coordination and body structure are still very variable, so correct posture and movement are very important for them, therapy provides a perfect basis for their development, and not only in pathological cases.

MATERIALS AND METHODS

The present work is based on research results presented in the Hungarian and international literature. The examination of the previous data of the researchers of the topic serves the preparation of a research project that is about to start.

RESEARCH RESULTS

Animal Assisted Activities (AAA)

Nowadays, keeping companion animals is not only a pastime, but also an important component in satisfying human psychological needs. When we ask owners to describe their pet, most of them describe their dog, cat, or other animal as a full-fledged member of the family. They believe that their pet understands, accepts, and even responds adequately to their moods and feelings, and in this way they contribute to making their stressful life

easier, creating and maintaining their sense of comfort. In the case of a healthy, good relationship, pet animals can help family members stay together, overcome crisis situations, and strengthen the intimate relationship with nature as children grow up. In the relationship built with them, children can learn the rules of care and responsibility, but companion animals can even act as playmates, friends, or protectors who provide constant attention. They can have a beneficial effect during recovery from illness and can also play an important role in the lonely life of the elderly [8].

Among high school students, it was observed that taking care of a pet rabbit promoted the development of empathy, responsibility, and interest in certain subjects (e.g. biology), although differences were observed in the case of girls and boys [14].

Due to their calming, motivating and activating effect on humans, animals are often used as therapeutic tools. They help with non-verbal communication, the satisfaction of basic needs for closeness and physical contact, the reflection of emotions, etc. In German-speaking areas, animal-assisted therapy is not limited to the field of psychotherapy, but is also used as occupational therapy, in speech therapy, special pedagogy, and to promote general well-being. In the Anglo-Saxon world, however, a distinction is made between "animal-assisted activities" and "animal-assisted therapy". The aim of the latter is to achieve professional therapeutic success with the help of specially trained animals. This therapeutic method is also spreading more and more in our country. We can meet therapy dogs, horses, rabbits, alpacas, etc. in several parts of the country, and we must not forget the extremely important work of guide dogs [16].

In England, the main areas of animal-assisted care today are the care of people with autism spectrum disorders, the treatment of victims of sexual abuse, the rehabilitation of heart patients in hospital and home care, and the support of people suffering from dementia. It seems that we still have to wait for the next step - for example, the spread of animal-assisted procedures integrated into educational processes [5].

The use of therapeutic animals kept for the development of care, coexistence skills, and abilities - based on the practice of domestic correctional institutions - seemed to be an option that could also be used within the framework of the penal system. Taking into account that among the "prospects" of the healing-educational group, appreciable results have already been achieved with the use of animals, it was planned to make the favorable domestic practice the backbone of the program of the healing-educational group and prepare for its implementation. In 2008, the institution's medical and educational department was handed over in order to suppress acts of violence and place prisoners in need of special treatment in a group with special educational needs. For the five main inmates placed in the group, a community living space suitable for the educational goals was created. In this living space, the therapeutic animals were given a place, namely: budgies, pygmy hamster, guinea pigs, small ornamental aquarium fishes, Peruvian squirrels. In order to ensure proper housing conditions for the animals, the livestock was moved from the inmate's common room to a separate, closed, so-called "Living World Room", which became the scene of this care-based therapy [15].

Equine therapy

It is essential to choose a suitable horse for the therapy. In order to reduce the stress of the therapy horse, the habituation processes used effectively allow the horse to quickly adapt to the working environment, the equipment and the therapists. Thanks to this, the horse does not have to waste attention on running away or fear and can effectively concentrate on its work. Thanks to the sensitization, it helps the horse to focus on its work and react to the smallest signals. The effective use of training methods therefore helps the therapy horse not to be stressed by the unexpected reaction of the treated person. It is

important for the therapist to ensure that the therapeutic environment is safe and calm for both people and horses [3].

In one study, the fear of the size of the animal and the unknown was typical for most of the group, 13 people felt some unjustified fear before riding. By the end of the session, 100% of the children's fear had disappeared based on the data [12].

Training a therapy horse is a very complex task, and its goal is to be able to raise a safe, efficiently cooperative companion. Each horse is a unique individual, which is why it is important to find optimal training methods. The most important factors determining the performance, control and value of horses are learning abilities, motivation and stress, which are influenced by the breed, the animal's sex and age. Understanding these factors and their implications is crucial for both equine practitioners and scientists [9].

Good therapy requires not only a suitable, trained horse, but also a good therapist and person who work with horses. Specialists who have a bachelor's degree in physiotherapist, special education teacher, psychologist, psychotherapist or medical doctor work within the framework of horse therapy. These professionals expand their professional knowledge in the field of equine therapy by completing further training as an equine therapist accredited by the Hungarian Equine Therapy Association. Physiotherapy-equestrian therapists are usually called hippotherapists, while representatives of special pedagogy and psychology disciplines are called equine therapists in a narrower sense. Horse therapists, who represent therapeutic riding and equestrian gymnastics (Figure 1), as well as equine-assisted psychotherapy, usually work within the framework of a foundation or privately (as sole proprietors) in Hungary. They often do their work in their own stable or in connection with an already operating stable [13].

The only thing missing from equestrian therapies is the children. But for which children can such an activity be effective? Children with almost any disease can participate in the therapy, examples of which are presented.

A force measuring platform was used for preliminary balance testing of children presenting with movement coordination disorder. The device contains four dynamometer sensors that measure the displacement of the individual's Center of Pressure (COP) as a function of time. This curve is the so-called stabilogram. Based on the displacements, the size of the average displacement during the given time can be determined. A stabilogram helps to analyze an individual's balance and movement, and to recognize and treat any deviations or problems [10].



Figure 1. Equestrian gymnastics presentation

Source: Karoly Bodnar

For a 6-year-old girl with ADHD and a 7-year-old boy with movement coordination difficulties, the horse immediately helped stabilize the children's balance when they were out of balance during the trot. The horse's quick and sensitive reaction prevented the accident and helped to maintain the children's trust in the therapy horse. Positive experiences can help children gradually develop their sense of balance and increase their confidence while riding [6].

The GAITRite® measuring system is a great help in gait tests, as it accurately records the various parameters of the patient's gait and enables their detailed analysis. During tests with the GAITRite® pressure-sensing mat, 14 people made up the treated group. All of these children have some sort of neurological disorder. Most of them have autism, but many also face challenges with other developmental disorders and disorders. The tool helps to assess the effectiveness of the therapy more objectively [1].

In another study, an existing standardized measuring device and a new device were used during the development of the measurement procedure. The standardized measuring tool is the National Unified Student Fitness Test (NETFIT) "NETFIT Balance Test", which can be used to measure the ability to balance. The new tool is software designed for a telemetry Electroencephalography (EEG) device that provides an objective basis from a neurological perspective. With the help of this, nervous system impulses that were previously invisible become visible. During equine therapy and riding, continuous muscle movement takes place, so movement development can be followed with the help of EEG, which enables monitoring the development of the horse's nervous system. The EEG records fixed points, so therapists and trainers can draw conclusions and perform calculations based on the received data. This combined measurement method creates new opportunities for tracking individual development and increasing the effectiveness of therapeutic treatments [7].

Based on the results obtained with the help of horse therapy sessions, a reduction in tension can be achieved in the case of anxious children as a result of horses and horse therapy developments. In one study, a decrease was observed both in the heart rate of the children and in the eye temperature values of the horses working in therapeutic work, which suggests a decrease in the level of anxiety. The constant, familiar, animal-assisted environment helps to a great extent to create a calm, balanced atmosphere, which contributes to the reduction of anxiety levels. The presence of horses and working with them during the therapies is extremely important; it helps to relieve frustration and stress. Working with horses is positive. Activities full of experiences, so the children who participate in the therapy leave with experience-based, emotionally rich experiences. During their basic training and special training, the therapy horses gain important practical experience with injured and disabled children, special development tools, tasks and therapy locations. The constant location, time and familiar people (equestrian therapy team members) can greatly help the horses' confidence during the therapeutic work. When developing the theme of the developments, we took into account the positive reinforcement of the horses, as well as the possibility of social development of the children, so the sessions always reward the horses they close, which means feeding them with apples and carrots. This protocol greatly helps to maintain the motivation of the horses and to create a deeper interaction between the children and the therapy horses [6].

Therapy also has an effect on social behavior. Children experience childhood in many different ways during adolescence and younger years. They were also able to achieve a change in children who were afraid of horses, and even those who did not excel at school found confidence. With the therapies, they found peace and stability, which changed their behavior with the outside world [11].

Gabriel et al. (2012) [4] focused on children with autism spectrum disorders. Therapy was performed 10 times a week for 10-10 weeks with before-after evaluation. 42 children between the ages of 6 and 16 were involved in the session. Specialist therapists carried out their evaluations one by one, according to self-regulation, motor skills, adaptive skills, and within these also according to individual problems. According to the tests, their results also prove the effectiveness of the method, significant development and improvement was caused by the performance of equestrian tasks.

Animal-assisted therapy sessions can be based on regular visits, where people regularly meet the animals at certain intervals for therapeutic purposes. In the case of other therapies, the constant presence of animals and the effects they produce are used during the therapy. During therapeutic work, animals play a special role, helping people to heal, develop and achieve an improved quality of life [2].

CONCLUSIONS

Therapy sessions that take advantage of the beneficial effects of the human-animal relationship can help people in many areas. The goals of these therapies can be very diverse, for example:

- *Movement improvement*: Helps to improve coordination and induce more movement, especially for people with limited mobility.
- *Emotional development*: The presence of animals can help achieve emotional balance and develop empathy.
- *Social development*: Working with animals can help develop social skills, for example, it helps in building trust and building relationships.
- *Cognitive development*: Interaction with animals can help improve cognitive functions, such as focusing attention and developing problem-solving skills.
- *Stimulating communication*: Dealing with animals can help develop communication skills, for example, it helps with speech development and improves verbal and non-verbal communication.
- *Improving the quality of life*: The relationship with animals can help improve the quality of life, increase the feeling of joy, and reduce stress.

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