

Sarah Moore

Lauren Peterson

6-7-18

UWP 1

The Effects of Incorporating Animals into Occupational Therapy for Children with Autism

Abstract

Children with autism have difficulty engaging with other people. Through personal experiences and research, I discovered that there are many ways in which animals help children with autism improve their social skills. Children with autism have a difficult time understanding complex human emotions and behaviors. Through animals, who are less complex than humans in their methods of communication, children with autism can learn the basics of interacting and communicating with others, which can give them the skills and confidence to interact with other people. Recent research shows that children with autism benefit from animal-assisted therapy being incorporated into occupational therapy because it helps them develop their language and communication skills. There are more and more children being diagnosed with autism, which makes finding effective, alternative treatment methods to the ones we most commonly use today so important.

Autism Spectrum Disorder (ASD) is “a complex developmental disorder that can cause problems with thinking, feeling, language and the ability to relate to others” (“What is Autism Spectrum Disorder?”). Because ASD is a spectrum disorder, people with autism vary in their abilities, with different kinds of therapy that cater to these varying abilities. One kind of therapy that is beneficial, but not widely used, is animal-assisted therapy. Research has shown that when animals are integrated into occupational therapy, children with autism benefit from therapy even more when compared to when there are no animals present. Why do children respond differently when animals are present? What makes the animal being present so crucial? Why is animal-assisted therapy not more widely used by therapists today? Animals being integrated into occupational therapy is beneficial to children with autism, especially to their language and communication skills, because animals are more straightforward when expressing their actions and emotions compared to humans.

In terms of treatment for autism, there is currently no cure. Autism is more common in boys than girls, and is becoming more prevalent today. The most recent study from the Center for Disease Control states that 1 in 59 children have autism (Baio). Because autism is becoming more prevalent today, we need to find new and more effective ways to help children with autism. Though they are children now, they will eventually grow older, and need skills that they can use to navigate the world. As I indicated, a few skills that people with autism often struggle with is communicating, relating, and engaging with others. These struggles can be obstacles, as people with autism cannot always understand other people’s actions or the motivations behind their actions. Often times people with autism don’t communicate as neurotypical people do. Because they can’t relate to others, they can’t communicate as other people do. If treatments begin in childhood, during the formative years while the child is learning about things around them, many

of the symptoms can be improved through therapy. There are many different treatments for autism, including behavioral therapy, speech therapy, skill building, and occupational therapy. All of these treatments can incorporate animals.

Animals can be integrated into therapy in multiple ways, including being on the ground with the animal or riding the animal (usually a horse). Both ways have their own benefits, and because children with autism differ in their therapeutic needs, some combination of those ways will be fit for the individual child. In equine-assisted therapy, also called hippotherapy, the child can do therapy on the ground as well as on horseback. First, the child and therapist usually start with groundwork, which can include brushing and petting the horse, to get comfortable around this new animal. Then, they usually move to riding the horse. The child can feel the rhythm of the horse's walk, and can feel if the horse speeds up or slows down depending on what they do. The child can directly see and feel how the horse reacts based on the actions that they make. Incorporating animals into therapy is usually a new encounter that can provide "the child with the opportunity for positive, engaged experiences that can generalize to other environments and persons," (Llambias 1). If the child pulls back on the reins, the horse will (most likely) stop. They may or may not have been told to do this by the occupational therapist, but either way, the connection between pulling and stopping was made. The pulling of the reins is a form of communication, which may also transfer over to spending time with people. If someone pulls on another person (lightly), they are usually trying to get that person's attention. Making these connections, that actions can have communicative meaning, and that actions often elicit a response from another being, can show the child that their actions have consequences. The child can then apply this learned knowledge to their social life, interacting with other humans.

Occupational therapist Mona Sams acknowledges that the animals being present may not be the only reason for the children's increase in being social; people being present helped too (273). When humans were present, the child was able to talk to them about the animals, or ask if they could spend time with the animals. While the animals are very beneficial, having people there too is important because in the end, the children will need to communicate with people, not animals.

Because children with autism struggle to relate to people, as humans are very complex in their behaviors and emotions, they can better relate to animals. Animals are much less complex than people, so children with autism can more easily understand them. In addition to the complexity of people and animals, children with autism may also feel intimidated while trying to communicate with a neurotypical human, knowing that the other person may have trouble interpreting what the child is trying to say or show, and they may feel judged because they can't communicate as effectively. When communicating with an animal, the animal isn't going to judge you, so you are free to say, or not say, what you would like. Children with autism may naturally engage with animals because they know that the animal will not judge them. Engagement is important for children with autism, as they are naturally unengaged with those around them, "and, during their engaged periods, [they] show a higher preference for objects and solitary play than for people," (Llambias 1). If a child with autism could choose, they would choose to spend their time not with other people, but with other unanimated, unresponsive things. Because their default way to spend time is to spend time with objects, they are not improving their language and communication skills, which further causes them to not want to spend time with people. This is a cycle that must be broken, and can be broken using animals,

because animals are somewhere between a toy and a human. Animals are responsive like humans, but straightforward in their communication, like a toy.

Another theory that supports the benefits of animal-assisted therapy is the biophilia hypothesis, which says that humans seek out connections to things in nature naturally (Rogers). Mona Sams uses this hypothesis when talking about children with autism's connection with animals, saying that "children exhibit a natural interest toward animals and other nonhuman aspects of their environments" (269). Making new connections, like the connections made with animals, helps to break the typical routine that children with autism get into, which can stimulate their learning. More learning means that they are improving their life skills, and whether it be communication, relating, and/or engaging skills, it doesn't matter. If the child's life skills are improving at all, it is beneficial to them.

Humans are incredibly complex creatures. We have motivations that aren't always transparent, we say things that contradict our actions, and we show emotions that negate both our words and actions. Children with autism observe these things, and have no idea how to respond to our complicated actions. Animals, on the other hand, are much less complex because we can usually tell what is going on in their mind. If a dog's tail is wagging, it is probably happy. If its tail is between his legs, he is probably scared. This is a way that dogs communicate with humans, whether the dogs themselves know it is a form of communication or not. Animals are generally not like humans, who hide their true intentions, or lie. Most animals in general are straightforward in their communication style: what you see is what you get. When animals are incorporated into therapy, children are able to learn from the less complicated actions of the animals, and apply those skills to less complicated human behaviors.

One theory is that being around an animal itself is a reward, which reinforces behavior. When doing equine-assisted therapy, “[t]he act of riding the horse may have been perceived as a rewarding stimulus that accounted for higher levels of motivation and social engagement. . .” (Bass 1266). While this theory does not have a biological backing, it makes logical sense. If the child with autism enjoys riding horses, why would they not improve more? If a child with autism is in traditional therapy (not with animals), and they are not interested in what is going on, they won’t want to stay focused or engaged in the activity. If they are with an animal, even if they are just watching a few animals interact with each other, the child is benefitting from just watching because they are watching a social interaction. Even if a child is just saying or signing a few words to an animal, they are practicing their social skills. And if the animal responds to the sound of the child’s voice, the child is getting positive feedback from the animal, which reinforces them speaking. The reinforcement encourages the repetition of using words to express something. The more reinforcement that the child receives, the more reward there will be, leading to greater benefits.

Animal-assisted therapy is valuable, however, not many children are receiving the benefits from it. In fact, in her research, Sams acknowledges that it isn’t practical for all therapists to do animal-assisted therapy (273). There are a few factors that go into being able to do animal-assisted therapy, including space (you need space to raise animals, no matter what kind of animal). While there are many animals used in animal-assisted therapy, from dogs to llamas, the amount of space needed depends on the animal. A dog or cat will need significantly less space and resources than a llama or a horse. Finances may or may not be an issue, depending on how much the session costs (traditional versus animal therapy will cost about the same), and if health insurance covers the treatment. Usually, health insurance will only cover tried and true

therapy, done by a trained professional, like an occupational therapist. Because animal-assisted therapy is not in the mainstream yet, many insurance companies will decide whether to cover this therapy on a case-by-case basis.

Children with autism benefit greatly from animal-assisted therapy, which helps to improve their communication, relating, and engaging skills. Improving these skills helps the children to better connect with other people. Humans are incredibly complex in their verbal and nonverbal communication, which is why children with autism have a harder time understanding and interpreting adults' actions and words. Animals are a simpler model for human communication from which the children can learn from. Because autism is becoming more common, we need more alternative therapies that are just as, or more, effective than the traditional therapies. Animal-assisted therapy engages children with autism in a way that no other person or therapy can, and we should be using this type of therapy more and more because of its proven effectiveness.

Works Cited

- Baio, Jon, et al. "Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years." *MMWR Surveillance Summaries*, vol. 67, no. 6, 2018, pp. 1-23.
- Bass, M.M., et al. "The effect of therapeutic horseback riding on social functioning in children with autism." *Journal of Autism and Developmental Disorders*, vol. 39, no. 9, 2009, pp. 1261-1267.
- Llambias, Cecilia, et al. "Equine-Assisted Occupational Therapy: Increasing Engagement for Children With Autism Spectrum Disorder." *American Journal of Occupational Therapy*, vol. 70, no. 6, 2016, pp 1-9.
- Rogers, Kara. "Biophilia Hypothesis." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 26 May 2016, www.britannica.com/science/biophilia-hypothesis.
- Sams, Mona J., et al. "Occupational Therapy Incorporating Animals for Children With Autism: A Pilot Investigation." *American Journal of Occupational Therapy*, vol. 60, no. 3, 2006, pp. 268-274.
- "What Is Autism Spectrum Disorder?" *American Psychiatric Association*, www.psychiatry.org/patients-families/autism/what-is-autism-spectrum-disorder.