**The effect of animals on kids with an autism spectrum disorder**

Presented to

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Practical Initiation to Methodology in the Social Sciences

300-300-RE

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Collégial International Sainte-Anne

December 6th, 2020

**Introduction**

Animals have been living on this planet for hundreds of years. While many species still live in the wild, many others have been domesticated. Some of the most common domesticated animals are cats and dogs. For a long time, people who own an animal have seen a lot of benefits on their stress level or their mood. Scientifics have made some researches and have found that animals stimulate the release of endorphins which produce a calming effect. Some of the experiences they performed where with people suffering of mental disorders or physical disorders. They discovered that zootherapy seems to be more beneficial for children affected by autism than psychologist visits are. Zootherapy is now being used more often in different countries since the benefits are demonstrated. Children affected by mental disorders appear to connect with animals in a way that humans are not able to do. Dogs or cats develop a certain way of connecting with children by playing with them. Children seem to trust more their dog or cat than their psychologist. Parents also prefer that their children spend time with an animal and develop a certain way of being than spending time with a psychologist and not seeing any progress.

In this research report, the methods used to find information was mostly content analysis. The data were collected in different text such as academic articles and books. In those academic articles and books, they explained some experience, observation, their methods and their results.

This report is based on the following research question: Why zootherapy helps children leaving with autism within their behavior? The author believes that zootherapy helps children leaving with autism in their behavior because it helps them with their communication skills, their interactions and also with the development of their brain.

This paper will talk in detail about the way zootherapy helps children leaving with autism with their social skills as their communication and their social life. Also, this report will discuss about their mental ability such as the stress they feel and their confidence. Furthermore, certain emotion of autism kids will be discussed in this paper.

**Social skills**

Zootherapy helps children with mental disease in their own development. Every child needs some different resources to help them become grow and to be more mature. Children who are affected with autism have some difficulties with their interactions with other people. Sometimes, they struggle to express their emotions or just with talking. Children with autism even have some difficulties talking to their family because they can’t express how they feel, triggering a panic attack. Some experiences have been done to observe the way children react when around an animal. Zootherapy helps children with mental disease in their own development. Every child needs some different resources to help them become grow and to be more mature. Children who are affected with autism have some difficulties with their interactions with other people. Sometimes, they struggle to express their emotions or just with talking. Children with autism even have some difficulties talking to their family because they can’t express how they feel, triggering a panic attack. Some experiences have been done to observe the way children react when around an animal. The research from Solomon (2010) explained how certain kids react following an interaction with a dog. Before the first visit, the therapist wanted to know how the kid acted. The mother explained that a slight change is her daughter routine could make her start screaming and could also make her become violent and hit others. From the beginning, the therapist brought a dog and wanted to observe how the kid would react. She knew that the little girl always had some special connection with living things like insects and birds. The woman who was responsible for the therapy made the girl sit in front of the dog and observed how she would look at the animal. She immediately saw how the nine years old girl looked at the dog: there was a connection between them. The therapist let the little girl touch the dog and she tried some command at the animal. The girl started becoming right away more attentive to the session. She has never been so engaged in any sort of activity for this long. Her mother saw rapidly some differences in the way she was acting with her twin sisters. Her sisters always stayed at the end of the visit to interact a little bit with her. The nine years old girl would express how she felt with her family and explained to them that she wanted to visit again her favorite dog. At the fourth visit, the girl was surrounded by many dogs and expressed her excitement to her therapist. The family observed a major difference between the first visit and the last. The girl developed a better social competence with the dogs and her family. According to Solomon (2010) “Moreover, animals play a role in a child’s social and communicative development that a human caregiver may not be able to provide because children and animals often interact in ways that may no longer be recognizable to adults” (p.5) Similarly, Leali, Merminod and Monnie (2017) performed a research on how animals are helping autism kids. In their research, they noticed that autism kids have difficulties to communicate and to create relation with others which is affecting their social relationship. Being around animals and communicating regularly with them creates a special relationship between the kid and the animal. In the research they explained that animals need to be chosen carefully. The animals need to be calm and to listen to humans to ensure the therapy will work. Children with autism can interact easily with animals since they can sense the feeling of the kids and then understand their problem. Also, kids are more emphatic towards animals than humans. The researchers describe two experiences that have been done with kids of seven to 13 years old. One of their experience was with animals and the other was without them. The experience with animals worked better than the one without. When kids had therapy without animals, they had less improvement in their communication skills than when they were with animals. By experimenting zootherapy, kids tend to be more motivated to persevere and lead to increase benefits. Being in a therapy with animals allows the kid to interpret the behavioral cues of animals and facilitate their understanding of humans. The therapist has seen some improvement in their behavior since the first meeting. Kids who spend times with animals can develop at every meeting and the change can be very impressive. They are more confident being around others, can trust more easily their family and even friends.

Zootherapy helps kids with their communication but also with their interactions with others. Kids tends to be shyer in public. Being around animals helps them to gain confidence and to have a better relationship with family and friends. A research from Solomon (2012) explained that a few years ago, she was playing with her dog at the park and the dog brought the frisbee to a little girl. She immediately took the frisbee and threw it back at the dog. The two of them started to play for a long time. Her father broke in tears since he never saw his daughter play with anyone before. The little girl developed some confidence within minutes of playing with the dog. One week later, the father called back Olga Solomon, the woman who had the dog. He told her that he saw some major changes on the behaviors of his daughter. She was now more confident than ever and her relationship with others improved significantly. On the other hand, Grandgeorge (2010) has compared kids who never lived with animals to kids who lived with animals since they were five years old and also to kids who lived with animals since they were born. Children who have been living with kids since their young age had made some real changes. The most obvious changes were that they were more generous with others: They were sharing foods and some toys. Before this therapy, those kids wouldn’t share a thing with others. Also, if someone would touch their belongings, they would panic. Another big thing that the therapist observed was with their family, children were trying to reassure their parents. When they would see their parents sad, they could understand their feelings and would start to comfort them. No changes could be observed with children who have lived with animals since their birth. Animals needs to be introduced to kids at a right age and, if not, the kids will have difficulties changing their behavior. Animals in the life of kids can play a very important role but dogs, for example, need to be gentle and well trained to see some change in behavior of kids.

**Mental ability**

Zootherapy brings a lot of benefits for autism kids. Kids who have mental disease sometimes can feel stress over things very simple and have difficulties to let go of it. Being around a dog can help them feel more confident than when they are with humans. Since animals can reacts to orders, kids feel like they can have control over something, and it makes them feel powerful. In the book of Beiger and Jean (2011), authors explained that they were with a little boy in a stable and the boy was very stress. He was stress because a lot of things where moving around him, and he didn’t know what to do. The therapist, the kid and his parents were walking around the stable to observe how the kid would react when around so many animals. The kid didn’t know what to do and at one point he decided to leave because it was too much for him. The next day, the therapist decided to walk again with the boy but without his parents. The kid had less things to worry than the day before. The kid then saw a dog in the corner of the stable and decided to walk to it. Right away, he felt like he was in a more secure place than before. The therapist could feel that he was calmer than before. The kid, the dog and the therapist decided to walk again in the alley and because the kid could feel a connection to the dog, he was calmer. When kids develop a certain relationship with an animal, they are less stress because they have a connection, and they feel like someone understand them for real. On the other hand, Wright explained in 2015 that the presence of animals helps a lot the kids as well as their parents. Based on an experience, they explained that all of the members of the family have benefited from the presence of a dog. They have seen a difference in between the stress level before and after the dog being present. The fact that they have adopted a dog helps them forget about their problems. Even if it is just playing or spending time with dogs, it helps to think about something else and just enjoy the moment. Dog brings a certain connection and helps forget about things. Humans acts a certain way with animals and helps them release a hormone in the brain to reduce stress. After a certain time, autism kids connect better with animals than with a human.

Autism kids who spend time with animals tend to have more self-confidence than before they had interactions with an animal. When they start spending time with animals, researchers can observe that kids are capable of doing some important task like taking care of dogs. The book by Lehotkay (2012) explains how dogs can help kids with their self-esteem. The author explains that autism kids experience a lot of rejection in their life, which affect their confidence. Kids are not used to interact with others kids that seem different from them. They tend to reject a kid with autism and play with their friend that seem “normal”. In his book, Lehotkay explains that a family he worked with has experience a lot of rejection from friends towards their little kid. They reached out to a psychologist to get help. On the first meeting, the psychologist brought a dog to help the kid. The dog started to lick the hand of the kid. This little act from the dog helped a lot this kid. It helped him to make contact with an external connection that can be out of his comfort zone. Also, it helped the kid to have more and more physical contacts and it served as mediator for rejection. The kid gained confidence since he knew that the dog accepted him even if others were not. He also understood that if even if his friends rejected him again, the dog would always be there for him. Hameury (2016) also performed some research on the benefit from therapy with horses. Her research was with six kids, aged between five and seven years old, who were also receiving some hospital care. With the agreements from their parents, she decided to take the kids to a stable to let them have interactions with horses. They all did horseback riding one after another. After a number of sessions with the horses, their family could already observe some changes. Because kids need to relax and let the horse control them, they need to accept the fact that they are not in control. The body heat from the horse make kids feel more secure on the horse and tend to make them also more confident. Since they are out of control on a horse, if an event happens in real life without the animals, they can think about how well it was on the horse. It helped them to increase their confidence if something happened for which they were not ready.

**Emotional**

Therapy with animals have many positive impacts on autism kids at different levels, including on their emotions Being with animals brings a lot of happiness in the life of human and even more for these kids. The research by Genevieve David (2007) was done with five kids between three and five years old. Those kids all had problems with their speech such as pronunciation problems and delayed language development. One of these kids was a young girl who refused to have any physical contact with anyone and had some trouble with animals. After a contact with a dove, she started to develop some behavior that she never had before. She started to smile; she stared at the dove, imitated it and made news sounds. This this experience and others, clearly showed that spending time with animals and making new connections with them brings a lot of happiness in autism kids’ life since they can play with them, relax and enjoy their moment. At this moment, the kid’s brain releases endorphins, which are natural molecules that leads to muscle relaxation and produce a sense of well-being. Following zootherapy, kids are a new version of themselves and their family realize the net improvement since their first session with animals. Then again, Sarica (2017) explained how dogs are very helpful to humans. With just an exchange of glances, a human and a dog can develop a connection. With this exchange, a hormone is secreted in their head, called “the love hormone”. This hormone is believed to be essential for the formation of bonds between a mother and her child. In addition, interactions between an autism kid and dogs provoke the secretion of a hormone called serotonin in the child’s brain. This hormone helps fight depression, which can make the kid happier. The author also explains that by kissing, caressing and playing with the dog, it helps the kid to be happier. Indeed, kids tend to appreciate the moment they are spending with animals, allowing them not to think about anything else. Since animals don’t judge, kids can feel a real connection without fear of being rejected by anyone. A lot of family has seen their autism kid happier with animals then with kids from their age group.

**Conclusion**

Zootherapy is a good approach to help an autism kids develop new talents like his social skills, his mental ability and even his emotions. Kids tend to progress more by spending time with animals then being with a therapist. Autism kids progress more with their communication skills when they spend time with animals since they create a special relationship. Also, since they can express their feeling to dogs, they feel like the dog is listening to him. Kids tend to speak more with their family after sessions with animals and their family sees a huge difference in between before they had zootherapy and after. Animals can help a lot with the way they spend time with other people. Kids gain confidence and talk more easily with other kids from their age. A therapist also noticed that kids tend to share more with their family or even their friends after spending sometimes with animals. Another positive impact that animals have on autism kids is on their level of stress. Autism kids tend to be stressed by many different things because they feel out of control and they don’t know how they are supposed to act. With a dog, they are concentrated on one thing at a time and forget about other things that could be a source of stress. Also, kids gain more confidence when they are around animals. They are capable of taking care of something and feel proud about themselves. Autism kids experiment a lot of rejection in their life, which affects a lot their confidence. Since animals accept those kids as they are, without any judgement, they feel loved by someone. The last topic covered in this research paper is their emotions. Kids affected by a mental disease and going through therapy with animals tends to experience more joy in their life. An endorphin is secreted by the brain, which helps them to be feel happier and more relax. Another hormone is also secreted, which fights depression and therefore help kids benefit from happiness.

 Thus, from the following question “How animals help kids with autism spectrum disorder with different aspect of their life?”, we can clearly conclude that animals help kids with their social skills, mental abilities and emotions. The hypothesis shared previously can be confirmed since it was demonstrated that zootherapy have many positive impacts on kids’ life at different levels. It would certainly be interesting to further understand why autism kids tend to be more comfortable around animals then around their own family, which they spend more time around.

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