

LITERATURE REVIEW

HOW DOES ANIMAL ASSISTED THERAPY POSITIVELY AFFECT CHILDREN WITH AUTISM SPECTRUM DISORDER?



Animals represent a multisensory stimulus (Valiyamattam et. al., 2020), with “strong and clear sounds, a vivid visual impression, a special smell and a stimulation to touch” (Berry et. al., 2013) which directly appeals to children with ASD who need extra sensory input to be able to engage in tasks.

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The purpose of this literature review is to outline the benefits that Animal Assisted Therapy (AAT) can have for children with Autism Spectrum Disorder (ASD) and to highlight how these understandings can be used in Animal Assisted Education (AAE). Autism Spectrum Disorder is defined by Berry, Borgi, Francia, Alleva & Cirulli (2013) as “characterized by deficits in social reciprocity and communication, and by unusually restricted, repetitive behaviours” and is understood to vary greatly in its presentation.

Animal Assisted Interventions (AAI) are “goal-oriented and structured interventions that intentionally incorporate animals in health, education, and human service for the purpose of therapeutic gains and improved health and wellness” (A Beginner’s Guide to Animal-Assisted Intervention Terminology, 2019). Within AAI there are different types of interventions including Animal Assisted Therapy, which is “a goal-oriented, planned, structured, and documented therapeutic intervention directed by health and human service providers as part of their profession” (A Beginner’s Guide to Animal-Assisted Intervention Terminology, 2019) and Animal Assisted Education (AAE), which is “a goal-oriented, planned, and structured intervention directed by a general education or special education professional” (A Beginner’s Guide to Animal-Assisted Intervention Terminology, 2019).

There has been an increase in the practise and study of AAI for ASD, with empirical literature between 2012 to 2015 tripling (O’Haire, 2019). This shows us that the interest in the evidence supporting the positives links between AAI and ASD is increasing and “recognition of the role animal interventions play in promoting human health is gaining momentum” (Burgoyne, Dowling, Fitzgerald, Connolly, Browne & Perry, 2014). There are 2 areas that the benefits can be broken down into and explored further: the understanding as to why animals themselves benefit children with ASD and the benefits to the children with ASD who engage in AAI.

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Animals themselves present a multitude of benefits to children with ASD when they are used in a professional setting, as an "affinity with animals may offer a means of enhancing the delivery of interventions" (Hill, Ziviani, Cawdell-Smith & Driscoll, 2019). Berry et. al., 2013, stated that "animals seem to possess a unique capacity to serve as an emotional bridge" which is particularly beneficial to children with ASD who can find it difficult to communicate their feelings. Berry et. al., (2013) goes on to say that the simple and interpretable characteristics of dogs can provide a link for children with ASD to then learn about the characteristics of humans.

Animals represent a multisensory stimulus (Valiyamattam et. al., 2020), with "strong and clear sounds, a vivid visual impression, a special smell and a stimulation to touch" (Berry et. al., 2013) which directly appeals to children with ASD who need extra sensory input to be able to engage in tasks. Valiyamattam et. al. (2020) found that children with ASD showed better visual attention to the faces of animals than those of humans, and that by incorporating animals into their treatments it can lead to overall enhancements of their social attention. From this research, we can see a link between the unique characteristics of animals and how they can help children with ASD to be able to learn effectively and transfer this learning into other settings. AAE can harness these benefits and use them to help children with ASD achieve their desired academic outcomes.

O'Haire (2019) found that from 28 studies, the most commonly reported outcome for children with ASD was increased social interaction. This means that children would reduce their isolative behaviours, as found by Fung (2017) when a therapy dog was introduced to the two children in their study, the children's social interests were immediately stimulated.

Verbal communication by children with ASD is demonstrably improved, especially in comparison to when standard therapy techniques are used without animal involvement (Berry, Borgi, Francia, Alleva & Cirulli, 2013). Examples of some of the verbal communications that children use when engaged in AAI include talking to the animal, engaging the therapist in discussions about the animal, and being able to stay on topic during the session (Berry et. al., 2013).



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Social anxiety is reduced (Valiyamattam, Katti, Chaganti, O'Haire & Sachdeva, 2020) giving the children a chance to engage themselves without the restrictions of the anxiety and its manifestations. There is evidence of "reduced problem behaviours, including reduced hyperactivity" (O'Haire, 2019) which means that children who may not have the skills to self-regulate are given the opportunity to be able to participate in therapies for better quality and longer periods of time. Positive emotional experiences are reported in children who participate in AAI (O'Haire, 2019), including smiling, making visual contact and affectionate behaviours (Berry et. al., 2013).

Collectively, these benefits highlight the fact that children with ASD can benefit greatly if given the opportunity to experience AAE in structured environments, particularly in schools. They will be able to associate participating in AAE at their school with an increase in their social skills and communication, which are two areas which children with ASD can struggle and therefore feel isolated by.

Although "difficulty with task engagement has been observed to impact individuals diagnosed with ASD across multiple domains of their daily functioning" (Hill et. al., 2019), from the synthesis of the articles in this literature review, we are able to understand how AAI can help to reduce these difficulties and positively impact those diagnosed with ASD. "Intervention strategies, based on exploiting the emotional aspects of the relationship with a dog, can overcome the inability of children affected by ASD to relate and interact with others by targeting some of the core symptoms of this disorder" (Berry et. al., 2013). Animals themselves provide benefits to children with ASD by giving opportunities for children to engage in ways that support their complex sensory needs. AAI benefits children with ASD by offering opportunities for increased social interactions, reducing social anxieties, isolative behaviours and hyperactivity and increasing overall happiness. By utilising AAE in schools, we are provided with an amazing opportunity to bring AAI to students with ASD who will then reap the benefits of working with animals.

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About Canine Comprehension.

We provide a calmer school environment through our tailored Dog Assisted Learning programs. We know that being able to provide a positive environment that is calm increases positive behaviours throughout the classroom, school and family environments.

With early intervention, we can help your child to process the emotions they are currently feeling and help them to understand them in a safe environment. Our highly trained tutors and dogs offer a connection that some children are craving and can help to create surroundings that are conducive to learning.

Our programs and individualised tutoring are goal oriented, evidenced based and innovative. We aim to create an environment that offers conducive learning experiences to a broad range of students whether in the classroom or at home.

See our website and social media pages to learn more about us.

