# Animal-assisted therapy in mental health

This issue we welcome new contributor and SCAS member Diane Hardiman, who takes a look at recent research showing how interaction with animals can benefit individuals with a range of mental health issues, including dementia and Alzheimer's, schizophrenia, and trauma.

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According to the World Health Organization (WHO, 2007) "Mental Health can be conceptualized as a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."

Anyone who fits this description would be unlikely to need any therapy, even animal-assisted. Yet most of us at some time will have felt stressed, unproductive, or unwell. At these times, many of us with companion animals will have found ourselves, often unconsciously, deriving comfort, acceptance, and a renewed sense of well-being by simply stroking their fur, taking them for a walk, grooming or just talking to them. From these simple interactions with our animal friends, we are:

- lowering the levels of the stress hormone cortisol
- increasing the levels of hormones that give:
  - a sense of happiness and bonding oxytocin
  - energy dopamine
  - that feeling after you have done lots of exercise and enjoyed it – endorphin
  - elation phenethylamine

This effect is shown in both the humans and their companion animals (Odendaal, 2000; Odendaal & Meintjes, 2003; Charnetsky et al. 2004; Wells, 2009 cited in Walsh, 2009).

Not surprisingly, research is being undertaken to explore these beneficial effects, with a view to finding nonpharmaceutical interventions to help individuals with a range of mental health issues. Johnson (2002, cited in PAWS InterActive, 2003) speculated, *"Would it be possible* to decrease the use of antidepressants by improving the patients' serotonin levels with pets?"

## **Current research areas: AAT, dementia and Alzheimer's disease**

Dementia is generally defined by the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM IV, 1994) as the *"loss of intellectual abilities of* 

### sufficient severity to interfere with social or occupational functioning."

Alzheimer's disease is a form of dementia that is characterized by an ABC grouping.

- A = impairment in the Activities that are part of daily living such as washing, toilet habits, dressing
- B = abnormal Behaviour observed in the patient such as failure to recognise close family members, inappropriate sexual advances, night-time restlessness
- C= loss of Cognitive functions whereby decision-making ability is lost and patients become easily confused

Animal-assisted therapy (AAT) has a growing reputation for eliciting positive social interaction and decreasing agitation in Alzheimer's patients (Churchill et al. 1999 cited in Kramer, 2009; Laun, 2003; Tribet et al. 2008; Walsh, 2009). Increasingly, studies are confirming these beneficial effects, for example, the work of Marx *et al.* (2010). They utilised a range of dog-related stimuli such as a puppy video, a real dog, a robotic dog, a plush toy dog, and colouring dog pictures. 56 patients in two residential nursing homes participated in the research and their daily living activities and cognitive functioning in response to their level of engagement with dog-related stimuli was assessed. The real dog scored high in all assessments along with the video of the puppy. They concluded that AAT should be considered for the residents.





Kramer *et al.* (2009) also included a robotic dog (Sony AIBO) along with their real dog and found an increase in socially interactive behaviour with both robotic and real dogs. The robotic dog caused slightly more interaction, possibly due to 'novelty factor'. However, a very significant possibility arises from this that the authors highlight, that the robotic dog *"might be a valuable tool in situations where it is not feasible to have dogs or other live animals present"* (Kramer, 2009:56). There is a low risk to the robot dog from patients with unpredictable behaviour and no risk of the robot dog scratching or being a source of allergy to the patients.

A key activity that is often impaired in patients with Alzheimer's is appetite, and subsequent weight loss. Edwards *et al.* (2002, cited in PAWS InterActive) studied a group of Alzheimer's patients who would take their meals seated in front of fish tanks. The movement of the fish swimming around the tanks fascinated the patients as they sat and watched. This had the effect of increasing the appetites of the watchers and so led to weight gain. Hence, they have evidenced that relatively low cost, low maintenance and low risk AAT can have significant, measurable, beneficial effects.

#### AAT and schizophrenia

Schizophrenia is one of the most common serious mental health conditions and affects men and women equally. It is a chronic condition that causes a range of different psychological symptoms including hallucinations (hearing or seeing things that do not exist) and delusions (believing in things that are untrue).

These symptoms are often referred to as 'symptoms of psychosis', when an individual cannot distinguish between reality and their imagination (NHS UK). Patients with schizophrenia often have difficulty in coping with everyday stressors; suffer emotional withdrawal and poor social functioning (Iwahashi *et al.* 2007) and this can be particularly pronounced in patients living in an institutionalised setting (Kovács et al. 2004).

The use of AAT within this patient group is varied. Kovács *et al.* (2004) explored the particular problems associated with institutionalised living, namely decreased levels of activity, social functioning and social problem-solving strategies, compared to non-institutionalized patients. His participant group consisted of seven patients working with a

psychiatrist, a social worker, a dog and its handler. Therapy took place over nine months, at weekly intervals, at the same time for 50 minutes. Assessment was made using the Independent Living Skill Survey (ILSS).

Kovacs found that, although for normal everyday activities the patients demonstrated a lack of persistence, for the weekly AAT, all of them attended for all of the sessions. Initially simple activities were incorporated involving the dog moving to each patient 'asking for some affection'. This evolved into the patients sharing their feelings and required them to concentrate, then development of social interaction and later physical skills of grooming and feeding the dog. The final results showed that the positive effects of the AAT lasted beyond the therapy sessions and into the everyday life of the patients.

Berget, Ekeberg and Braastad (2008) moved away from 'pets' and looked at the effect of working with farm animals. They recruited 15 farmers, some of whom had experience of working with psychiatric patients, and 60 patients. The patients visited the farms for three hours, twice a week for 12 weeks and worked only with the animals and only within their capabilities and interest. The animals included horses, cattle, sheep, pigs, poultry, rabbits as well as cats and dogs. Activities and behaviours observed were physical contact with the animals, which included riding the horses, and verbal communication - receiving instructions from the farmer while milking and feeding the animals. In spite of a number of dropouts, mainly inpatients, the results were favourable. At the end of the 12 weeks both self-efficacy and coping strategies were improved from the baseline measure and continued to show improvement at six month follow-up. From these results Berget et al. are looking for further controlled studies in order to define the optimum parameters for patient therapy and improvement.

Interest in AAT is increasing across the globe; although relatively well-known in the USA and Europe it has yet to be well-publicised in Japan. As yet Japan has very little AAT within the field of mental health; however the development of a culturally appropriate form of AAT is being explored by Iwashashi *et al.* (2007). They formulated a questionnaire to assess the expectations for AAT as a day-care programme for patients with schizophrenia. From the responses, they found that most patients would embrace working with animals as part of their treatment and they have begun a schedule of 'light-contact' dog-assisted therapy with doctors, nurses and students from Azabu University and the Japanese Animal Hospital Association.

#### AAT and trauma

An exploration of the therapeutic nature of the humanequine bond with respect to trauma recovery is given by York *et al.* (2008). Here they investigated therapeutic riding with six participants who all had pre-existing relationships with horses prior to their trauma. All six participants felt that their relationship with the horse(s) was a key factor in their recovery from their trauma. York identified two categories emerging from the experimental data:

- 1. the nature of the equine-human bond involving:
  - intimacy/nurturing bond emotional and personal
  - partnership bond emotional and personal
  - identity bond task-orientated and practical
  - utility bond task-orientated and practical
- 2. the therapeutic value of the equine-human bond
  - Feelings
  - Proximity/touch
  - Behaviours relevant to healing and recovery.

Overall findings were positive showing that trust, acceptance, and intimacy develop via the collaborative relationship between horse and rider. Physical and emotional relationships are required when riding, along with risktaking and facing of fears, all of which contribute to the strength, resilience and improved self-esteem of the rider. These practiced qualities can then be applied to life events, particularly recovering from trauma.

#### AAT and survivors of sexual abuse

Relating a trauma to anyone, let alone a stranger, is very frightening; however, this can be significantly lessened by the

presence of a companion animal, either the client's or the therapist's (Kruger *et al.* 2004 cited in Lefkowitz, 2005). As a therapist, this has also been my experience with clients. AAT therapists appear more empathic, more human, and far less threatening when their companion animals show trust and unconditional love towards them and it is reciprocated.

Reichert (1994 cited ibid) worked with sexually abused 9–13 year old girls. She found that by incorporating her German Shepherd into the group therapy, the girls were able to project their feelings onto the dog rather than saying "I", thereby disclosing the abuse and expressing their feelings safely.

Altschuler (1999 cited ibid) related that his clients with resistant Post Traumatic Stress Disorder (PTSD) were less anxious in the presence of their companion animals. As a result, he suggested a treatment model incorporating AAT.

In 2005, Lefkowitz *et al.* took the work of both Reichert and Altschuler a step further. They proposed a form of AAT for survivors of sexual assault who are suffering from PTSD, called Animal-Assisted Prolonged Exposure (AAPE). Prolonged Exposure (PE) has yielded good long-term results however it has high dropout rate (up to 26%) and a reluctance for survivors to participate at all (Resick *et al.* 2002: Riggs, 2004 cited ibid).

Lefkowitz *et al.* identified the inherent resilience and strength in survivors of sexual assault and how reluctant they can be to recognise these qualities in themselves, instead seeing themselves as weak and worthless. Hence, to begin PE therapy and then drop out can reinforce the negative selfimage of being weak and worthless. The concept behind the inclusion of companion animals is to provide some degree of comfort and grounding as the therapy becomes difficult, to provide a practice ear by whispering to the dog before telling the therapist, and encouraging the survivor to engage in the therapy and complete it.

Finally, as in all areas of AAT, the authors acknowledge that there is still a lack of scientific study to support its



use; however they hope that this will go some way to "strengthening the literature and open new avenues of exploration" (Lefkowitz, 2005:292).

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## About the author

We would like to welcome new Research Focus contributor **Diane Hardiman** MA (Psychotherapy & Counselling); Dip Supervision. Diane is currently a part-time lecturer and manager of the new BA in Counselling at Eastleigh College. She also lectures for SCAS on the Animal-Assisted Interventions in Therapeutic Practice course and runs workshops on the human-companion animal bond for local colleges. Diane also has a private therapy and supervision practice where she also offers clients animal-assisted therapy with her dogs Jasper and Freya.

Regular Research Focus contributor **Alison Reynolds** (BSc (Hons) MSc VN PGCE) is currently on maternity leave; we would like to congratulate her on the birth of her baby and also thank her for all her contributions to Research Focus over the past few years.



"Until one has loved an animal a part of one's soul remains unawakened." ANATOLE FRANCE